
PFERD

Your personal contact

Do you have any **questions regarding PFERD products and solutions**? Together with our **trading partners**, we offer **qualified support**, free of charge and without obligation. Simply contact your personal PFERD representative! To find a PFERD retailer **near you**, visit:

www.pferd.com

PFERD

TRUST BLUE

PFERD



















ABC

General information	About us Products Services
Files	Chamfering Finishing Sharpening
Milling tools	Deburring Machining of contours Cutting out holes
Mounted points	Machining of geometries Chamfering Cleaning
Fine grinding and polishing tools	Creation of surfaces Levelling Polishing
Diamond and CBN tools	Filing Grinding Cutting
Cut-off wheels, flap discs and grinding wheels	Cutting Roughing Grinding
Cut-off wheels for stationary applications	Cutting to size Cutting of large cross sections Cutting rails
Industrial power brushes	Deburring Cleaning of weld seams Cleaning/derusting
Tool drives	Air grinders Electric grinders Flexible shaft drives
Index	Material knowledge Keywords and synonyms Replacement article list



Application

The **application** determines the choice of **drive and tool**. The following factors should be taken into account:

- The desired **work result**, e.g. high stock removal, high surface quality
- The **operating conditions**, e.g. the power supply, stationary or manual application
- The **workpiece** to be worked, e.g. its dimensions, geometry and accessibility
- The **duration** of use, e.g. individual or mass production
- Requirements and ergonomic advantages in accordance with **labour protection laws**

The **optimum** tool

With over 8,500 tools for **work on surfaces** and material **cutting**, PFERD offers the **ideal tool solution** for every application. The selection of the correct tool is determined by the **application**, the **material** to be worked and the appropriate **tool drive**.

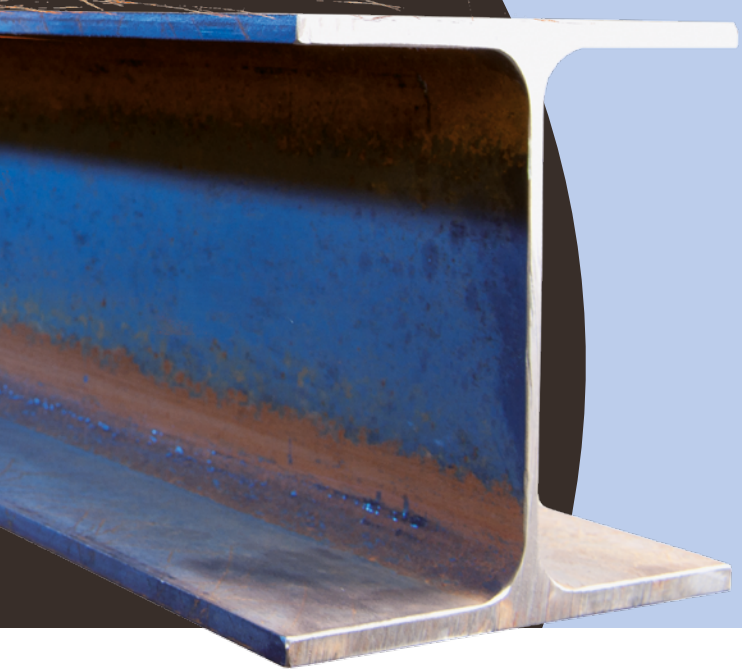
The **tool navigation** in the introduction of the respective catalogue sections 1 to 9 will help you **select the optimum tool**.

Tool drive

The **tool drive** that is used has a significant influence on the **cost-effectiveness** of the machining process. Selecting the ideal drive, i.e. air grinder, electric grinder and flexible shaft drive, takes into account:

- **Design, shape and size**
- **Performance**
- **Rotational speed**
- **Tool mounting**
- **Power supply** (compressed air or electrical power supply)

Further information on PFERD tool drives can be found in catalogue section 9.



Material

The varying properties of the **materials** place **individual requirements** on the tools used to work on them. PFERD tools are especially designed for the **differing material properties** and thus allow the highest possible levels of cost-effectiveness and the **very best results**.

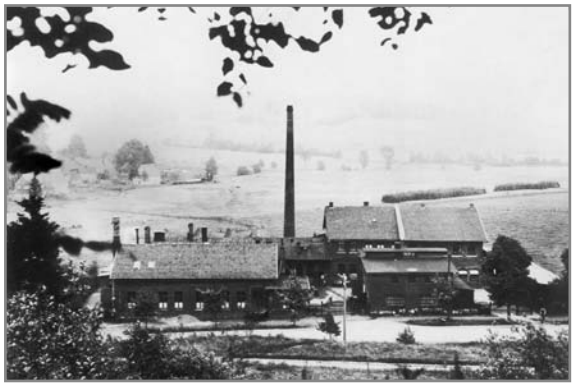
An overview of the **material groups**, information about **material properties**, as well as **recommendations for use**, can be found in the index on page 1.















The **jumping HORSE**

PFERD (the German term for horse) is leading in the **development, production and support**, as well as in the **distribution**, of tool solutions for **work on surfaces and material cutting**. In keeping with a **tradition** that dates back more than 200 years, PFERD operates as an independent, internationally oriented, **family-owned company** geared towards the long term.

PFERD tools offer the user **maximum benefit and optimum cost-effectiveness**. Its unlimited commitment to **premium quality**, its **reliability** as a supplier and its **responsible use of resources** all make PFERD a dependable and reliable **trading partner that operates with sustainability in mind**.



Quality since

1799









Greater **economic efficiency**

Each and every day, PFERD tools solve **application problems within a great number of industries**. Innovations in this area regularly offer **considerable added value**: not just for users, but for trade as well – PFERD innovations are **unique selling propositions**!

PFERD product management is constantly **updating** and further developing the range in line with **your wishes and needs**. If required, PFERD can develop your **own tailor-made solution**, always with the aim of attaining the highest levels of cost-effectiveness for you.




PFERD



Formula for **success**

The PFERD formula is the basis for **your success**. Workers all over the world trust blue and choose PFERD.

The combination of **individual consultation** and **innovative high-performance tools**, together with the **worker's experience** on site, consistently guarantee **optimum work results**.



The **PFERD formula**

Innovative, high-performance tools
+ Individual, targeted **consultation**
+ Correct selection of **drive**
+ Worker's **experience**

= Optimum **economic** result



Ergonomic and efficient – **PFERD**VALUE

Consultancy services, e.g. to **improve working ergonomics** or to **boost economic efficiency**, are increasingly gaining importance among international competition. **PFERD**VALUE systematically factors in **working ergonomics and economic efficiency** with the aim of maintaining optimum **worker health** and attaining the **best possible level of efficiency**.

Speak to your PFERD representative and uncover your **added value with PFERD.**

Vibration
reduction

Noise
reduction

PFERDERGONOMICS

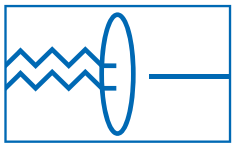
Emissions
reduction

Comfort
enhancement

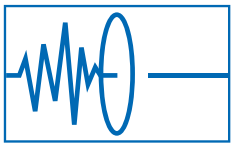


PFERDERGONOMICS

Users of hand-held tools are exposed to mechanical oscillation. The consequences of these oscillations may lead to decreased performance and adverse health effects.



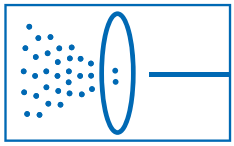
Vibration Filter



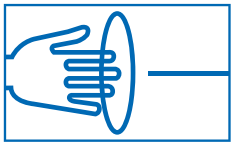
Noise Filter

Noise at the workplace can become an issue. Depending on the job and personal perceptions, noise at work may be bothersome, disruptive and may even pose a danger to health.

Not only does the pollutant content impair air quality due to the dust, the size of the particles may also create issues: The smaller they are, the greater the health hazard.



Emission Filter



Haptic Filter

Using tools successfully and economically requires the ability to work using the lowest level of force with the best possible control and maximum comfort.



Economic efficiency
boost

Energy
savings

Waste
reduction

PFERDEFFICIENCY

Time & cost
savings

Resources
put to optimum use

PFERDEFFICIENCY

Perfectly harmonised with optimum dimensions, PFERD tools and tool drives offer considerably higher performance, save energy and boost economic efficiency.

Energy Saving

Waste Saving

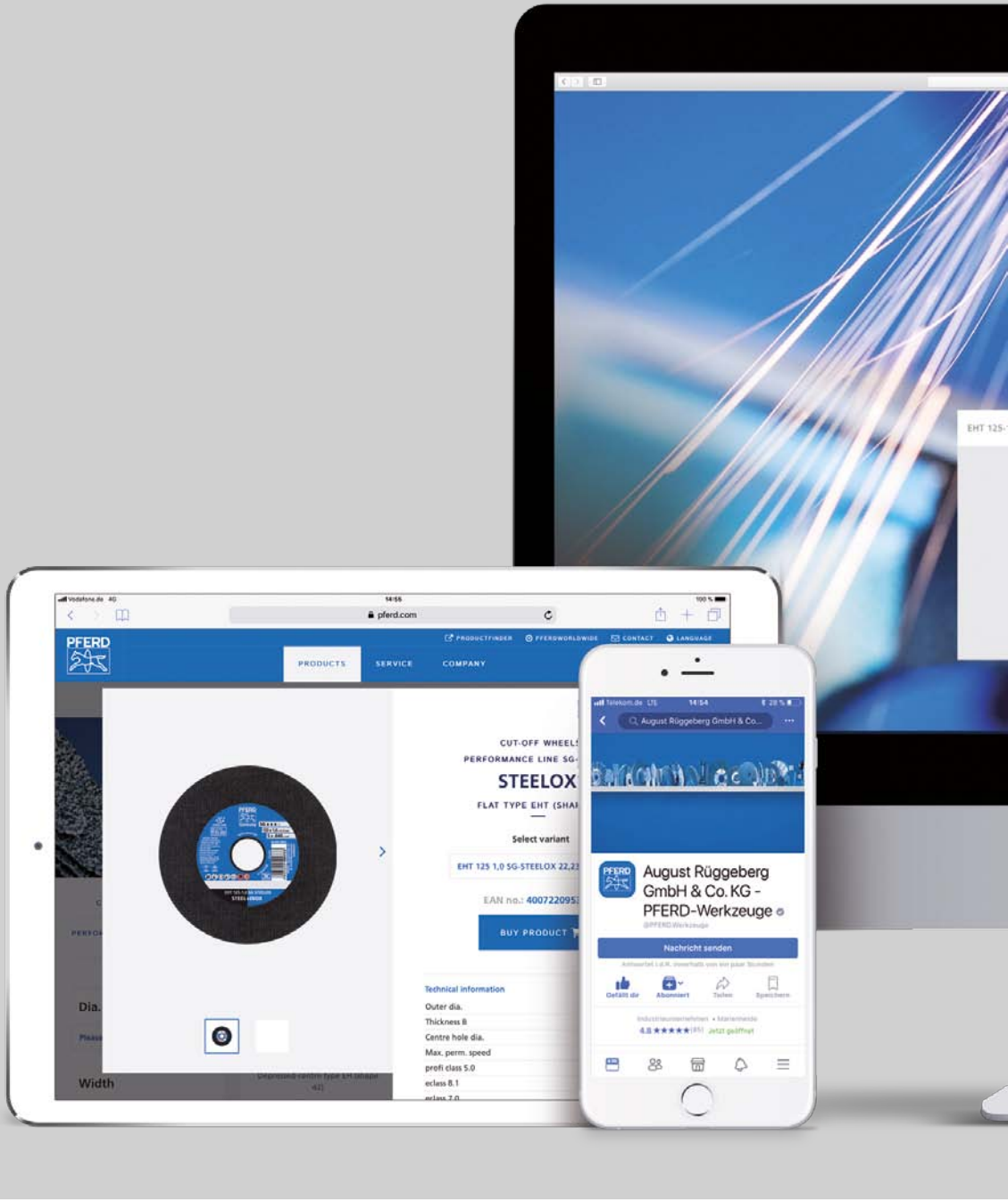
Waste incurs effort and costs. PFERD tools produce less waste through improved stock removal rates and cutting performance with reduced product mass or an above-average tool life.

Time is a factor in cost-effectiveness. More aggressive tools with a higher stock removal rate plus reduced unproductive idle time, such as tool changes and rest periods, result in time savings.

Time Saving

Resource Saving

PFERD tools set themselves apart over their entire life cycle through the optimum and efficient utilisation of existing resources, thus enabling them to make a considerable contribution to savings.

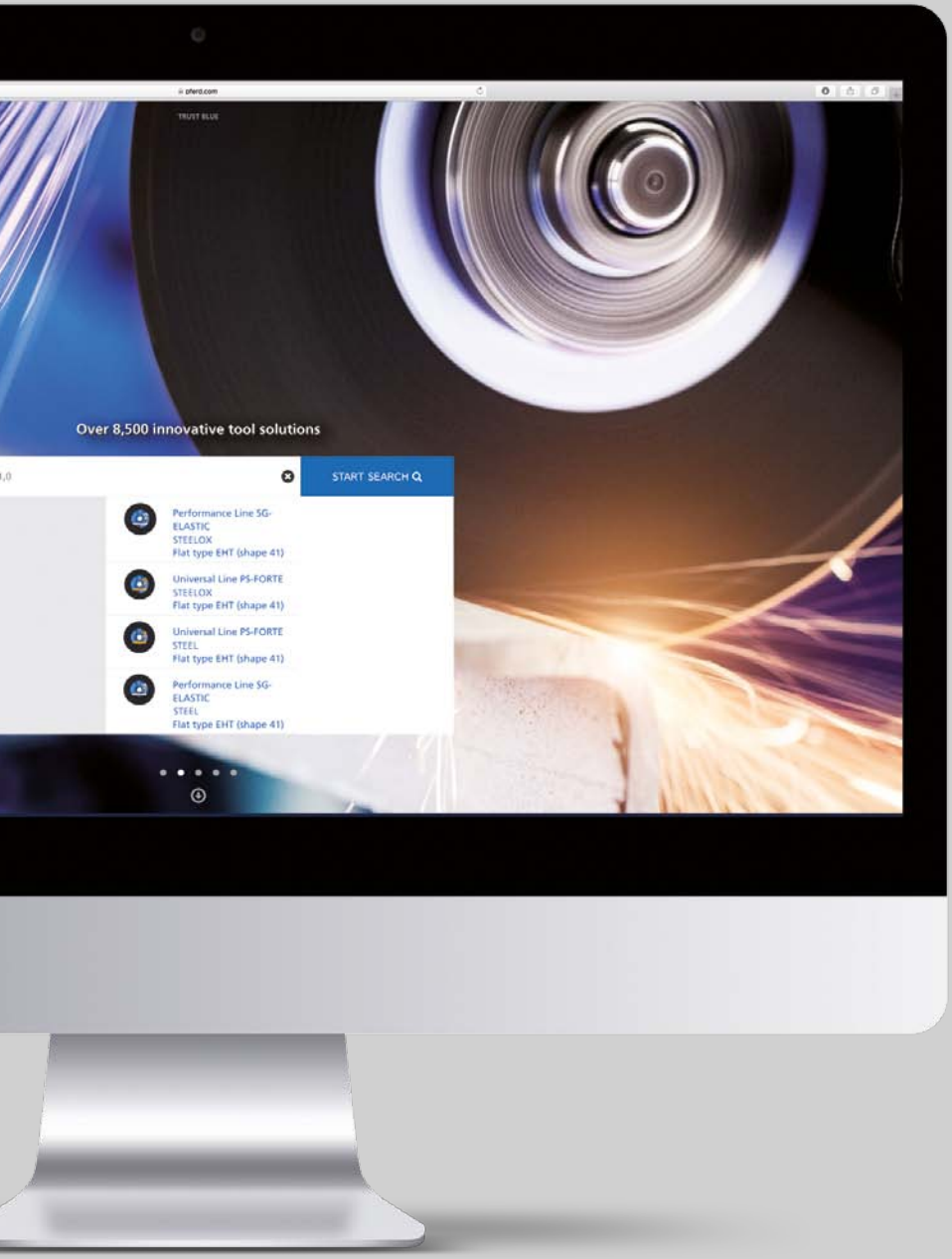


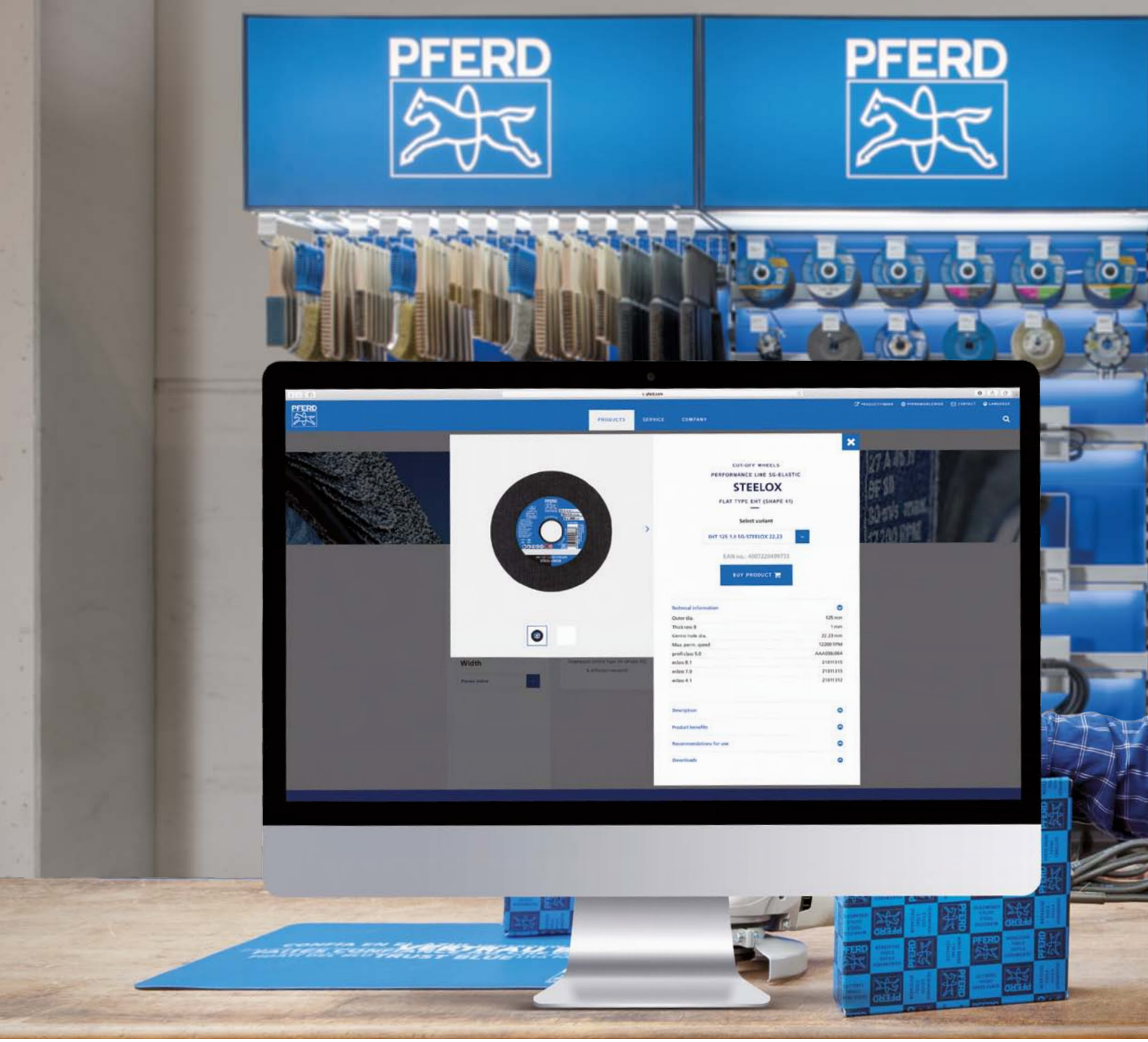
Know-how

Besides the **Tool Manual** and a number of other **publications**, PFERD provides knowledge in many forms.

The **PFERD website** focuses on solutions. Using the **product finder** on the home page means that the **ideal** product is just a few clicks away. The **PFERD App** makes all the knowledge that PFERD has to offer also available **on mobile devices**. Anytime, anywhere. The **PFERD YouTube channel** not only displays product and application videos; our "**TOOLTORIALS**" explain **how to use the tools correctly and safely**.

Anyone wanting to **learn even more** can connect with PFERD on one of the **social media channels** and become part of the PFERD family.


pferd.com
TRUST BLUE
Over 8,500 innovative tool solutions
START SEARCH
Performance Line SG-
ELASTIC
STEELOX
Flat type EHT (shape 41)
Universal Line PS-FORTE
STEELOX
Flat type EHT (shape 41)
Universal Line PS-FORTE
STEEL
Flat type EHT (shape 41)
Performance Line SG-
ELASTIC
STEEL
Flat type EHT (shape 41)



Taking action together

Within the marketplace, PFERD **is perfectly at home within trade circles**. The close-knit trade network guarantees **a fast response**. With ongoing training, the retail market is the **ideal on-site adviser**.

Whether on site, on your premises or over the Internet: PFERD offers **powerful support** for your sales. The **PFERD**TOOL-CENTER presents the **best-sellers** and allows to **experience** the PFERD tool world. But we are also ideally equipped to help you **online**. **Procurement** is quick and easy using the PFERD Shop, via EDI, nexMart or other portals that suit your needs. Our **traffic** translates into your **sales**. If you are connected to our online catalogue using **data View** and **retail Connect**, visitors to our website become **your customers** in a single click.

The **PFERD data service** provides you with all the information, images, videos and classifications you need. This means we will also be able to **trade together successfully in future**.


PFERD
PFERD







Expertise is **BLUE**

In-depth knowledge of the **interactions** of tool, material and tool drive forms the foundation for the **optimization of machining processes**.

PFERD sales representatives and **technical advisers** along with the **PFERD**TOOL-MOBILE are **employed daily around the world** in order to find the **best solution** to your application problem – together with your retailer, on site and individually tailored to you.

In the **PFERD**ACADEMY, we provide **highly specialized and practical** knowledge from the world of grinding and cutting. The seminar blocks follow on from each other, so **step by step you will become a PFERD tool specialist**.

PFERD publications – in **print and online** – make a great impression: they are easy to understand, **offer tool navigation with a logical structure** and provide in-depth **technical knowledge**.




TOOL
TORIAL
#002
TOOL TORIAL #2 Frässtifte / Burrs /
Fresas / Fraises sur tige
300 Aufrufe
4
0
Teilen
Hinzufügen
August Rüggeber...
673 Abonnenten
ABONNIEREN
Nächstes Video
Autoplay
PFERD
HM-
Frässtifte...
August...
4,2 Tsd...
2:29
TOOL

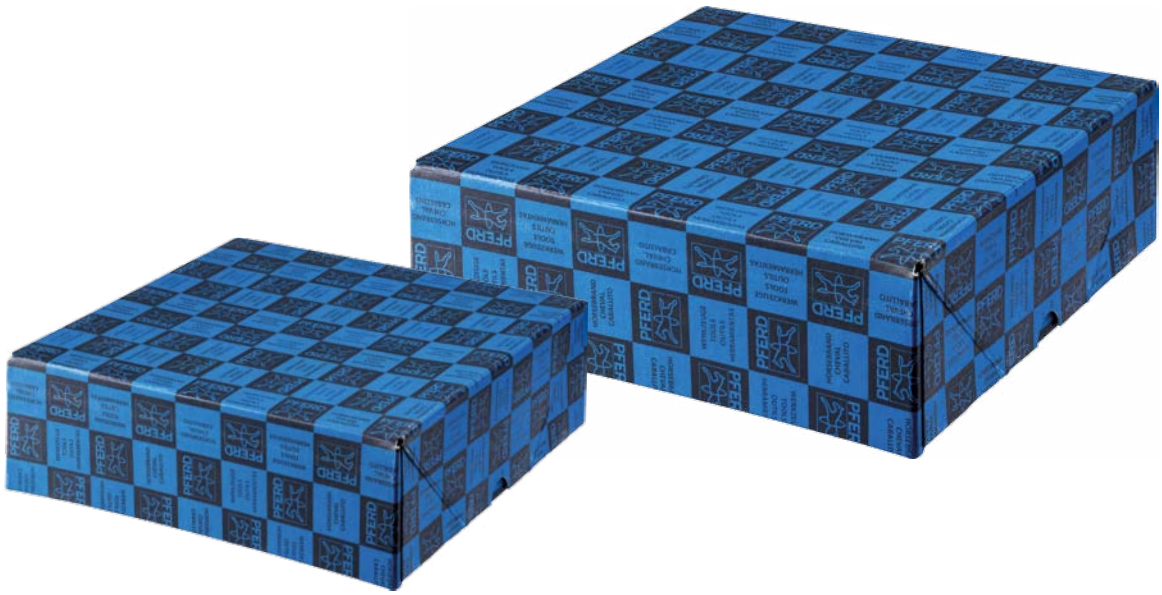


Always at **your** side

Near-100 % availability and a **reliable global logistics network** with its own warehouses right around the globe – welcome to **PFERD**LOGISTICS. Your order will be dispatched to you within **24 hours**.

PFERD in-house representatives **handle your enquiries personally** and are dedicated to **dealing with your order efficiently**. Maintaining this close dialogue is the key to **mutual success**.

With a **comprehensive network** of **over 20 distribution companies** worldwide and more than **100 international trading partner representatives**, PFERD maintains a wide **presence**, including a location near you.


PFERD







Better **PFERD**

Quality is directly connected with **benefit** and **customer satisfaction**. That's why PFERD researches and develops **innovative, high-performance products**.

Our own **machine and plant construction**, and the continuous testing and further development of the **quality and safety standards** in our own laboratories all guarantee the proverbial **PFERD quality**. As a founder member of the "**Organisation for the Safety of Abrasives (oSa)**", PFERD also offers the **highest possible levels of safety** for the user by constantly monitoring manufacturing in all PFERD production facilities worldwide.

PFERD **quality management** is **certified** according to ISO 9001.



FEDERATION·OF·EUROPEAN
PRODUCERS·OF·ABRASIVES

ISO 9001
BUREAU VERITAS
Certification

VDS Verband Deutscher Schleifmittelwerke



PFERD worldwide

PFERD production facilities



Marienheide, Germany

Hermeskeil, Germany



Milwaukee, USA



Vitoria-Gasteiz, Spain



Araia, Spain

Germany

August Rüggeberg GmbH & Co. KG
PFERD-Werkzeuge
Hauptstraße 13
51709 Marienheide
Phone + 49 (0) 22 64 - 90
vertrieb-deutschland@pferd.com

Argentina

PFERD Latinoamerica S.R.L.
1126 Ciudad Autónoma
de Buenos Aires
Phone + 54 - 9 11 - 40 41 41 28
contacto@pferdla.com

Australia

PFERD-Australia Pty. Ltd.
1-3 Conifer Crescent
Dingley, Vic. 3172
Phone + 61 - 3 - 95 65 32 00
sales@pferd.com.au

Austria

PFERD-Rüggeberg GmbH
Prinz-Eugen-Straße 17
4020 Linz
Phone + 43 - 7 32 - 79 64 11-0
info@pferd-rueggeberg.at

Belgium

bvba PFERD-Rüggeberg sprl
Waterranonkelstraat 2 a
Rue de la Grenouillette
1130 Brussel - Bruxelles
Phone + 32 - 2 - 2 47 05 90
info@pferd.be

Brazil

PFERD-Rüggeberg do Brasil Ltda.
BR 277 no. 4.654 km 2 - CIC
82305-200 Curitiba - PR
Phone + 55 - 41 - 30 71 82 02
pferd@pferd.com.br

Canada

PFERD CANADA INC.
5570 McAdam Rd.
Mississauga, Ontario L4Z 1P1
Phone + 1 - 905 - 501 - 1555
sales@pferdcanada.ca

China

PFERD-TOOLS TRADING
SHANGHAI CO., LTD.
No. 2555 Changyang Road
Yangpu District
200090 Shanghai
Phone + 86 - 21 - 2510 - 5500
info@pferd.cn

Columbia

PFERD PANAMERICANA SAS
Carrera 11 # 93A-53 Oficina 304
Torre de La 93
Bogotá, D.C. – Kolumbien
Phone + 57 - 1 - 795 83 88
contacto@pferdla.com

Danmark

PFERD Danmark ApS
Bekkasinvej 1
6500 Vojens
Phone + 45 - 61 16 32 32
torben.nielsen@pferd.com

France

PFERD-Rüggeberg France
Ernolsheim-sur-Bruche
2, Avenue de la Concorde
67129 Molsheim Cédex
Phone + 33 - 3 88 - 49 72 50
info@pferd.fr

Indonesia

Representative Office of PFERD ASIA.
PACIFIC PTE. LTD. in Indonesia
Unity Bldg. 6th Floor
Jl. Boulevard Gading Serpong
Kav M5 No. 21
15810 Tangerang
Phone + 62 - 21 - 22 22 47 03
indonesia@pferd.com

Italy

PFERD-Italia s.r.l.
Via Walter Tobagi 13
20068 Peschiera Borromeo (MI)
Phone + 39 - 02 - 55 30 24 86
info@pferd.it

Korea

PFERD Korea Limited
#1104 11th floor, 83
Gasan digital 1-ro,
Geumcheon-gu
08589 Seoul
Phone + 82 (0) 2 855 3065
korea@pferd.com





Spartan, South Africa


Changli, China


Saint Petersburg, Russia

Mexico
PFERD-FANDELI, S.A. de C.V.
Av. Presidente Juárez 225
Col. San Jerónimo Tepetlacalco
Tlalnepantla, Estado de México
C. P. 54090 - México
Phone + 52 - 55 - 53 66 - 14 00
servicio@fandeli.com.mx

The Netherlands
PFERD-Rüggeberg B.V.
Hekven 15 bis., Postbus 2070
4824 AD/4800 CB Breda
Phone + 31 - 76 - 5 93 70 90
info@pferd.nl

Poland
PFERD-VSM Sp.z o.o.
ul. Polna 1A
62-025 Kostrzyn Wlkp.
Phone + 48 - 61 - 8 97 04 80
pferdvsm@pferdvsm.pl

Russia
PFERD-Russland LLC
Shenkurskiy Proyezd, 3B, Office 417
127349 Moscow
Phone + 7 916 201 61 04
pferd.russland@pferd.com

Singapore
PFERD-Asia Pacific Pte. Ltd.
25 International Business Park,
#03-106 German Centre
Singapore 609916
Phone + 65 - 68 97 02 88
info@pferd.com.sg

South Africa
PFERD-South Africa (Pty.) Ltd.
32 Derrick Road
Spartan, Kempton Park
P.O. Box 588
Kempton Park, 1620
Phone + 27 - 11 - 2 30 40 00
info@pferd.co.za

Spain
PFERD-Rüggeberg S.A.
C/Júndiz, 18
Pol. Ind. Júndiz
01015 Vitoria-Gasteiz
Phone + 34 - 945 184 400
pferd@pferd.es

Sweden
PFERD-VSM AB
Radiovägen 3B
181 55 Lidingö
Phone + 46 - (0) 8 564 72 300
info@pferd-vsm.se

Switzerland
PFERD-VSM (Schweiz) AG
Werkzeuge und Schleifmittel
Zürichstrasse 38b
Postfach 22
8306 Brüttisellen
Phone + 41 - 44 - 805 28 28
info@pferd-vsm.ch

Thailand
PFERD (Thailand) Co., Ltd.
455/3 BIZ Phatthanakan-On Nut
Phatthanakan Road, Prawet
Sub-District, Prawet District
10250 Bangkok
Phone + 662 - 001 - 3328
thailand@pferd.com

Turkey
PFERD Aşındırıcı Takımlar Ticaret Ltd. Şti.
Marmara Geri Dönüsümcüler Koop.
Defne Sokak No. 22
41420 Sekerpinar-Cayirova-Kocaeli
Phone + 90 - 262 658 9990
info@pferd.com.tr

United Kingdom
PFERD LTD.
4 Westleigh Hall, Wakefield Road
Denby Dale
West Yorkshire HD8 8QJ
Phone + 44 - 14 84 - 86 61 49
info.uk@pferd.com

USA
PFERD INC.
9201 W. Heather Ave.
Milwaukee, WI 53224
Phone + 1 - 262 - 255 - 3200
sales@pferdusa.com

Vietnam
Representative Office of PFERD ASIA
PACIFIC PTE. LTD. in Vietnam
03 Floor – 85 Nguyen Huu Cau
District 01
Ho Chi Minh City
Phone +84 - 901 636 391
vietnam@pferd.com

Quality tools from a single source



Catalogue section 1

Files



Catalogue section 2

Milling tools



Catalogue section 3

Mounted points



Catalogue section 4

Fine grinding and polishing tools



Catalogue section 5

Diamond and CBN tools



Catalogue section 6

Cut-off wheels, flap discs and grinding wheels



Catalogue section 7

Cut-off wheels for stationary applications



Catalogue section 8

Industrial power brushes



Catalogue section 9

Tool drives



Files
Table of contents

General information 3
Well packed and presented 4
The fast way to the best tool 5
The most common PFERD cuts and teeth 6
PFERD quality, number of cuts 7

Files




Files for the workshop

- Machinist's files, DIN series 8
- Special files 14
- Key files 18
- Tungsten point files 21




Car body files

- Adjustable holders for car body files 22
- Car body file blades 23
- Car body files, tanged type 23




Milled tooth files

- Paint peeler 24
- Universal chamfer file 24
- Milled tooth files, tanged type 25
- Milled tooth file blades 26
- Holders for file blades 26




Tungsten carbide files

- Tungsten carbide files 27
- Holders for tungsten carbide files 27



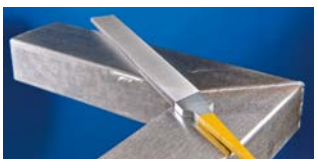
Sharpening files

- Three square saw files 28
- Knife sharpening files 30
- Featheredge files 30
- Mill saw files 31
- Chain saw files 32
- Chain saw sharpeners 35
- Depth gauge files 37




Wood files and rasps

- Wood files 38
- Wood rasps 39
- Hoof plane and horse rasps 41
- Special rasps 42
- Needle rasps 43

Precision files

- Tang files 45
- CORINOX files 46
- CORINOX needle files 47
- Needle files 48
- Handy files 50
- Riffler files, riffler rasps 51

Accessories





File handles, file sleeves, file brush

- File handles 56
- Quick-mounting handles 57
- Riffler file holder 57
- Plastic sleeves, empty 57
- File brush 58

Hand deburrer





Hand deburrer

- Hand deburrer 59



File sets can be found on the pages of the individual product groups.



Detailed information and ordering data for **diamond files** can be found in catalogue section 5.

All tools and more information:
www.pferd.com

Quality

For 200 years, PFERD has been manufacturing files of a world-renowned high quality. The experience gained over many years as a tool manufacturer is constantly used for the development of PFERD files.

Application-oriented file shapes and cuts for industry and crafts guarantee good economic value. Even after long use, PFERD files achieve high stock removal rates and an excellent surface quality. State-of-the-art production technology and strict quality controls guarantee the outstanding PFERD quality.

PFERD is certified according to ISO 9001.



PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

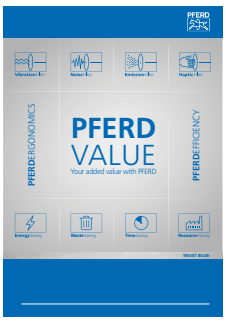
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



PFERDPRAXIS brochures

Our **PFERD**PRAXIS brochures contain a wealth of useful information on material properties as well as tips and tricks for using PFERD tools on specific materials.

You can find information on the maintenance and care of a saw chain and on the repair of other forestry tools in the "PFERD tools for forestry" PRAXIS FOCUS brochure.





PFERD industrial packaging

PFERD files in industrial packaging are traditionally rolled in paper which protects them against corrosion. Depending on file length, they are packed in packaging units of 5 or 10 pieces (except chain saw files and precision files).

These files are delivered without a handle. They are therefore suitable for experienced users who have their own handles or who would like to purchase these separately according to their individual needs.

Advantages:
- Robust, corrosion- and damage-resistant packaging.
- Easier selection of the optimum file thanks to the colour coding system for fast cut selection.
- Packaging labels with all the important information at a glance.



Point-of-sale packaging

PFERD also offers many of its products in sales-boosting point-of-sale packaging. It is designed to perfectly present the products at the **PFERD**TOOL-CENTER.

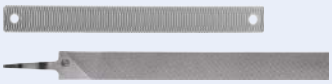
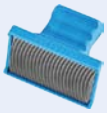
Advantages:
- Attractive design.
- Fixture to mount the products on the sales stand.
- Optimal protection against corrosion and damage.



PFERDTOOL-CENTER

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool. Your local retailer or PFERD sales adviser will be glad to answer any questions you might have.

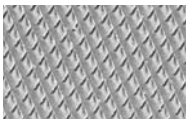
Advantages:
- Individual planning on a needs-driven basis.
- Eye-catching and intuitively designed.

Application	Material	Applications	Tool	Page
Filing 	■ Steel ■ Stainless steel (INOX) ■ Cast iron ■ Cast steel ■ Non-ferrous metals ■ Copper ■ Bronze ■ Brass ■ Zinc	■ Chamfering ■ Deburring ■ Roughing ■ Finishing ■ Surface work ■ Filing of breakthroughs	Files for the workshop 	8
			Soft metal files 	16
			Milled tooth files 	25
			Precision files 	44
			Tungsten carbide files 	27
Sharpening 	■ Saw chains ■ Saw blades ■ Band saw blades ■ Knives ■ Machetes	■ Sharpening of saw chains, blades, and band saw blades	Chain saw files	32
			Three square saw files 	28
			Mill saw files 	31
			Chain saw sharpeners CHAIN SHARP 	35
Car body work 	■ Sheet metal ■ Non-ferrous metals ■ Plastics	■ Surface work ■ Deburring ■ Removal of solder spots ■ Removal of weld spots	Car body files 	23
		■ Removal of thin paint layers ■ Correction of painting faults	Paint peeler 	24
Soft material work 	■ Wood ■ Plastics ■ Soft stone ■ Horn	■ Roughing ■ Finishing ■ Surface work ■ Deburring ■ Chamfering	Wood files 	38
			Wood rasps 	39
			Hoof plane and horse rasps 	41
			Special rasps 	42

Files
The most common PFERD cuts

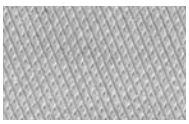
Files for the workshop

Cut 1



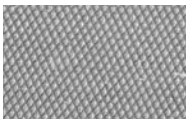
- Cross cut.
- Suitable for coarse stock removal and for roughing.

Cut 2



- Cross cut.
- Suitable for universal roughing and finishing.

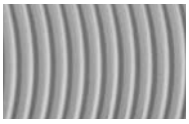
Cut 3



- Cross cut.
- Suitable for fine processing and finishing.

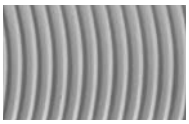
Car body files

Cut 00



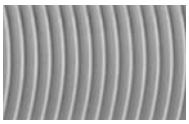
- Radial cut.
- Suitable for very coarse stock removal and for roughing.
- Creates score-free surfaces.

Cut 0



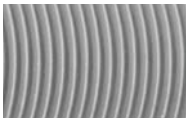
- Radial cut.
- Suitable for coarse stock removal and for roughing.
- Creates score-free surfaces.

Cut 1



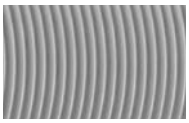
- Radial cut.
- Suitable for coarse stock removal and for roughing.
- Creates score-free surfaces.

Cut 2



- Radial cut.
- Suitable for universal roughing and finishing.
- Creates score-free surfaces.

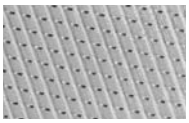
Cut 3



- Radial cut.
- Suitable for fine stock removal and finishing.
- Creates score-free surfaces.

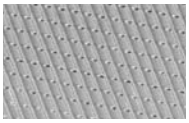
Milled tooth files

Cut 1



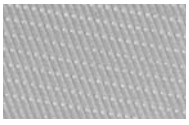
- Straight cut.
- Suitable for coarse stock removal on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

Cut 2



- Straight cut.
- Suitable for universal roughing and finishing on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

Cut 3



- Straight cut.
- Suitable for fine stock removal on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

Sharpening files

Classic



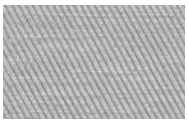
- Classic spiral cut.
- For users who prefer an aggressive filing action.

Premium



- Innovative spiral cut.
- For users who prefer a softer filing action.

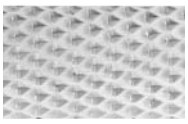
Single cut Cut 2



- Single cut.
- Universally suited to sharpening.

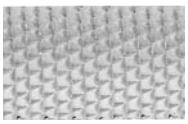
Rasps

Cut 1



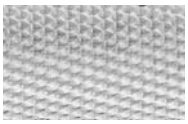
- Rasp cut.
- Suitable for coarse stock removal and for roughing.

Cut 2



- Rasp cut.
- Suitable for universal roughing and finishing.

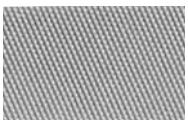
Cut 3



- Rasp cut.
- Suitable for fine processing and finishing.

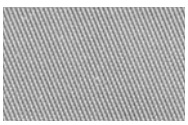
Precision files

Cut 00



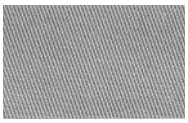
- Cross cut.
- Suitable for very coarse precision work.

Cut 0



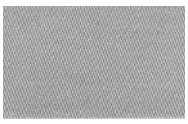
- Cross cut.
- Suitable for coarse precision work.

Cut 1



- Cross cut.
- Suitable for medium precision work.

Cut 2



- Cross cut.
- Suitable for medium to fine precision work.

Cut 3



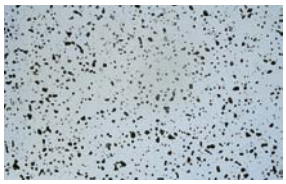
- Cross cut.
- Suitable for fine precision work.

Cut 4



- Cross cut.
- Suitable for very fine precision work.

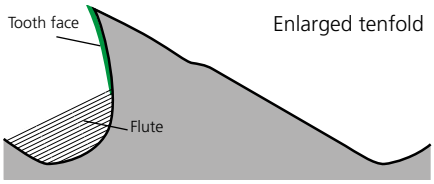
Several criteria determine PFERD quality



Uniform hardness through flawless steel microstructure
The profiling in the rolling mill, the forging of shape and tang, the annealing prior to cutting and the heat treatment each cause a change in the steel microstructure. The high carbon content of the steel microstructure determines the hardness and cutting performance of the file and must therefore be maintained.



Exact shape and uniform cut from tang to tip
The file blanks acquire their exact shape through forging and grinding. This enables accurate work. Equally spaced cuts and a uniform depth of cut ensure good filing performance and good surface finishes. The type and angle of the cut depend on the purpose for which the file is intended.



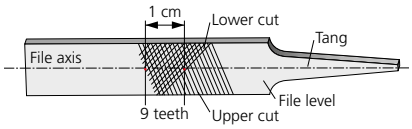
Perfectly milled tooth geometries for every application
Tooth shapes suited to various applications ensure the best stock removal rate. There is no universally appropriate tooth shape for every application. PFERD has developed the optimally suitable tooth shapes and tooth geometries for each of the various applications. The figure shows a car body file tooth with its typical rounded tooth face and large flute.

Number of cuts for cut files [cuts/cm] according to DIN 8349

Length (without tang) [mm]	Machinist's files number of cuts ± 8 %			Sharpening files number of cuts ± 5 %					
	Cut 1-B Bastard	Cut 2 Half-smooth	Cut 3-S Smooth	Regular	Slim	Extra slim	Double extra slim	Mill saw files Cut 1	Mill saw files Cut 2
100	17	22	28	20	23	26	–	–	–
125	–	–	–	19	22	24	25	–	–
150	13	18	22	17	20	22	24	20	24
175	–	–	–	16	19	21	23	–	–
200	10	14	18	15	17	20	22	18	20
250	9	12	16	14	16	17	–	16	18
300	8	11	14	–	–	–	–	14	16
350	7	10	13	–	–	–	–	12	14

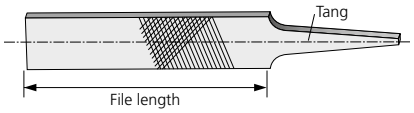
Determining the number of cuts:
The numbers of cuts for PFERD files conform to DIN 8349 requirements.

The number of cuts for a file is the number of scores (cuts) per cm of file length, counted along the file axis. For cross cut files, the number of cuts is determined by the upper cut.



Example:
At a length of 250 mm, a cut 1 file has 9 teeth/cm. A 100 mm long cut 1 file has 17 teeth/cm of file length, however. The higher number of teeth found on shorter files is intended to provide the same ease of use (in terms of force input, guidability and stock removal rate) on surfaces and edges as for a longer file.

Dimensions:



The cross-sectional dimensions indicated in the tables are measured across the cut and may vary depending on cut type. For tapered files the cut is measured at the highest and widest position.

PFERD files are manufactured in compliance with DIN and ISO standards.

Colour code for the file cut

The different colours used for the cuts available allow rapid tool selection.

Cut 1	Cut 2	Cut 3
green = coarse	yellow = medium	red = fine
10 Hand Planas paralelas 1112 | Inches 10" | bastard basto 1	10 Hand Planas paralelas 1112 | Inches 10" | Second cut medio 2	10 Hand Planas paralelas 1112 | Inches 10" | Smooth fino 3

Overview of file designations according to DIN

Designation	Shape symbol	Designation according to DIN 7261	
Hand		1112	A
Flat		1122	B
Three square		1132	C
Square		1142	D
Half-round		1152	E
Round		1162	F
Knife files		1172	G
Lathe files		1612 DE	H

Files for the workshop
Machinist's files, DIN series

PFERD produces files for the workshop with the highest quality standards. They achieve a long service life and high stock removal rates. Three application-oriented cuts are available.

Advantages:

- Consistently high stock removal rate from the tip to the tang.
- Long service life.
- Application-oriented design.
- Half-round and round versions with outstanding filing performance thanks to PFERD spiral cut.

Recommendations for use:

- Choose cut 1 for roughing or coarse stock removal.
- Choose cut 2 for universal use.
- Choose cut 3 for fine processing and finishing.

Materials that can be worked:

- Aluminium
- Bronze
- Copper
- Brass
- Zinc
- Grey cast iron
- Steels up to 1,200 N/mm²
- Cast steel

Applications:

- Deburring
- Surface work
- Work on edges (chamfering, rounding)

Ordering notes:

- PFERD files for the workshop are available in industrial packaging without handle or in POS packaging with ergonomic file handle.

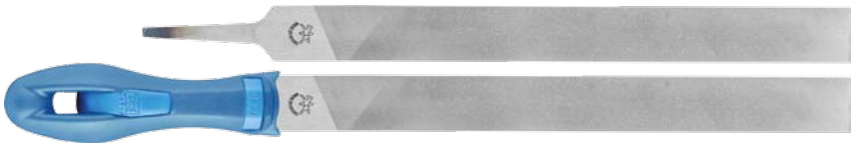
Matching accessories:

- You can find matching ergonomic file handles and other PFERD handles on page 56.



PFERDVALUE:

PFERDERGONOMICS recommends the ergonomic file handle for comfortable work.



Hand (1112)

Rectangular file, cut on three sides, one side uncut. Version with tang. Shape A according to DIN 7261. Suitable for filing rectangular geometries.

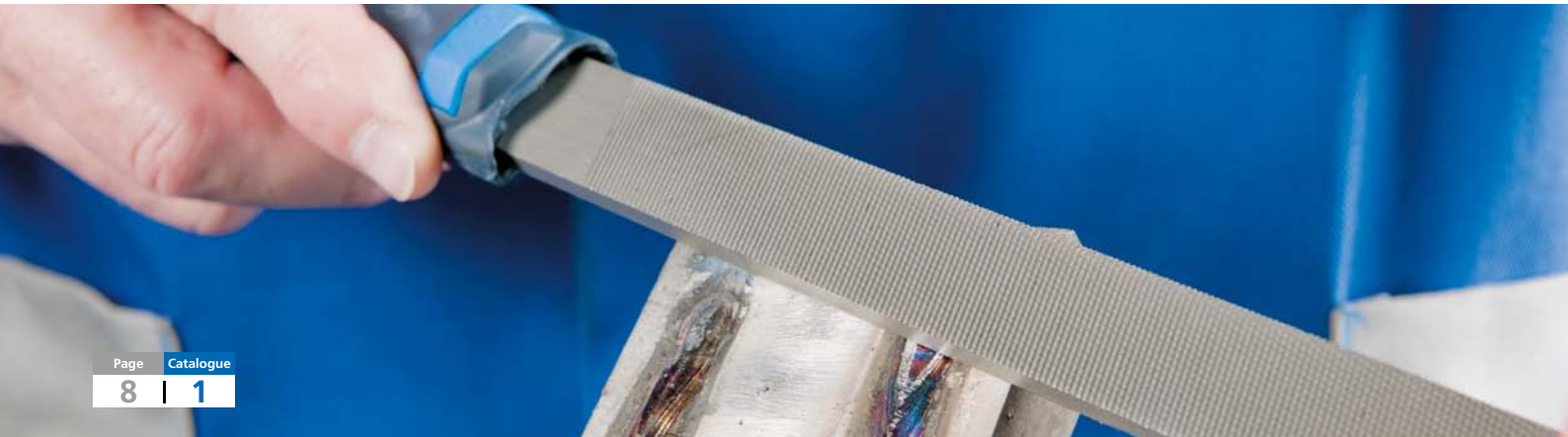
Ordering notes:

- Please specify the desired cut.

PFERDVALUE:

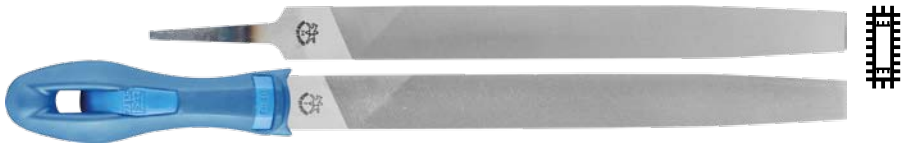
HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1112	100	4	005606	005613	005620	12.0 x 2.5	FH 2	-	10	1112 100 H...
	150	6	005637	005644	005651	16.0 x 4.0	FH 3	-	10	1112 150 H...
	200	8	005668	005675	005682	20.0 x 5.0	FH 4/1	-	10	1112 200 H...
	250	10	005699	005705	005712	25.0 x 6.0	FH 4/1	-	10	1112 250 H...
	300	12	005729	005736	005743	30.0 x 6.5	FH 5/1	-	5	1112 300 H...
	350	14	005750	005767	-	35.0 x 7.5	FH 5/1	-	5	1112 350 H...
POS packaging (with handle)										
1112	150	6	541388	541432	541463	16.0 x 4.0	-	FH 3	5	PF 1112 150 H...
	200	8	541494	541524	541555	20.0 x 5.0	-	FH 4/1	5	PF 1112 200 H...
	250	10	541586	541623	541647	25.0 x 6.0	-	FH 4/1	5	PF 1112 250 H...
	300	12	541661	541678	541685	30.0 x 6.5	-	FH 5/1	5	PF 1112 300 H...



Flat (1122)

Rectangular file, tapered and cut on four sides. Version with tang. Shape B according to DIN 7261. Suitable for filing rectangular geometries.



Ordering notes:
- Please specify the desired cut.

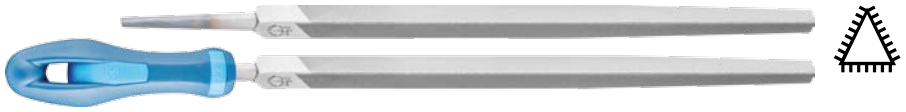
PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1122	100	4	005811	005828	005835	12.0 x 2.5	FH 2	-	10	1122 100 H...
	150	6	005842	005859	005866	16.0 x 4.0	FH 3	-	10	1122 150 H...
	200	8	005873	005880	005897	20.0 x 5.0	FH 4/1	-	10	1122 200 H...
	250	10	005903	005910	005927	25.0 x 6.0	FH 4/1	-	10	1122 250 H...
	300	12	005934	005941	005958	30.0 x 6.5	FH 5/1	-	5	1122 300 H...
	350	14	005965	-	-	35.0 x 7.5	FH 5/1	-	5	1122 350 H...
POS packaging (with handle)										
1122	150	6	669341	669358	669365	16.0 x 4.0	-	FH 3	5	PF 1122 150 H...
	200	8	669372	669389	669396	20.0 x 5.0	-	FH 4/1	5	PF 1122 200 H...
	250	10	669402	669419	669426	25.0 x 6.0	-	FH 4/1	5	PF 1122 250 H...
	300	12	669433	669440	669457	30.0 x 6.5	-	FH 5/1	5	PF 1122 300 H...

Three square (1132)

Triangular file, tapered and cut on three sides. Version with tang. Shape C according to DIN 7261. Suitable for filing angular profiles.



Ordering notes:
- Please specify the desired cut.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1132	100	4	006603	006610	006627	8.0	FH 2	-	10	1132 100 H...
	150	6	006641	006658	006665	11.0	FH 3	-	10	1132 150 H...
	200	8	006672	006689	006696	13.0	FH 4	-	10	1132 200 H...
	250	10	006702	006719	006726	15.5	FH 5	-	10	1132 250 H...
	300	12	006733	006740	-	18.0	FH 5	-	5	1132 300 H...
POS packaging (with handle)										
1132	150	6	541692	541708	541715	11.0	-	FH 3	5	PF 1132 150 H...
	200	8	541722	541739	541746	13.0	-	FH 4	5	PF 1132 200 H...
	250	10	541753	541760	-	15.5	-	FH 5	5	PF 1132 250 H...



Square (1142)

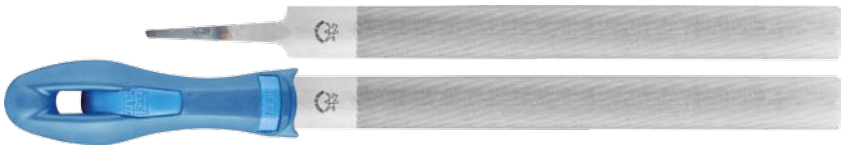
Square file, tapered and cut on four sides. Version with tang. Shape D according to DIN 7261. Suitable for filing angular profiles.

Ordering notes:
- Please specify the desired cut.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1142	100	4	006009	006016	006023	4.0	FH 2	-	10	1142 100 H...
	150	6	006030	006047	006054	6.0	FH 3	-	10	1142 150 H...
	200	8	006061	006078	006085	8.0	FH 4	-	10	1142 200 H...
	250	10	006092	006108	006115	10.0	FH 4	-	10	1142 250 H...
	300	12	006122	006139	-	12.0	FH 5	-	5	1142 300 H...
POS packaging (with handle)										
1142	150	6	541777	541784	-	6.0	-	FH 3	5	PF 1142 150 H...
	200	8	541791	541807	-	8.0	-	FH 4	5	PF 1142 200 H...
	250	10	541814	541838	-	10.0	-	FH 4	5	PF 1142 250 H...



Half-round (1152)

Half-round file, cut on two sides. Version with tang. Shape E according to DIN 7261. Suitable for work on radii and for filing of half-round shapes.

Ordering notes:
- Please specify the desired cut.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1152	150	6	006207	006214	006221	16.0 x 4.5	FH 3	-	10	1152 150 H...
	200	8	006238	006245	006252	20.0 x 6.0	FH 4/1	-	10	1152 200 H...
	250	10	006269	006276	006283	25.0 x 7.0	FH 4/1	-	10	1152 250 H...
	300	12	006290	006306	006313	30.0 x 8.5	FH 5/1	-	5	1152 300 H...
	350	14	006320	-	-	35.0 x 10.0	FH 5/1	-	5	1152 350 H...
POS packaging (with handle)										
1152	150	6	541845	541852	541869	16.0 x 4.5	-	FH 3	5	PF 1152 150 H...
	200	8	541876	541883	541890	20.0 x 6.0	-	FH 4/1	5	PF 1152 200 H...
	250	10	541906	541920	541937	25.0 x 7.0	-	FH 4/1	5	PF 1152 250 H...
	300	12	541944	-	-	30.0 x 8.5	-	FH 5/1	5	PF 1152 300 H...

Half-round pointed (1152 SP)



Half-round pointed file, cut on two sides. Version with tang. Shape E according to DIN 7261. Suitable for work on radii and for filing of half-round shapes.

Ordering notes:
- Please specify the desired cut.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1152 SP	100	4	006160	006177	006184	10.4 x 2.5	FH 2	-	10	1152 SP 100 H...
	150	6	006955	006962	006979	16.0 x 4.5	FH 3	-	10	1152 SP 150 H...
	200	8	006986	006993	007006	20.0 x 6.0	FH 4/1	-	10	1152 SP 200 H...
	250	10	007013	007020	007037	25.0 x 7.0	FH 4/1	-	10	1152 SP 250 H...
	300	12	007044	007051	007068	30.0 x 8.5	FH 5/1	-	5	1152 SP 300 H...
	350	14	222355	-	-	35.0 x 10.0	FH 5/1	-	5	1152 SP 350 H...
POS packaging (with handle)										
1152 SP	150	6	809877	809891	809907	16.0 x 4.5	-	FH 3	5	PF 1152 SP 150 H...
	200	8	809914	809921	809938	20.0 x 6.0	-	FH 4/1	5	PF 1152 SP 200 H...
	250	10	809952	809969	809976	25.0 x 7.0	-	FH 4/1	5	PF 1152 SP 250 H...
	300	12	810002	810019	810026	30.0 x 8.5	-	FH 5/1	5	PF 1152 SP 300 H...

Round (1162)



Round file with circumferential cut. Version with tang. Shape F according to DIN 7261. Suitable for work on radii and for filing profiles with inner radii.

Ordering notes:
- Please specify the desired cut.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1162	100	4	006405	006412	006429	4.0	FH 2	-	10	1162 100 H...
	150	6	006467	006474	006481	6.0	FH 3	-	10	1162 150 H...
	200	8	006498	006504	006511	7.5	FH 4	-	10	1162 200 H...
	250	10	006528	006535	006542	9.5	FH 4	-	10	1162 250 H...
	300	12	006559	006566	006573	12.0	FH 5	-	5	1162 300 H...
	350	14	006580	-	-	15.0	FH 5	-	5	1162 350 H...
POS packaging (with handle)										
1162	150	6	541951	541968	541982	6.0	-	FH 3	5	PF 1162 150 H...
	200	8	541999	542002	542019	7.5	-	FH 4	5	PF 1162 200 H...
	250	10	542026	542040	542057	9.5	-	FH 4	5	PF 1162 250 H...
	300	12	542064	-	-	12.0	-	FH 5	5	PF 1162 300 H...



Knife files (1172)

Triangular file with knife profile, cut on two sides and the narrow edge. Version with tang. Shape G according to DIN 7261. For work on very acute-angled and narrow geometries.

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle		Description
			EAN 4007220						
Industrial packaging (without handle)									
1172	150	6	-	006801	006818	16.0 x 5.2 x 1.25	FH 3	10	1172 150 H...
	200	8	006825	006832	006849	20.0 x 6.4 x 1.5	FH 4	10	1172 200 H...
	250	10	006856	006863	-	25.0 x 7.9 x 1.75	FH 4	10	1172 250 H...



PFERD-PLUS files, hand type (1112)

Rectangular file, cut on three sides, one edge uncut. Version with tang. Shape A according to DIN 7261. Outstanding filing performance thanks to the special PFERD-PLUS cut. Suitable for filing rectangular geometries.

Advantages:
- Easy and energy-saving working due to spade-like filing teeth.
- No clogging whilst processing soft materials thanks to a wide chip breaker.
- Can be used universally for all hobby and DIY purposes.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut PLUS-cut	Cross section [mm]	Incl. handle		Description
			EAN 4007220				
POS packaging (with handle)							
1112	200	8	542071	20.0 x 5.0	FH 4/1	5	PF 1112 PLUS 200
	250	10	542095	25.0 x 6.0	FH 4/1	5	PF 1112 PLUS 250
	300	12	006948	30.0 x 6.5	FH 5/1	5	PF 1112 PLUS 300



Machinist's files in plastic pouch WR, machinist's files in plastic pouch with cardboard box WRU



Quality files for industry and trade in a protective and climate-resistant PVC pouch for storage in a toolbox or on a workbench. Each file comes with an ergonomic file handle. PFERD also provides the plastic pouches with files that are 200 and 250 mm in length in attractive packaging with a transparent window.

Advantages:
- Suitable for a wide range of applications.
- Available on request with matching plastic pouch to save space when stored.

Ordering notes:
- Please specify the desired type.
- WR = machinist's files in plastic pouch
- WRU = machinist's files in plastic pouch with cardboard box

PFERDVALUE:

HapticFilter

Length [mm]	Length [inch]	Type		Contents		Description
		WR	WRU			
		EAN 4007220				
200	8	011409	807965	1112 200 H1, 1142 200 H1, 1152 200 H1, 1162 200 H1, 1552 200 H2	1	520 ... 200
		011416	807972	1112 200 H1, 1132 200 H1, 1142 200 H1, 1152 SP 200 H1, 1162 200 H1	1	531 ... 200
		011423	807989	1112 200 H2, 1132 200 H2, 1142 200 H2, 1152 SP 200 H2, 1162 200 H2	1	532 ... 200
		011430	807996	1112 200 H3, 1132 200 H3, 1142 200 H3, 1152 SP 200 H3, 1162 200 H3	1	533 ... 200
250	10	011447	808009	1112 250 H1, 1132 250 H1, 1142 250 H1, 1152 SP 250 H1, 1162 250 H1	1	541 ... 250
		011454	808016	1112 250 H2, 1132 250 H2, 1142 250 H2, 1152 SP 250 H2, 1162 250 H2	1	542 ... 250
		011461	808023	1112 250 H3, 1132 250 H3, 1142 250 H3, 1152 SP 250 H3, 1162 250 H3	1	543 ... 250
300	12	011478	-	1112 300 H1, 1132 300 H1, 1142 300 H1, 1152 SP 300 H1, 1162 300 H1	1	551 ... 300
		011485	-	1112 300 H2, 1132 300 H2, 1142 300 H2, 1152 SP 300 H2, 1162 300 H2	1	552 ... 300
200 / 300	8 / 12	011508	-	1112 200 H1, 1112 200 H2, 1112 200 H3, 1112 300 H1, 1112 300 H2, 1112 300 H3	1	555 ... 200/300

File set



Quality files designed to meet the needs of DIY users in a protective cardboard box. Precise files with a high stock removal rate and a long service life. Also suitable for sharpening. Each file comes with an ergonomic file handle.

Contents:
The set consists of one file each of
- PF 1512 VZ 200 H1/1, file rasp
- PF 1152 200 H1, half-round file
- PF 1212 VZ 200 H1/2, hobby file

PFERDVALUE:

HapticFilter

Length [mm]	Length [inch]	EAN 4007220		Description
200	8	008515	1	PF-Set 300 200



Hobby file (1212)

Rectangular file with different cuts on three sides. Version with tang and ergonomic file handle. Cross cut 1 on front side for roughing, single cut 2 on back side and edge for sharpening.

Advantages:
- For roughing and sharpening using the same tool.
- Suitable for versatile use.

Materials that can be worked:
steel, cast steel

Applications:
deburring, surface work, work on edges, sharpening, fine finishing

PFERDVALUE:
HapticFilter

Profile	Length [mm]	Length [inch]	Cut Cross cut 1/single cut 2 EAN 4007220	Cross section [mm]	Incl. handle		Description
POS packaging (with handle)							
1212	200	8	542293	25.0 x 4.5	FH 4/1	5	PF 1212 VZ 200 H1/2



File rasp (1512)

Rectangular file with different cuts on both flat sides. Version with tang and ergonomic file handle. Cross cut 1 on front side for roughing, rasp cut 1 on back side for rasping and one cut edge.

Advantages:
- For roughing and sharpening using the same tool.
- Suitable for versatile use.

Materials that can be worked:
soft non-ferrous metal, wood, plastics, steel

Applications:
deburring, cutting out holes, surface work, work on edges

PFERDVALUE:
HapticFilter

Profile	Length [mm]	Length [inch]	Cut Cross cut 1/rasp cut 1 EAN 4007220	Cross section [mm]	Incl. handle		Description
POS packaging (with handle)							
1512	200	8	542149	20.0 x 5.0	FH 4/1	5	PF 1512 VZ 200 H1/1

Universal sharpening file (1212)



Rectangular file, tanged and single cut 2 on two sides, with rounded, uncut narrow edges and ergonomic file handle. Often referred to as a lawnmower file. Suitable for sharpening cutting tools.

Advantages:
- Long tool life.
- High surface quality with optimum cutting performance.

Materials that can be worked:
steel, cast steel

Applications:
deburring, sharpening

PFERDVALUE:
HapticFilter

Profile	Length [mm]	Length [inch]	Cut Single cut 2 EAN 4007220	Cross section [mm]	Incl. handle		Description
POS packaging (with handle)							
1212	200	8	542286	25.0 x 4.5	FH 4/1	5	PF 1212 ruk 200 H2

Fitter's file (611)



Rectangular file with different milled cuts, tanged and with ergonomic file handle. Straight cut with chip breaker on front side, radial cut on back side, uncut edges. Suitable for various materials and for synthetic resin fillers or wood containing nails as well as steels up to 1,200 N/mm² and cast steel or for work on soldered seams.

Advantages:
- Extremely robust design.
- Suitable for versatile use.

Materials that can be worked:
aluminium, soft non-ferrous metal, wood, plastics, steel, cast steel

Applications:
deburring, work on edges, surface work, roughing

PFERDVALUE:
HapticFilter

Profile	Length [mm]	Length [inch]	Cut Radial 1/straight 2 EAN 4007220	Cross section [mm]	Incl. handle		Description
POS packaging (with handle)							
611	250	10	542309	24.0 x 5.3	FH 4/1	5	PF 611 250 Z1/2



Files for aluminium, hand (1612 w)

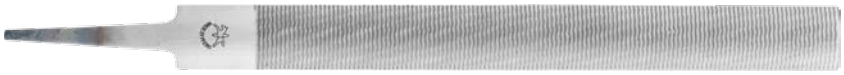
Rectangular file, tanged and special cut on three sides, one edge uncut. Shape A according to DIN 7261. Particularly suitable for work on soft metals.

Advantages:
- Special tooth geometry prevents the file from clogging.
- Good surface.
- Labour-saving work.

Materials that can be worked:
aluminium, soft non-ferrous metal, plastics

Applications:
deburring, surface work

Profile	Length [mm]	Length [inch]	Cut 0 EAN 4007220	Cross section [mm]	Matching handle		Description
1612 w	250	10	005798	25.0 x 6.0	FH 4/1	10	1612 w 250 H0
	300	12	005804	30.0 x 6.5	FH 5/1	5	1612 w 300 H0



Files for aluminium, half-round (1652 w)

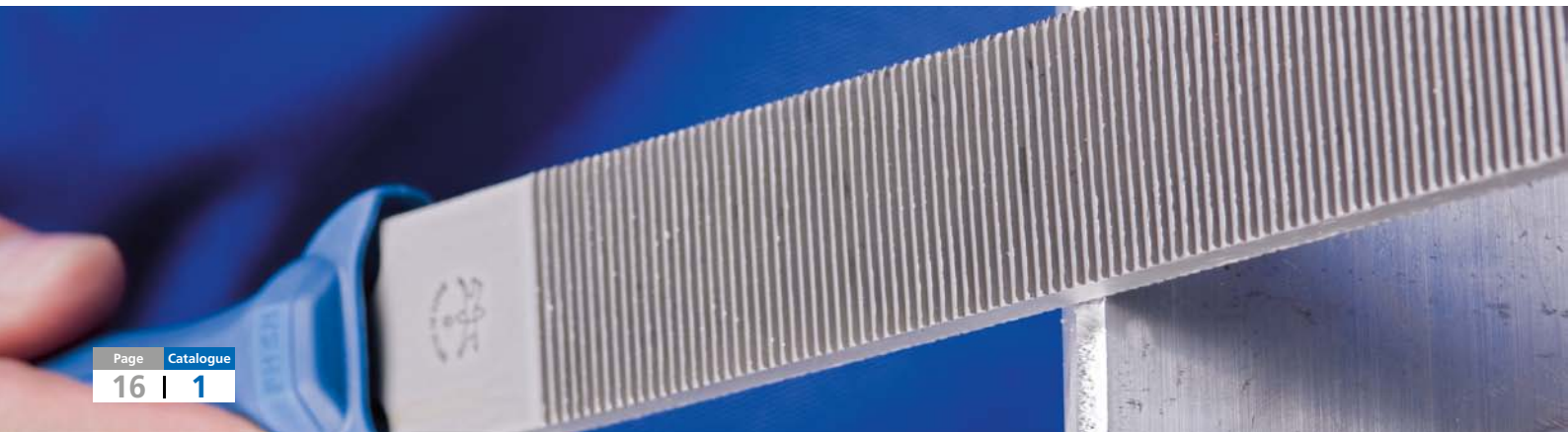
Half-round file, tanged with cut on two sides. Shape E according to DIN 7261. Outstanding filing performance thanks to the PFERD spiral cut on the half-round side. Particularly suitable for work on soft metals.

Advantages:
- Special tooth geometry prevents the file from clogging.
- Good surface.
- Labour-saving work.

Materials that can be worked:
aluminium, soft non-ferrous metal, plastics

Applications:
deburring, surface work

Profile	Length [mm]	Length [inch]	Cut 0 EAN 4007220	Cross section [mm]	Matching handle		Description
1652 w	250	10	006375	25.0 x 7.0	FH 4/1	10	1652 w 250 H0
	300	12	006399	30.0 x 8.5	FH 5/1	5	1652 w 300 H0



Files for plastics



Rectangular file, tanged and cross cut on three sides, one edge uncut. The cross cut is characterised by a particularly high stock removal rate. Also well suited to work on plastics, particularly duroplastics.

Advantages:
- Particularly high stock removal rate.
- Suitable for versatile use.

Materials that can be worked:
soft non-ferrous metal, plastics

Applications:
deburring, work on edges

Profile	Length [mm]	Length [inch]	Cut Cross cut EAN 4007220	Cross section [mm]	Matching handle		Description
1312	150	6	006887	16.0 x 2.8	FH 3	10	1312 150
	200	8	006894	20.0 x 3.5	FH 4/1	10	1312 200

Lathe files



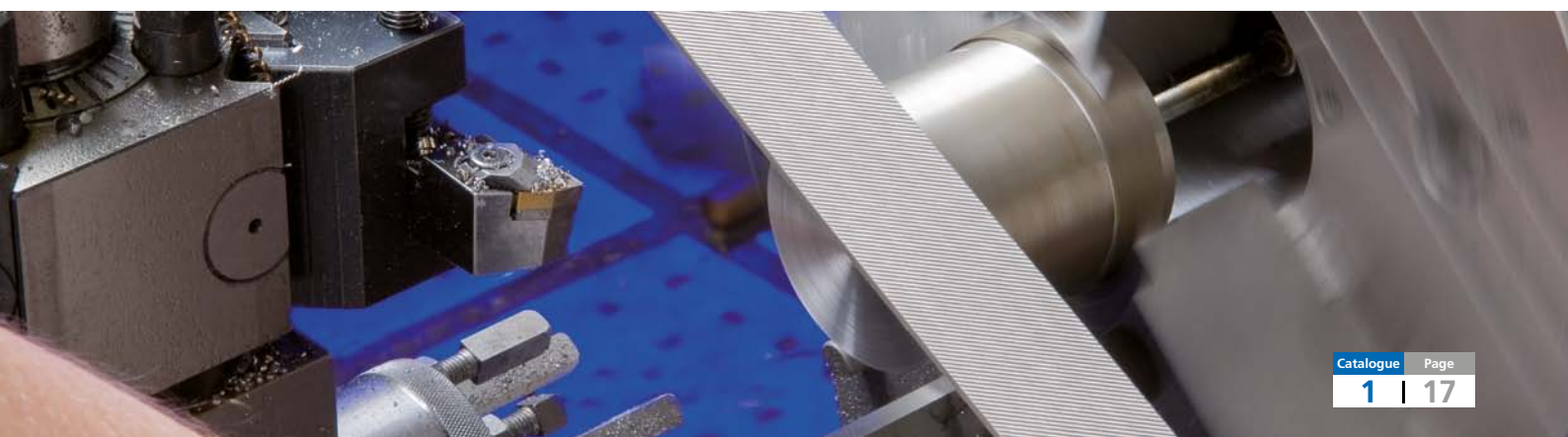
Rectangular file, tanged and cut on two sides, two edges uncut. Shape H according to DIN 7261. Suitable for deburring parts turned on a lathe.

Advantages:
- Opposed direction of the cut on the front and back side causes the file to move away from the chuck during lathe work. This improves safety.

Materials that can be worked:
aluminium, hard non-ferrous metal, plastics, steel, cast steel

Applications:
deburring, work on edges

Profile	Length [mm]	Length [inch]	Cut Single cut EAN 4007220	Cross section [mm]	Matching handle		Description
1612 DE	250	10	011713	25.0 x 6.0	FH 4/1	10	1612 DE 250 H1
	300	12	011720	30.0 x 6.5	FH 5/1	5	1612 DE 300 H1



Files for the workshop
Key files

These small files are perfectly suited to light and delicate filing tasks, especially in tool and mould-making. PFERD produces the different file shapes according to DIN 7283 specifications.

Advantages:

- Versatile application.
- Very handy design for the processing of delicate components.

Materials that can be worked:

- Aluminium
- Copper
- Brass
- Zinc
- Grey cast iron
- Steels up to 1,200 N/mm²
- Cast steel

Applications:

- Deburring
- Surface work
- Work on edges (chamfering, rounding)
- Sharpening
- Finishing

Ordering note:

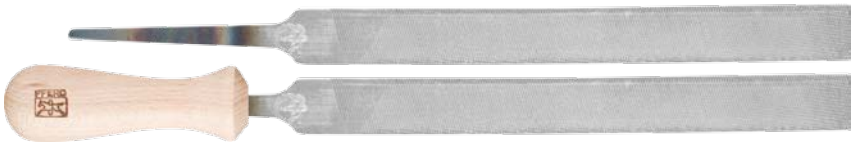
- PFERD key files are available in industrial packaging without handle or in POS packaging with wooden handle.



Accessories:



PFERD offers a practical quick-mounting handle for key files.
File tangs are reliably clamped by simply twisting the two halves of the handle. For ordering data and more information about PFERD file handles, see page 57.



Hand (1117)

Rectangular files that are cut on three sides and uncut on one side. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
1117	100	4	010624	10.0 x 1.4	FH 2	-	10	1117 100 H2
	150	6	010648	16.0 x 1.8	FH 2	-	10	1117 150 H2
POS packaging (with handle)								
1117	100	4	009154	10.0 x 1.4	-	wooden	10	PF 1117 100 H2



Flat (1127)

Rectangular file, tapered and cut on four sides. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1127	100	4	010532	10.0 x 1.4	FH 2	10	1127 100 H2
	150	6	010563	16.0 x 1.8	FH 2	10	1127 150 H2



Three square (1137)



Triangular file, tapered and cut on three sides. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle		Description
			EAN 4007220				
1137	100	4	010693	5.0	FH 2	10	1137 100 H2

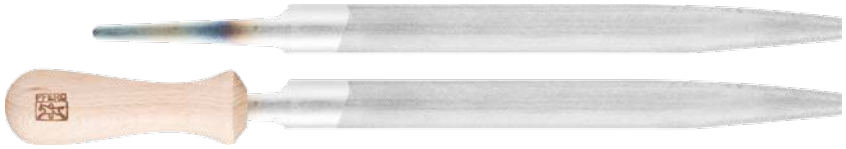
Square (1147)



Square file, tapered and cut on four sides. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220					
Industrial packaging (without handle)								
1147	100	4	010716	3.0	FH 2	-	10	1147 100 H2
POS packaging (with handle)								
1147	100	4	009185	3.0	-	wooden	10	PF 1147 100 H2

Half-round (1157)



Half-round file, cut on two sides. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220					
Industrial packaging (without handle)								
1157	100	4	010655	9.0 x 3.0	FH 2	-	10	1157 100 H2
POS packaging (with handle)								
1157	100	4	009192	9.0 x 3.0	-	wooden	10	PF 1157 100 H2

Round (1167)



Round file with circumferential cut. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220					
Industrial packaging (without handle)								
1167	100	4	010679	3.0	FH 2	-	10	1167 100 H2
POS packaging (with handle)								
1167	100	4	009208	3.0	-	wooden	10	PF 1167 100 H2



Key file set 265 A

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
Six key files:
- hand (1117)
- flat (1127)
- three square (1137)
- square (1147)
- half-round (1157)
- round (1167)
- quick-mounting handle

Advantages:
- Suitable for a wide range of delicate and light filing tasks.

Ordering notes:
- Supplied with quick-mounting handle no. 210 in a plastic pouch to protect against dirt and damage.

Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
100	4	011386	1	265 A 100 H2



Key file set 265 B

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
Six key files:
- hand (1117)
- flat (1127)
- three square (1137)
- square (1147)
- half-round (1157)
- round (1167)

Advantages:
- Suitable for a wide range of delicate and light filing tasks.

Ordering notes:
- Supplied with mounted wooden handles in a plastic pouch to protect against dirt and damage.

Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
100	4	011393	1	265 B 100 H2



Key file set 265 K

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
Six key files:
- hand (1117)
- flat (1127)
- three square (1137)
- square (1147)
- half-round (1157)
- round (1167)

Advantages:
- Suitable for a wide range of delicate and light filing tasks.

Ordering notes:
- Supplied with mounted wooden handles in a metal box to protect against dirt and damage.

Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
100	4	011362	1	265 K 100 H2

Tungsten point file



Rectangular file with flat handle and cut 2 on two sides. Shape A according to DIN 7283. Very thin file, which is particularly suitable for work on contacts and in narrow grooves and slots.

Advantages:
- The punched file handle eliminates the need for an additional handle.
- Very small cross section for use in keyways.
- Handy design.

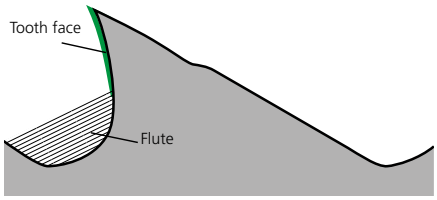
Materials that can be worked:
soft non-ferrous metal, steel, cast steel

Applications:
deburring, surface work

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]		Description
			EAN 4007220			
1118 A	100	4	010747	8.0 x 1.2	10	1118 A 100 H2



Cross section of a file tooth
Enlarged tenfold



Cross section of a car body file
Illustration of convex shape



PFERD car body files are not just needed for automotive body work

They are ideal for **any surface work** on sheet metal, non-ferrous metals and plastics requiring a particularly smooth and scratch-free finish. The surfaces can be painted immediately after filing. No subsequent polishing is necessary, as there are no scratches. The positive rake angle, the convex shape and the unsurpassed sharpness of the teeth provide outstanding filing performance and an optimum surface quality for professional users of PFERD milled car body files.

Ideal tooth shape

The teeth of the car body files are milled from solid material, as distinct from the usual cutting process. Each individual tooth is designed to ensure that the chip rolls up before the rounded tooth face and is found in the large flute. A special finishing treatment produces razor-sharp tooth edges that give these files an outstanding stock removal rate. The car body files are available in five tooth versions and in cross-cut form.

Convex shape prevents scratches

The convex shape means that the cutting area is not flat, but higher in the middle than around the file edges. The height difference is about 0.4 mm. This special cross-section shape prevents the edges of the file from coming into contact with the workpiece during processing, thus preventing scratches.

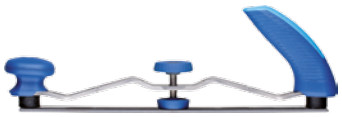
Materials that can be worked:

- Aluminium
- Steels up to 1,200 N/mm²

Applications:

- Levelling
- Surface work

Adjustable holders for car body files



Adjustable holders for car body files

This ergonomic and particularly lightweight holder permits individual tensioning of car body file blades to match the surface contour of the workpiece.

Advantages:
- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Particularly lightweight plastic design without plasticizer.
- Can be used in a focused manner or over a wide area as the car body file can be used curved as well as straight.
- Enables work with low levels of fatigue thanks to vibration-damping rubber pad.

PFERDVALUE:
Vibration Filter · Haptic Filter · Time Saving

Suitable for file length [mm]	Suitable for file length [inch]	EAN 4007220		Description
350	14	097915	1	KFH 350



Adjustable holders for car body files

This ergonomic holder permits individual tensioning of car body file blades to match the surface contour of the workpiece.

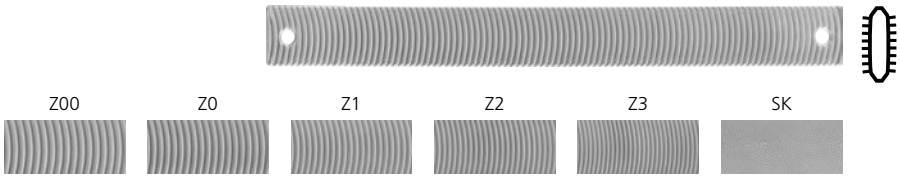
Advantages:
- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Can be used in a focused manner.
- The die-cast aluminium structure is lightweight and stable.

Suitable for file length [mm]	Suitable for file length [inch]	EAN 4007220		Description
300	12	016374	1	BH 125/300
350	14	016381	1	BH 125/350

Car body file blades

Car body file blades can be tensioned individually in the car body file holder and can be adapted to match the surface contour of the workpiece.

Advantages:
- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Convex shape of the file prevents unwanted scratches.
- Can be used in a focused manner.
- Razor-sharp tooth edges.



Profile	Length [mm]	Length [inch]	Cut	Type	EAN 4007220	Cross section [mm]	Teeth per inch		Description
299 b	300	12	1	coarse	016183	31.0 x 4.7	9	1	299 b 300 Z1
	300	12	2	medium	016190	31.0 x 4.7	10	1	299 b 300 Z2
	300	12	3	fine	016206	31.0 x 4.7	12	1	299 b 300 Z3
	350	14	00	extra-coarse	016268	36.0 x 5.8	7	1	299 b 350 Z00
	350	14	0	very coarse	016220	36.0 x 5.2	8	1	299 b 350 Z0
	350	14	1	coarse	016237	36.0 x 4.7	9	1	299 b 350 Z1
	350	14	2	medium	016244	36.0 x 4.7	10	1	299 b 350 Z2
	350	14	3	fine	016251	36.0 x 4.7	12	1	299 b 350 Z3
299 e	350	14	Special cross cut (SK)	-	016312	36.0 x 4.7	-	1	299 e 350

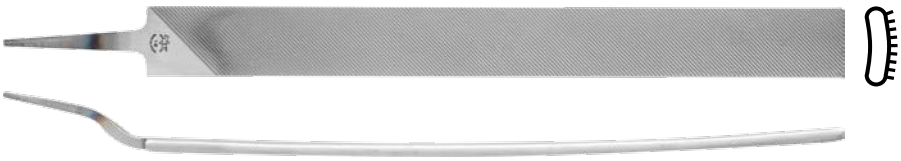
Car body files, tanged type

Car body files, tanged type

File curved in longitudinal and transverse direction (convex), tanged. Cut on one side.

Advantages:
- Convex shape of the file prevents unwanted scratches.
- Can be used in a focused manner.

Applications:
deburring, work on edges (chamfering, rounding)



Profile	Length [mm]	Length [inch]	Cut	EAN 4007220	Cross section [mm]	Matching handle		Description
299 c	350	14	1	016282	34.5 x 7.6	FH 5/1	5	299 c 350 H1
			3	016299	34.5 x 7.6	FH 5/1	5	299 c 350 H3



Milled tooth files
Paint peeler



Paint peeler

The small design of the paint peeler enables work in hard-to-reach areas. It is used for finishing the smallest painted surfaces with the corresponding plastic holder. This plastic holder allows for very fine adjustment of the file using two adjusting screws. Suitable for smoothing, correcting painting faults such as impurities, dust particles and air bubbles as well as removing extremely thin paint layers.

Advantages:
- Convex shape of the file prevents unwanted scratches.
- Precision-cut, razor-sharp teeth provide a very high-quality, scratch-free surface finish.
- Surfaces can be painted or processed immediately.
- File blade can be used on both sides.

Industry:
car, car body and trailer construction, furniture manufacture

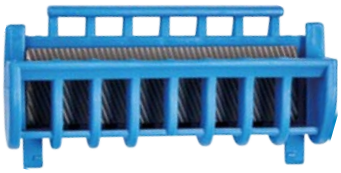
Materials that can be worked:
aluminium, steels up to 1,200 N/mm²

Ordering notes:
- The paint peeler is supplied together with a file.
- Replacement file for paint peelers: LAHF 50 Z3

Length [mm]	Length [inch]	Cut 3  EAN 4007220	Cross section [mm]	Replacement file		Description
Paint peeler						
50	2	016428	36.0 x 4.7	LAHF 50 Z3	1	LAH Z3
Replacement file for paint peelers						
50	2	016329	36.0 x 4.7	-	10	LAHF 50 Z3

Universal chamfer file

UKF



KF 110



Universal chamfer file

Rectangular file in a special plastic holder, straight cut on two sides. Ideal for easy and fast repair and for deburring on the guide rails of chain saws. Regular maintenance extends the service life of the guide rail and saw chain. Increases cutting precision and safety.

Advantages:
- The special holder enables easy tool control and exact, right-angled positioning of the chamfer file on the guide rail.
- Also excellent for sharpening ski edges.

Materials that can be worked:
aluminium, grey cast iron, steels up to 1,200 N/mm²

Applications:
work on edges, chamfering, deburring

Ordering notes:
- The universal chamfer file is supplied together with a file blade.
- Replacement file blade for universal chamfer file: KF 110 Z2

Length [mm]	Length [inch]	Cut 2  EAN 4007220	Cross section [mm]	Replacement file		Description
Universal chamfer file						
110	4-1/2	016008	-	KF 110 Z2	1	UKF Z2
Replacement file blade						
110	4-1/2	015995	31.0 x 4.7	-	10	KF 110 Z2



Milled tooth files from PFERD are particularly well suited to coarse stock removal. The highly abrasive milled tooth geometry with large flutes prevents clogging.



Advantages:

- Very aggressive.
- No clogging thanks to the large flutes.

Recommendations for use:

- Choose cut 1 with 8 teeth per inch for coarse stock removal.
- Choose cut 2 with 11 teeth per inch for medium stock removal.
- Choose cut 3 with 17 teeth per inch for fine stock removal.

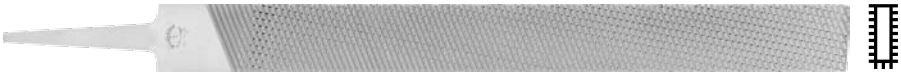
Materials that can be worked:

- Aluminium
- Grey cast iron
- Steels up to 1,200 N/mm²
- Cast steel
- Copper
- Brass

Applications:

- Levelling
- Deburring
- Surface work
- Work on edges (chamfering, rounding)

Hand



Rectangular file with cuts on three sides. Version with tang. Straight cut with chip breaker on the flat sides, straight cut on the high edge. Suitable for filing rectangular geometries.

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle		Description
			EAN 4007220						
290	250	10	015636	015643	-	25.0 x 5.5	FH 4/1	10	290 250 Z...
	300	12	015650	015667	015674	30.0 x 6.0	FH 5/1	5	290 300 Z...
	350	14	015681	015698	-	36.0 x 7.0	FH 5/1	5	290 350 Z...

Half-round, hollow

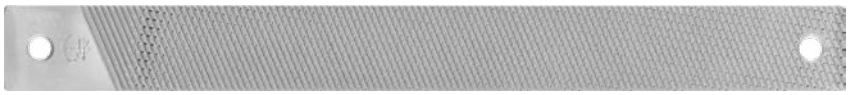


Half-round file, hollow and tapered. Version with tang. With chip breaker on the half-round side, straight cut on one side. Suitable for work on radii and for filing of half-round shapes.

Profile	Length [mm]	Length [inch]	Cut 1	Cross section [mm]	Matching handle		Description
			EAN 4007220				
295	250	10	015711	23.0 x 7.0	FH 4/1	10	295 250 Z1
	300	12	015735	27.0 x 9.0	FH 5/1	5	295 300 Z1



Milled tooth files
Milled tooth file blades



Hand

Rectangular file with two bores for mounting on the file holder, straight cut with chip breaker on the flat sides.

Materials that can be worked:
aluminium, grey cast iron, cast steel, steels up to 1,200 N/mm²

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cross section [mm]	Matching holder		Description
			EAN 4007220					
296	300	12	015834	015841	31.0 x 4.7	296a/300	5	296 300 Z...
	350	14	015858	015865	36.0 x 4.7	296a/350	5	296 350 Z...

Holder for file blades



Holder for file blades

This reusable, ergonomic file holder gives optimum file control and optimum filing results. Can be used for car body file blades, comes in two sizes for all PFERD milled file blades.

Advantages:
- Quick tool changes without special tools.
- Handy design.

Suitable for	EAN 4007220	Matching handle		Description
296 300 mm	015896	FH 5/1	1	296a/300
296 350 mm	015902	FH 5/1	1	296a/350



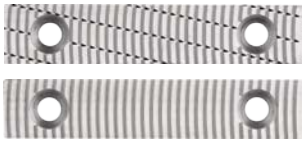
Tungsten carbide files, flat type

Flat tungsten carbide files for work on flat, convex and concave surfaces.

HMF 5010/1
HMF 13220/1



HMF 5010/2
HMF 13220/2



Advantages:
- The best results thanks to radial and convex cut pattern.

Materials that can be worked:
steel, steel materials with a hardness > 54 HRC

Recommendations for use:
- Use tungsten carbide files without chip breakers to achieve a very high surface quality.
- Use tungsten carbide files with chip breakers to achieve a high stock removal rate.
- Tungsten carbide files can be resharpened.

Ordering notes:
- **HMF 5010/1, HMF 13220/1:** Rectangular files, convex in transverse and longitudinal direction, cut on one side.
- **HMF 5010/2, HMF 13220/2:** Rectangular file, convex in transverse direction, cut on two sides, one of which has chip breakers.
- Holders for tungsten carbide files (HMFH) must be ordered separately.

Length [mm]	Length [inch]	EAN 4007220	Teeth per cm	Cross section [mm]	Chip breaker	Matching holder		Description
50	2	016435	10	10 x 5.0	without	HMFH 50	1	HMF 5010/1
		016442	6.5	10 x 5.0	1 side without, 1 side with	HMFH 50	1	HMF 5010/2
132	5 1/4	016473	6.5	20 x 7.0	without	HMFH 132	1	HMF 13220/1
		016480	5	20 x 7.0	1 side without, 1 side with	HMFH 132	1	HMF 13220/2

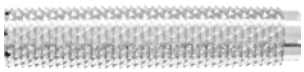
Tungsten carbide files, round type

Round tungsten carbide files for work on concave shapes and for refining inner radii, e.g. drip edges. Round tungsten carbide files with circumferential cut. The mounting system in the HMFH 51 R file holder allows the files to be rotated around their own axis in 60° steps.

HMF 1050



HMF 1250



Advantages:
- The unique tooth geometry ensures optimum results.
- Can be used 360°.

Materials that can be worked:
steel, steel materials with a hardness > 54 HRC

Ordering notes:
- Please order holders for tungsten carbide files (HMFH 51 R) separately.

Length [mm]	Length [inch]	EAN 4007220	Teeth per cm	Dia. [mm]	Matching holder		Description
50	2	016459	8	10.0	HMFH 51 R	1	HMF 1050
		016466	8	12.0	HMFH 51 R	1	HMF 1250

Holder for tungsten carbide files

Holder for tungsten carbide files

Reusable and ergonomically shaped file holder with ergonomic file handle.

HMFH 50



HMFH 132



HMFH 51 R



Advantages:
- Optimal file control is guaranteed.
- The best results.
- Rapid tool change.

Ordering notes:
- Please order tungsten carbide files separately.

PFERDVALUE:

HapticFilter

Matching tungsten carbide files	EAN 4007220		Description
HMF 5010/1, HMF 5010/2	016398	1	HMFH 50
HMF 13220/1, HMF 13220/2	016411	1	HMFH 132
HMF 1050, HMF 1250	016404	1	HMFH 51 R

Sharpening files
Three square saw files

Triangular files, tapered to the tip with tang. Cut on three sides and three edges.

Advantages:

- Good stock removal rate.
- Long service life.
- Versatile application.

Materials that can be worked:

- Steels up to 1,200 N/mm²
- Cast steel

Applications:

- Sharpening

Ordering notes:

- Type POS is supplied with ergonomic file handle.
- Available in the versions regular, slim, extra slim, and ultra-slim according to DIN 7262.



PFERDVALUE:

PFERDERGONOMICS recommends the ergonomic file handle for comfortable work.

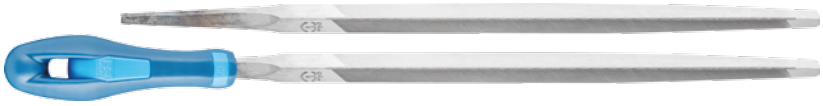


Saw files, normal (1232)

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
1232	125	5	010310	10.0	FH 3	-	10	1232 125 H2
	150	6	010327	12.0	FH 3	-	10	1232 150 H2
	250	10	010358	18.0	FH 4	-	10	1232 250 H2
POS packaging (with handle)								
1232	125	5	542347	10.0	-	FH 3	5	PF 1232 125 H2
	150	6	542354	12.0	-	FH 3	5	PF 1232 150 H2



Saw files, slim (1237)

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
1237	100	4	010365	6.0	FH 2	-	10	1237 100 H2
	125	5	010389	7.0	FH 2	-	10	1237 125 H2
	150	6	010396	8.5	FH 3	-	10	1237 150 H2
	175	7	010402	10.0	FH 4	-	10	1237 175 H2
	200	8	010419	12.0	FH 4	-	10	1237 200 H2
POS packaging (with handle)								
1237	125	5	542361	7.0	-	FH 2	5	PF 1237 125 H2
	150	6	542378	8.5	-	FH 3	5	PF 1237 150 H2

Saw files, extra slim (1238)



PFERDVALUE:

HapticFiler

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
1238	100	4	010426	5.0	FH 2	-	10	1238 100 H2
	150	6	010457	7.0	FH 2	-	10	1238 150 H2
POS packaging (with handle)								
1238	150	6	542408	7.0	-	FH 2	5	PF 1238 150 H2

Saw files, ultra-slim tapers (1239)



Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1239	125	5	328286	4.7	FH 2	10	1239 125 H2
	200	8	328316	8.0	FH 3	10	1239 200 H2

Fine saw file



Triangular file with knife profile, tanged. Cut on two sides and the narrow edge.

PFERDVALUE:

HapticFiler

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
340	110	4 1/2	011157	6.5 x 4.8	FH 2	-	10	340 110 H2
POS packaging (with handle)								
340	110	4 1/2	542415	6.5 x 4.8	-	FH 2	5	PF 340 110 H2

Cantsaw file (1230)



Triangular file, tanged. Cut on three sides, non-equilateral triangular shape.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1230	200	8	011171	19.5 x 11.0	FH 4	10	1230 200 H2



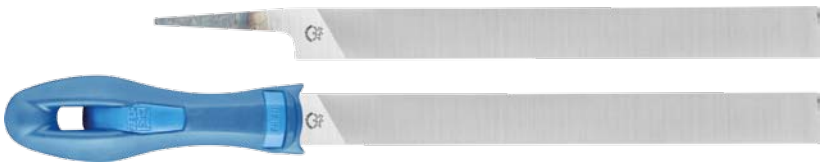


Band saw files (1231)

Triangular file, tapered with tang. Cut on three sides, round cut edges. Shape D according to DIN 7262. Suitable for sharpening saw blades.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1231	150	6	011096	14.6	FH 3	10	1231 150 H2
	175	7	011102	15.5	FH 4	10	1231 175 H2
	200	8	011119	17.0	FH 4	10	1231 200 H2

Knife sharpening files





Knife sharpening files (1272)

Triangular file with knife profile, tanged. Cut on two sides and the narrow edge. Shape G according to DIN 7262.

Ordering notes:

- Type POS is supplied with an ergonomic file handle.

PFERDVALUE:



Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle	Incl. handle		Description
Industrial packaging (without handle)								
1272	200	8	010853	20.0 x 6.4 x 1.5	FH 4/1	-	10	1272 200 H2
	250	10	010860	25.0 x 7.9 x 1.75	FH 4/1	-	10	1272 250 H2
POS packaging (with handle)								
1272	200	8	542385	20.0 x 6.4 x 1.5	-	FH 4/1	5	PF 1272 200 H2

Featheredge file





Featheredge file

File with rhomboid cross section with feather edge profile, tanged. Cut on four sides.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
305	200	8	010884	32.0 x 6.0	FH 5/1	10	305 200 H2

Mill saw files (1212)



gr

r

Rectangular file, tanged. Available in three versions: With two straight edges (1212), with one round and one straight edge (1212 gr), with two round edges (1212 r) and cut on four sides. Shape E according to DIN 7276.

Ordering notes:
- Type POS is supplied with an ergonomic file handle.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220					
Industrial packaging (without handle)								
1212	200	8	010914	20.0 x 3.5	FH 4/1	-	10	1212 200 H2
	250	10	010921	25.0 x 4.5	FH 4/1	-	10	1212 250 H2
	300	12	010938	30.0 x 5.0	FH 5/1	-	10	1212 300 H2
Industrial packaging (without handle) – gr								
1212 gr	150	6	010945	16.0 x 3.0	FH 3	-	10	1212 gr 150 H2
	200	8	010952	20.0 x 3.5	FH 4/1	-	10	1212 gr 200 H2
	250	10	010976	25.0 x 4.5	FH 4/1	-	10	1212 gr 250 H2
	300	12	010983	30.0 x 5.0	FH 5/1	-	10	1212 gr 300 H2
POS packaging (with handle) – gr								
1212 gr	200	8	542248	20.0 x 3.5	-	FH 4/1	5	PF 1212 gr 200 H2
Industrial packaging (without handle) – r								
1212 r	200	8	011003	20.0 x 3.5	FH 4/1	-	10	1212 r 200 H2
	250	10	011027	25.0 x 4.5	FH 4/1	-	10	1212 r 250 H2
	300	12	011034	30.0 x 5.0	FH 5/1	-	10	1212 r 300 H2
POS packaging (with handle) – r								
1212 r	200	8	542255	20.0 x 3.5	-	FH 4/1	5	PF 1212 r 200 H2
	250	10	542279	25.0 x 4.5	-	FH 4/1	5	PF 1212 r 250 H2

Mill saw files, US type 1212 SP ("Mill file")



Rectangular file, tapered with tang. Cut on four sides. Shape E according to DIN 7262.

Applications:
sharpening, deburring, surface work

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle		Description
			EAN 4007220						
1212 SP	150	6	011546	-	011560	16.0 x 3.0	FH 3	10	1212 SP 150 H...
	200	8	011577	011584	011591	20.0 x 3.5	FH 4/1	10	1212 SP 200 H...
	250	10	011607	011614	011621	25.0 x 4.5	FH 4/1	10	1212 SP 250 H...
	300	12	011638	011645	011652	30.0 x 5.0	FH 5/1	10	1212 SP 300 H...



Chain saw files, round

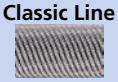
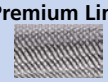
Round file for manual sharpening of saw chains with precise spiral cut for outstanding sharpness and particularly long tool life. For fast, score-free sharpening of saw teeth. In comparison to machine sharpening, these files remove stock sparingly without thermal loads due to friction on the metal.

Advantages:
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.
- **Premium Line:** Perfect sharpness thanks to innovative spiral cut, for ensuring a fine tooth surface for maximum cutting performance and a gentler feel to the tool whilst filing.

Applications:
sharpening

Ordering notes:
- Please specify the desired Performance Line.
- Available in different diameters, suitable for all common saw chains.
- Packaging units of 6 and 60 pieces in a practical cardboard box.

Materials that can be worked:
steels up to 1,200 N/mm²

Profile	Length [mm]	Length [inch]	Dia. [mm]	Dia. [inch]	Performance Line		Chain pitch [inch]	Matching handle		Description
					Classic Line 	Premium Line 				
					EAN 4007220					
412	200	8	3.5	9/64	005194	-	1/4 LP*	SH 220	6	412 200 x 3,5 ...
			4.0	5/32	005217	021897	1/4 , 3/8 LP*	FH 2	6	412 200 x 4,0 ...
			4.5	11/64	005224	021910	.325	FH 2	6	412 200 x 4,5 ...
			4.8	3/16	005231	021927	.325	HKSF 100, FH 2, FH 3	6	412 200 x 4,8 ...
			5.16	13/64	005248	021934	3/8	HKSF 100, FH 3	6	412 200 x 5,16 ...
			5.5	7/32	005255	021941	3/8 , 404	HKSF 100, FH 3	6	412 200 x 5,5 ...
			6.3	1/4	005262	-	-	HKSF 100, FH 3	6	412 200 x 6,3 ...
			7.0	9/32	005279	-	-	HKSF 100, FH 3	6	412 200 x 7,0 ...
			7.9	5/16	005286	-	3/4	HKSF 100, FH 3	6	412 200 x 7,9 ...

Always observe the current guidelines and recommendations of the equipment and saw chain manufacturers. * LP = Low Profile

Packing system for PFERD chain saw files

Pack of 6
6 chain saw files



Display box
60 chain saw files
= 10 packs of 6





You can find matching ergonomic file handles for PFERD chain saw files on page 56.

Chain saw files in plastic pouch 3 pc. packaging



Three round files with spiral cut in promotional plastic packaging to protect against dirt and damage.

Advantages:
- The opening on the front of the packaging makes it easier to remove and return the files.
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.
- **Premium Line:** Perfect sharpness thanks to innovative spiral cut, for ensuring a fine tooth surface for maximum cutting performance and a gentler feel to the tool whilst filing.

Ordering notes:
- Please specify the desired Performance Line.
- Chain saw files 412, file diameter 3.2 mm, are supplied with a round cylindrical tang.
- One packaging unit contains four plastic packs, each containing three files.

Profile	Length [mm]	Length [inch]	Dia. [mm]	Dia. [inch]	Performance Line		Chain pitch [inch]	Matching handle		Description
					Classic Line 	Premium Line 				
					EAN 4007220					
POS packaging										
412	200	8	3.2	1/8	959534	-	1/4 LP*	SH 220	12	412 4x3 200 3,2 ...
			4.0	5/32	958803	056899	1/4 , 3/8 LP*	FH 2	12	412 4x3 200 4,0 ...
			4.5	11/64	072868	072875	.325	FH 2	12	412 4x3 200 4,5 ...
			4.8	3/16	958810	057339	.325	HKSF 100, FH 2, FH 3	12	412 4x3 200 4,8 ...
			5.16	13/64	056875	063965	3/8	HKSF 100, FH 3	12	412 4x3 200 5,16 ...
			5.5	7/32	958827	064214	3/8 , 404	HKSF 100, FH 3	12	412 4x3 200 5,5 ...

Always observe the current guidelines and recommendations of the equipment and saw chain manufacturers. * LP = Low Profile

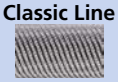
Chain saw files in plastic pouch 2 pc. packaging



Two round Classic Line files with spiral cut in promotional plastic packaging to protect against dirt and damage.

Advantages:
- The overlapping opening on the rear ensures that no files can inadvertently slide out of the packaging.
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.

Ordering notes:
- One packaging unit contains twenty plastic packs, each containing two files.

Profile	Length [mm]	Length [inch]	Dia. [mm]	Dia. [inch]	Performance Line	Chain pitch [inch]	Matching handle		Description
					Classic Line 				
					EAN 4007220				
POS packaging									
412	200	8	4.0	5/32	005408	1/4 , 3/8 LP*	FH 2	40	4122 SK-4,0 200 Classic
			4.8	3/16	005415	.325	HKSF 100, FH 2, FH 3	40	4122 SK-4,8 200 Classic
			5.16	13/64	045718	3/8	HKSF 100, FH 3	40	4122 SK-5,16 200 Classic
			5.5	7/32	005422	3/8 , 404	HKSF 100, FH 3	40	4122 SK-5,5 200 Classic

Always observe the current guidelines and recommendations of the equipment and saw chain manufacturers. * LP = Low Profile





Wooden handles for chain saw files

The wooden handle for chain saw files has an angular contact surface which maintains a 35° filing angle for accurate, even sharpening of all chainsaw teeth.

Advantages:
- Optimized filing angle ensures precise, even filing.

Suitable for chain saw file diameter [mm]	EAN 4007220	Overall length [mm]		Description
4.8 / 5.16 / 5.5 / 6.3 / 7.0 / 7.9	015407	100	10	HKSF 100/10
	015391	100	100	HKSF 100/100

FH 1 KSF



KSSL



Ergonomic file handle, chain saw gauge

The chain saw gauge supports consistent sharpening results by providing the correct sharpening angle. It is attached to the stud of the ergonomic file handle FH 1 KSF.

Ordering notes:
- Please order ergonomic file handle FH 1 KSF separately.
- The chain saw gauge is available in two versions: an angle of 25°/30° and an angle of 30°/35°.

PFERDVALUE:

HapticFilter

Suitable for chain saw file diameter [mm]	EAN 4007220	Overall length [mm]		Description
4.0 / 4.5 / 4.8 / 5.16 / 5.5	535707	120	10	FH 1 KSF
	551899	-	10	KSSL 25/30
	536308	-	10	KSSL 30/35



You can find information on the maintenance and care of a saw chain and on the repair of other forestry tools in the "PFERD tools for forestry" PRAXIS FOCUS brochure.



In our pocket guide "Sharpening saw chains", we have concisely summarised all the important information that you need for sharpening your saw chains.



Chain saw sharpeners from PFERD are exceptionally well suited to the manual sharpening of saw chains. Manual sharpening is more economic and much more gentle than machine-based sharpening, and can prolong the operating life of the saw chain.



Advantages:

- Flexible use on-site due to compact device design.
- Easy to use and defined sharpening angle.
- Long operating life due to interchangeable files.
- Precise and uniform sharpening result, even for inexperienced users.

Materials that can be worked:

- Steels up to 1,200 N/mm²

Applications:

- Sharpening

CHAIN SHARP CS-X chain saw sharpeners

The CHAIN SHARP CS-X chain saw sharpener stands out due to its excellent file position, ergonomic shape and easier operation. The device provides a sharpening angle of 30°. The defined depth gauge distance can be found in the table.

CS-X-3,2



CS-X-4,0
CS-X-4,8
CS-X-5,16
CS-X-5,5



Contents:
The chain saw sharpener consists of:
- One sharpener
- One depth gauge file
- Two Classic Line chain saw files

Advantages:
- Turn the device over to change from the right to the left tooth – no conversion work required.
- Optimized shape for precise guidance and optimal sharpening results.
- Improved design makes it easy to replace the files.
- For simultaneously sharpening the saw teeth and adjusting the depth gauge.

Ordering notes:
- PFERD offers five types of the CHAIN SHARP CS-X chain saw sharpener adapted to different chain pitches.
- The sharpener is supplied with detailed operating instructions in a transparent, reusable plastic pouch which protects against damage and dirt.

PFERDVALUE:



Suitable for chain saw file diameter [mm]	Suitable for chain saw file diameter [inch]	EAN 4007220	Chain pitch [inch]	Depth gauge distance [mm]	Matching depth gauge file		Description
POS packaging							
3.2	1/8	943731	1/4 LP*	0.45	4132	1	CS-X-3,2
4.0	5/32	835913	3/8 LP*	0.65	4132	1	CS-X-4,0
4.8	3/16	835920	.325	0.65	4132	1	CS-X-4,8
5.16	13/64	835937	3/8	0.65	4132	1	CS-X-5,16
5.5	7/32	835944	.404	0.75	4132	1	CS-X-5,5

* LP = Low Profile







KSSG 90



KSSG 91



CHAIN SHARP KSSG chain saw sharpeners

You can convert the device for sharpening the right and left cutting teeth in a few steps. The device provides a sharpening angle of 35°. The defined depth gauge distance can be found in the table.

Contents:
The chain saw sharpener consists of:
- One sharpener
- One Classic Line chain saw file
- One depth gauge file
- One ergonomic file handle FH 1 KSF

Advantages:
- Maximum precision for optimal sharpening results.
- For simultaneously sharpening the saw teeth and adjusting the depth gauge.

Ordering notes:
- Available in three types that are adapted to different chain pitches.
- The sharpener is supplied with detailed operating instructions in a transparent, reusable plastic pouch which protects against damage and dirt.

PFERDVALUE:

HapticFilter

Suitable for chain saw file diameter [mm]	Suitable for chain saw file diameter [inch]	EAN 4007220	Chain pitch [inch]	Depth gauge distance [mm]	Matching depth gauge file		Description
POS packaging							
4.0	5/32	005460	3/8 LP*	0.65	4131	1	KSSG 91-4,0
4.8 / 5.5	3/16 , 7/32	005439	.325	0.65	4130	1	KSSG 90-4,8
		005446	3/8	0.65	4130	1	KSSG 90-5,5

* LP = Low Profile



CHAIN SHARP CS-MT chain saw sharpeners

The compact CHAIN SHARP CS-MT sharpening solution combines a chain saw file and a depth gauge file in one ergonomic tool. The defined elevation of the chain saw file makes sharpening the saw teeth easier and prevents the connecting links of the saw chain from being damaged. The side-mounted depth gauge file allows you to individually set the depth limit. The gauge provided gives depth spacings of 0.65 mm (.025") for harder wood or 0.75 mm (.030") for softer wood.

Contents:
The chain saw sharpener consists of:
- One sharpener
- One Classic Line chain saw file
- One depth limit file
- One ergonomic file handle
- One depth gauge

Advantages:
- Compact sharpener.
- Depth gauge can be individually adjusted.
- Suitable for all common chain saw files.
- Long tool life with PFERD files.

Ordering notes:
- Available in four designs for the most common chain pitches.
- The sharpener is supplied with detailed operating instructions in a belt pouch which protects against damage and dirt.

PFERDVALUE:

HapticFilter

TimeSaving

Suitable for chain saw file diameter [mm]	Suitable for chain saw file diameter [inch]	EAN 4007220	Chain pitch [inch]	Matching depth gauge file		Description
POS packaging						
4.0	5/32	098646	3/8 LP*	1213 ruk 150	1	CS-MT-4,0
4.8	3/16	098677	.325	1213 ruk 150	1	CS-MT-4,8
5.16	13/64	098684	3/8	1213 ruk 150	1	CS-MT-5,16
5.5	7/32	098707	.404	1213 ruk 150	1	CS-MT-5,5

* LP = Low Profile

Depth gauge file for CHAIN SHARP CS-X



Rectangular file with cut on two sides.
Suitable for the CHAIN SHARP CS-X chain saw sharpener.

Advantages:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Length [inch]	Cut	EAN 4007220	Cross section [mm]	Suitable for		Description
4132	200	8	2	831335	9.0 x 6.0	CS-X-3,2, CS-X-4,0, CS-X 4,8, CS-X 5,16, CS-X 5,5	10	4132 200

Depth gauge files for CHAIN SHARP KSSG

4130



4131



Rectangular file with cut on two sides. Available in two different cross sections.
Suitable for the CHAIN SHARP KSSG chain saw sharpener.

Advantages:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Length [inch]	Cut	EAN 4007220	Cross section [mm]	Suitable for		Description
4130	200	8	2	011218	9.0 x 6.0	KSSG 90-4,8, KSSG 90-5,5	10	4130 200
4131	200	8	2	011225	7.0 x 4.5	KSSG 91-4,0	10	4131 200

Flat chain saw files for depth gauges



Rectangular file, tanged with two round uncut edges and cut on two sides. Shape F according to DIN 7262. Flat chain saw files are used to file the depth gauges of saw chains.

Advantages:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1213 ruk	150	6	011041	16.0 x 3.0	FH 3	10	1213 ruk 150 H2
	200	8	011058	20.0 x 3.5	FH 4/1	10	1213 ruk 200 H2



Files and rasps for wood
Wood files

PFERD quality files which are particularly suited to the coarse stock removal of wood.

Advantages:

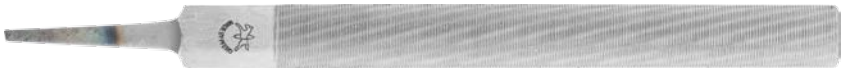
- High stock removal rate.
- Good chip removal.

Materials that can be worked:

- Wood
- Plastics

Applications:

- Surface work
- Filing of radius areas
- Filing of half-round shapes
- Deburring
- Work on edges (chamfering, rounding)



Wood files

Half-round file with special file cut on two sides. Shape C according to DIN 7263. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220	Cross section [mm]	Matching handle		Description
1159	200	8	006368	20.0 x 6.0	FH 4/1	10	1159 200 H2
	250	10	006382	25.0 x 7.0	FH 4/1	10	1159 250 H2



Cabinet files

Half-round file, tapered with special cut on two sides. Flatter and wider design in comparison to the half-round file. Shape F according to DIN 7263. Version with tang.

Profile	Length [mm]	Length [inch]	Cut 1 EAN 4007220	Cross section [mm]	Matching handle		Description
1158	200	8	009840	23.0 x 4.7	FH 4/1	5	1158 200 H1
	250	10	009857	29.0 x 6.0	FH 4/1	5	1158 250 H1



PFERD quality rasps which are particularly suited to the coarse stock removal of wood.

Advantages:

- High stock removal rate.
- Good chip removal.

Materials that can be worked:

- Wood

Applications:

- Deburring
- Surface work
- Chamfering
- Work on edges (chamfering, rounding)

Ordering note:

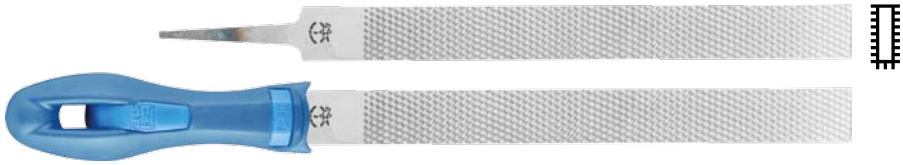
- Type POS is supplied with ergonomic file handle.
- Please specify the desired cut.

PFERDVALUE:

PFERDERGONOMICS recommends the ergonomic file handle for comfortable work.

Hand wood rasps

Rectangular file with cut on three sides, flat sides with rasp cut, one edge with file cut, one edge uncut. Shape A according to DIN 7263. Version with tang.



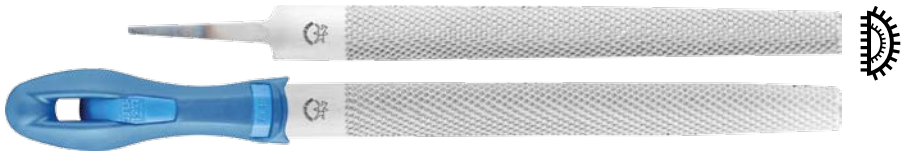
PFERDVALUE:

HapticFiler

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220						
Industrial packaging (without handle)									
1512	200	8	-	009550	20.0 x 6.5	FH 4/1	-	10	1512 200 H...
	250	10	009567	009574	25.0 x 7.5	FH 4/1	-	10	1512 250 H...
POS packaging (with handle)									
1512	200	8	-	542125	20.0 x 6.5	-	FH 4/1	5	PF 1512 200 H...
	250	10	-	542132	25.0 x 7.5	-	FH 4/1	5	PF 1512 250 H...

Half-round wood rasps

Half-round file, tapered with rasp cut on two sides. Shape C according to DIN 7263. Version with tang.

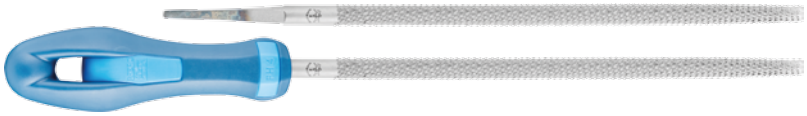


PFERDVALUE:

HapticFiler

Profile	Length [mm]	Length [inch]	Cut 1	Cut 2	Cut 3	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220							
Industrial packaging (without handle)										
1552	150	6	-	009598	-	16.0 x 6.0	FH 3	-	10	1552 150 H...
	200	8	009611	009628	-	21.0 x 7.5	FH 4/1	-	10	1552 200 H...
	250	10	009659	009666	009673	25.0 x 8.5	FH 4/1	-	10	1552 250 H...
	300	12	009697	009703	-	30.0 x 10.0	FH 5/1	-	5	1552 300 H...
POS packaging (with handle)										
1552	150	6	-	542163	-	16.0 x 6.0	-	FH 3	5	PF 1552 150 H...
	200	8	542187	542194	-	21.0 x 7.5	-	FH 4/1	5	PF 1552 200 H...
	250	10	-	542217	-	25.0 x 8.5	-	FH 4/1	5	PF 1552 250 H...

Files and rasps for wood
Wood rasps



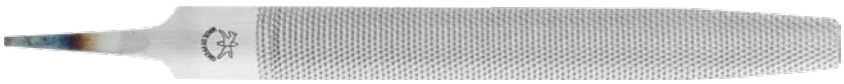
Round wood rasps (1562)

Round file, tapered with circumferential rasp cut. Shape E according to DIN 7263. Version with tang. Suitable for work on radii and for filing profiles with inner radii.

PFERDVALUE:

HapticFilter

Profile	Length [mm]	Length [inch]	Cut 2	Cross section [mm]	Matching handle	Incl. handle		Description
			EAN 4007220					
Industrial packaging (without handle)								
1562	200	8	009710	9.5	FH 4	-	10	1562 200 H2
	250	10	009727	11.5	FH 4	-	10	1562 250 H2
POS packaging (with handle)								
1562	200	8	542224	9.5	-	FH 4	5	PF 1562 200 H2
	250	10	542231	11.5	-	FH 4	5	PF 1562 250 H2



Cabinet rasps (1558)

Half-round file, tapered with rasp cut on two sides. Shape D according to DIN 7263. Version with tang. Wider and flat than a half-round wood rasp. Suitable for work on surfaces, radii, half-round profiles and edges (chamfering and rounding).

Profile	Length [mm]	Length [inch]	Cut 2	Cut 3	Cut 5	Cross section [mm]	Matching handle		Description
			EAN 4007220						
1558	200	8	009758	-	-	25.0 x 6.0	FH 4/1	5	1558 200 H...
	250	10	009789	009796	009802	29.0 x 7.0	FH 4/1	5	1558 250 H...
	300	12	009819	-	-	34.0 x 8.0	FH 5/1	5	1558 300 H...



Hoof plane



Rectangular file, tanged and cut on four sides. One side fine, one side rough. Suitable for straightening the hoof surface, for finishing the hoof wall, for filing the toes and for work on the hoof nails after undercutting.

Advantages:
- Long tool life.
- Very good surface quality.
- Saves on labour and reduces the strain on the back.
- Comfortable filing for humans and animals.

Materials that can be worked:
wood, horn

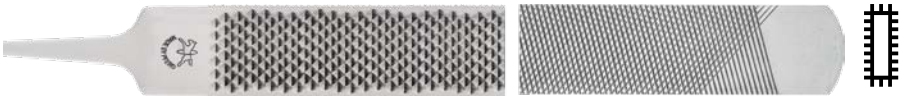
Recommendations for use:
- The PFERD hoof plane file can be used with commercial file handles in the corresponding sizes.

PFERDVALUE:

WasteSaving TimeSaving

Profile	Length [mm]	Length [inch]	Cut milled EAN 4007220	Cross section [mm]	Matching handle		Description
3515	350	14	809631	44.0 x 6.0	FH 5	5	3515 350

Horse rasp, tanged type



Rectangular file, tanged and cut on four sides, one flat side with a rasp cut, one flat side with a cross cut, two edges with a file cut. Shape B according to DIN 7263.

Advantages:
- Very robust tool.

Profile	Length [mm]	Length [inch]	Cut Rasp/filing cut 1 EAN 4007220	Cross section [mm]	Matching handle		Description
3510	350	14	009901	40.0 x 6.0	FH 5	5	3510 350 H1







Files and rasps for wood
Special rasps

Special rasps from PFERD are used by numerous professionals in many industries for different applications. They are used for the processing of carved woodwork, plastics, relief ornaments, casting patterns and areas which are hard to reach.

Advantages:

- Universally suitable for many materials.
- Application-oriented versions.

Materials that can be worked:

- Wood
- Soft stone
- Plastics
- Horn



Sculptor's file rasp

Half-round file rasp with two curved ends, each with different cuts (file cut and rasp cut).

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
3553	200	8	009932	5	3553 200 H2



Staircase maker's file rasp

File rasp with two half-round, curved ends with rasp cut on the outer radius and file cut on the inner radius.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
3554	250	10	009529	5	3554 250 H2



Staircase maker's rasp

Half-round, curved file body with rasp cut on the half-round side. Strongly curved, half-round profile allows you to work on various radii. Suitable for reworking handrails, ornaments, carved woodwork, sculptures and casting patterns.

Profile	Length [mm]	Length [inch]	Cut 2 EAN 4007220		Description
3556	250	10	009512	2	3556 250 H2

Needle rasps

Needle rasps are ideal for use in hard-to-reach places, e.g. ornaments, casting patterns, carved woodwork and sculptures.

Materials that can be worked:
wood, soft stones, plastics, horn

Applications:
deburring, surface work, work on edges, chamfering, rounding

Recommendations for use:
- Needle rasps have forged shanks and can be used with and without a file handle.



Profile	Length [mm]	Length [inch]	Swiss cut 2 EAN 4007220	Shank dia. [mm]		Description
hand	140	5 1/2	346013	3.0	12	2501 140 H2
half-round	140	5 1/2	346051	3.0	12	2502 140 H2
flat	140	5 1/2	346006	3.0	12	2506 140 H2
three square	140	5 1/2	346020	3.0	12	2507 140 H2
square	140	5 1/2	346037	3.0	12	2508 140 H2
round	140	5 1/2	346044	3.0	12	2510 140 H2

Needle rasp set

Needle rasp set

Contains an application-oriented selection of needle rasps for work in hard-to-reach areas.



Contents:
Six needle rasps:
- flat (2506)
- hand (2501)
- three square (2507)
- square (2508)
- round (2510)
- half-round (2502)

Advantages:
- Can be used with or without a file handle thanks to the forged shanks.

Materials that can be worked:
wood, soft stones, plastics, horn

Applications:
deburring, surface work, work on edges, chamfering, rounding

Ordering notes:
- Supplied in a clearly structured plastic pouch to protect against dirt and damage.

Length [mm]	Length [inch]	Swiss cut 2 EAN 4007220	Contents [pcs.]		Description
140	5 1/2	235522	6	1	2527 140 H2

Precision files
General information

PFERD precision files meet the highest demands when it comes to geometric accuracy, cutting performance and service life. Compared to machinist's files, precision files are more exact in their geometry.

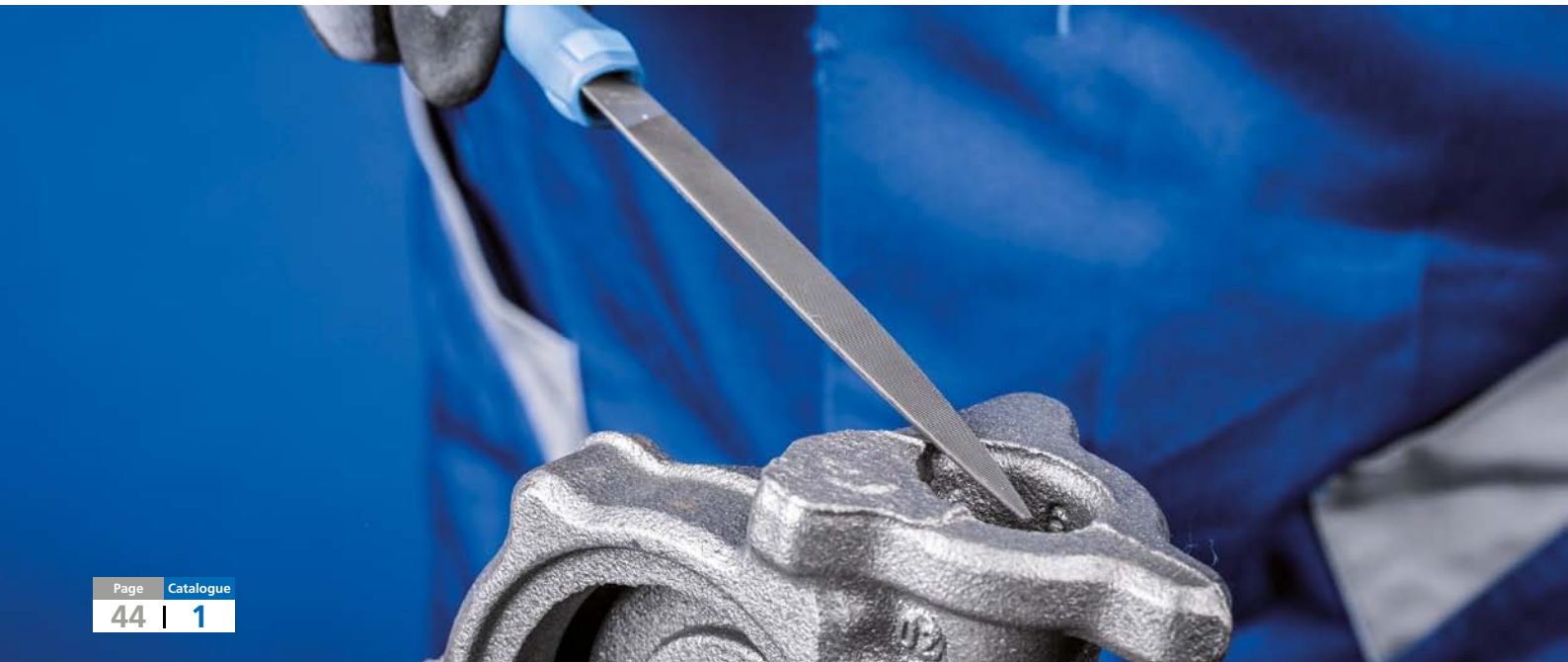
They are used in jig and tool construction, especially for the manufacture of tools for the punching, forming, forging, embossing of series items etc.

In addition, precision files are suitable for assembling tasks and building complex devices and machines to the highest precision standards. For all precision files, the cross section is measured at the uncut part of the file.

Table of cuts for precision files

Number of cuts per cm

Cuts Type of file	Swiss cut 00 [Cuts/cm]	Swiss cut 0 [Cuts/cm]	Swiss cut 1 [Cuts/cm]	Swiss cut 2 [Cuts/cm]	Swiss cut 3 [Cuts/cm]	Swiss cut 4 [Cuts/cm]	Swiss cut 5 [Cuts/cm]
Tang files No. 800–875 100, 150 and 200 mm	16	20	25	31	38	46	56
Tang files No. 800–875 250 mm	12	16	20	25	31	38	46
CORINOX files No. 800–860 150 and 200 mm	16	20	–	31	–	–	–
Needle files No. 2401–2416	20	25	31	38	46	56	–
CORINOX needle files No. 2301–2310	–	25	–	38	–	–	–
Handy files No. 2601–2610	16	–	25	–	–	–	–
Riffler files No. 900P–996P 150 mm	–	25	–	38	–	56	–
Riffler files No. 710P–775P 180 mm	–	16	–	25	–	–	–
Riffler files No. 410P–480P 300 mm	–	12	–	20	–	–	–



Precision files, tanged

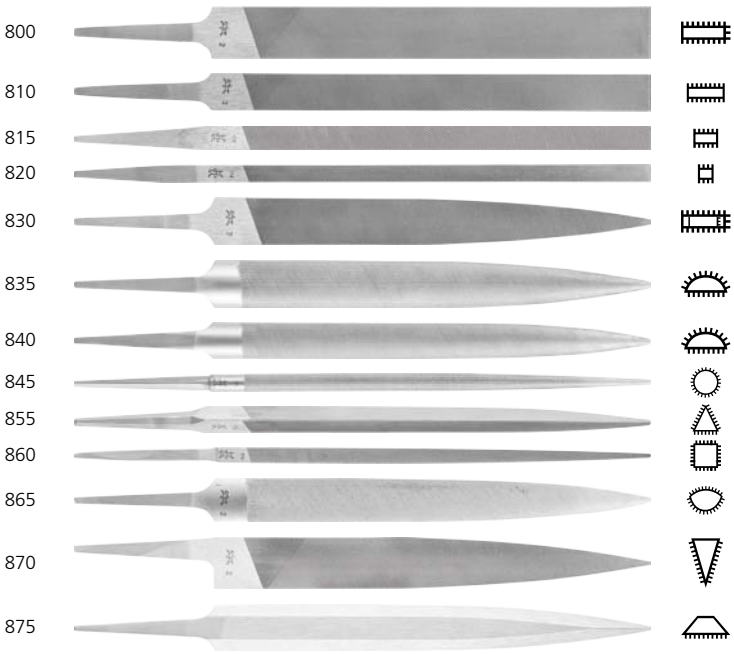
Small, handy files for use on delicate workpieces.

Advantages:
- Small, handy design.
- Particularly suitable for work on small and delicate workpieces.

Materials that can be worked:
steels up to 1,200 N/mm²

Applications:
deburring, surface work, work on edges (chamfering, rounding), fine finishing

Ordering notes:
- Please specify the desired cut.



Profile	Length [mm]	Length [inch]	Cut 00	0	1	2	3	4	Cross section [mm]	Matching handle		Description
			EAN 4007220									
pottance files, hand	100	4	279595	279601	279618	279625	279632	279649	13.0 x 3.0	FH 2	12	800 100 H...
	150	6	279656	279663	279670	279687	279694	279700	18.0 x 4.0	FH 3	12	800 150 H...
	200	8	279717	279724	279731	279748	279755	279762	22.0 x 5.0	FH 4/1	12	800 200 H...
pillar files, regular	150	6	279793	279809	-	279816	-	-	13.0 x 4.0	FH 3	12	810 150 H...
	200	8	279823	279830	-	279847	-	-	15.0 x 5.0	FH 4/1	12	810 200 H...
	250	10	279854	279861	-	279878	-	-	18.0 x 6.0	FH 4/1	12	810 250 H...
pillar files, slim	150	6	279885	279892	-	279908	-	-	8.0 x 3.5	FH 2	12	815 150 H...
	200	8	279915	279922	-	279939	-	-	10.0 x 4.5	FH 3	12	815 200 H...
	250	10	279946	279953	-	279960	-	-	12.0 x 5.0	FH 3	12	815 250 H...
pillar files, extra slim	150	6	279977	279984	-	279991	-	-	6.0 x 3.0	FH 2	12	820 150 H...
	200	8	280003	280010	-	280027	-	-	8.0 x 3.5	FH 2	12	820 200 H...
flat, slim	150	6	-	280058	-	280065	-	-	16.0 x 2.0	FH 3	12	830 150 H...
half-round	100	4	280072	280089	280096	280102	280119	280126	12.0 x 3.5	FH 2	12	835 100 H...
	150	6	280133	280140	280157	280164	280171	280188	16.0 x 4.5	FH 3	12	835 150 H...
	200	8	280195	280201	280218	280225	280232	-	21.0 x 6.0	FH 4/1	12	835 200 H...
	250	10	280256	280263	280270	-	-	-	25.0 x 7.0	FH 4/1	12	835 250 H...
half-round, slim	150	6	280317	280324	280331	280348	-	-	12.0 x 3.5	FH 3	12	840 150 H...
round	100	4	-	280379	-	280393	-	-	4.0	FH 2	12	845 100 H...
	150	6	-	280416	280423	280430	280447	-	6.0	FH 3	12	845 150 H...
	200	8	-	280454	280461	280478	280485	-	8.0	FH 4	12	845 200 H...
three square	100	4	-	-	280522	280539	-	-	6.0	FH 2	12	855 100 H...
	150	6	-	280553	280560	280577	280584	-	10.0	FH 3	12	855 150 H...
	200	8	-	280591	280607	280614	280621	-	14.0	FH 4	12	855 200 H...
square	150	6	-	280676	280683	280690	-	-	6.0	FH 3	12	860 150 H...
	200	8	-	280713	280720	280737	280744	-	8.0	FH 4	12	860 200 H...
crossing oval	150	6	-	-	-	280768	-	-	16.0 x 4.5	FH 3	12	865 150 H...
knife	150	6	-	280812	-	280829	-	-	18.0 x 4.0	FH 3	12	870 150 H...
	200	8	-	280836	-	280843	-	-	22.0 x 5.0	FH 4/1	12	870 200 H...
barette	150	6	-	280850	-	280867	-	-	16.0 x 4.0	FH 3	12	875 150 H...
	200	8	-	280874	-	280881	-	-	21.0 x 5.0	FH 4/1	12	875 200 H...

Precision files
CORINOX files



CORINOX files

CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used for precise filing on very small and delicate components.

Advantages:
- Extremely wear-resistant and sturdy thanks to high surface hardness.
- Can also be used on materials that are difficult to file.
- Do not clog up.
- Chips can easily be removed by knocking the tool gently against a hard object.

Materials that can be worked:
stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metal, fibre-reinforced duroplastics (GRP, CRP)

Applications:
deburring, surface work, work on edges (chamfering, rounding), fine finishing

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Swiss cut 00	Swiss cut 0	Swiss cut 2	Cross section [mm]	Matching handle		Description
			EAN 4007220						
pottance files, hand	150	6	304082	304099	-	18.0 x 4.0	FH 3	12	COR 800 150 H...
	200	8	304105	304112	304129	22.0 x 5.0	FH 4/1	12	COR 800 200 H...
	250	10	669464	669471	669488	25.0 x 6.0	FH 4/1	12	COR 800 250 H...
pillar files, regular	150	6	304136	304143	-	13.0 x 4.0	FH 3	12	COR 810 150 H...
	200	8	304150	304167	317785	15.0 x 5.0	FH 4/1	12	COR 810 200 H...
tang files, half-round	150	6	-	304174	-	16.0 x 4.5	FH 3	12	COR 835 150 H...
	200	8	-	304181	317792	21.0 x 6.0	FH 4/1	12	COR 835 200 H...
round	200	8	-	304198	317808	8.0	FH 4	12	COR 845 200 H...
three square	200	8	-	304211	317815	14.0	FH 4	12	COR 855 200 H...
square	150	6	-	304204	317822	6.0	FH 3	12	COR 860 150 H...



CORINOX needle files

CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.

Advantages:
- Extremely wear-resistant and sturdy thanks to high surface hardness.
- Can also be used on materials that are difficult to file.
- Do not clog up.
- Chips can easily be removed by knocking the tool gently against a hard object.
- Can be used with or without a file handle thanks to the forged tang.

Materials that can be worked:
stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metal, fibre-reinforced duroplastics (GRP, CRP)

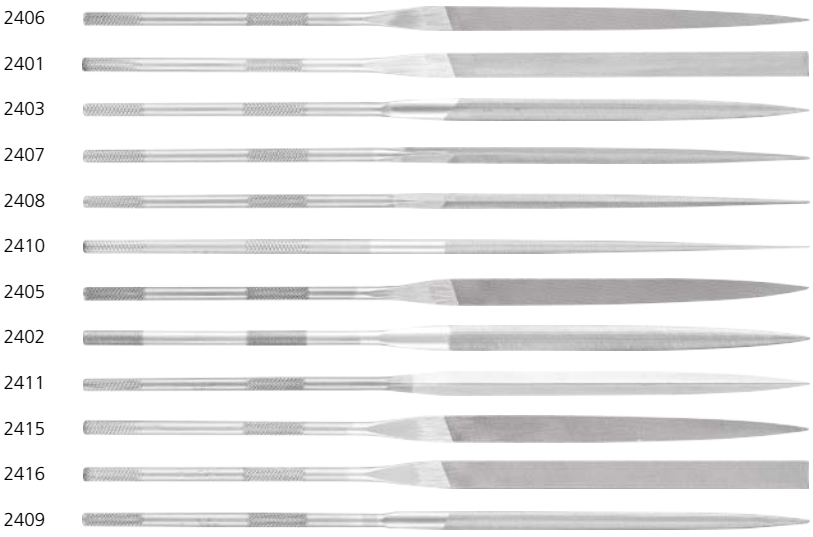
Applications:
deburring, surface work, work on edges (chamfering, rounding), fine finishing

Ordering notes:
- Please specify the desired cut.



Profile	Length [mm]	Length [inch]	Swiss cut 0	Swiss cut 2	Shank dia. [mm]	Cross section [mm]		Description
			EAN 4007220					
flat	180	7	346532	346549	3.5	6.0 x 1.5	12	COR 2306 180 H...
hand	180	7	346556	346570	3.5	6.0 x 1.5	12	COR 2301 180 H...
three square	180	7	346587	346594	3.5	4.1	12	COR 2307 180 H...
square	180	7	346600	346648	3.5	2.7	12	COR 2308 180 H...
round	180	7	346624	346662	3.5	3.5	12	COR 2310 180 H...
half-round	180	7	346686	346716	3.5	6.0 x 2.0	12	COR 2302 180 H...





Needle files

PFERD needle files are ideally suitable for work on the smallest surfaces, breakthroughs, geometries, profiles and radii.

Advantages:
- Can be used with or without a needle file handle thanks to the forged tang.

Materials that can be worked:
steels up to 1,200 N/mm²

Applications:
deburring, fine finishing

Ordering notes:
- Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time for these files is therefore around 8 weeks.
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Cut						Shank dia. [mm]	Cross section [mm]		Description
			00	0	1	2	3	4				
			EAN 4007220									
flat	140	5 1/2	-	237458	237465	237472	-	-	3.0	5.1 x 1.3	12	2406 140 H...
	160	6 1/4	-	237489	237496	237502	237519	-	3.25	5.5 x 1.4	12	2406 160 H...
	180	7	237526	237533	-	345979	-	-	3.5	6.0 x 1.5	12	2406 180 H...
hand	140	5 1/2	-	383858	383872	383896	383919	-	3.0	5.1 x 1.3	12	2401 140 H...
	160	6 1/4	-	383933	383957	383971	237168	-	3.25	5.5 x 1.4	12	2401 160 H...
	180	7	384015	237182	237199	384077	-	-	3.5	6.0 x 1.5	12	2401 180 H...
	200	8	237212	384114	237236	235898	-	-	3.75	6.4 x 1.6	12	2401 200 H...
crossing oval	140	5 1/2	-	237328	237335	237342	-	-	3.0	4.5 x 1.8	12	2403 140 H...
	160	6 1/4	-	237359	237366	237373	237380	-	3.25	5.2 x 2.3	12	2403 160 H...
	180	7	-	237397	237410	237403	-	-	3.5	5.7 x 2.5	12	2403 180 H...
three square	140	5 1/2	-	237700	237717	237724	237731	-	3.0	3.5	12	2407 140 H...
	160	6 1/4	-	237748	237755	237762	237779	-	3.25	3.7	12	2407 160 H...
	180	7	237786	237793	-	237809	237816	-	3.5	4.1	12	2407 180 H...
	200	8	237823	237830	-	237847	237854	-	3.75	4.4	12	2407 200 H...
square	140	5 1/2	-	238073	238080	238097	238103	-	3.0	2.4	12	2408 140 H...
	160	6 1/4	-	238110	238127	238134	238141	-	3.25	2.5	12	2408 160 H...
	180	7	238158	238165	-	238172	-	-	3.5	2.7	12	2408 180 H...
	200	8	238196	238202	-	238219	-	-	3.75	3.0	12	2408 200 H...
round	140	5 1/2	-	238226	238233	238240	-	238257	3.0	3.0	12	2410 140 H...
	160	6 1/4	-	238264	238271	238288	-	238295	3.25	3.25	12	2410 160 H...
	180	7	345986	238301	238318	238325	238332	-	3.5	3.5	12	2410 180 H...
	200	8	345993	238349	238356	238363	238370	-	3.75	3.75	12	2410 200 H...
knife	140	5 1/2	-	237571	237588	237595	-	-	3.0	5.5 x 1.5	12	2405 140 H...
	160	6 1/4	-	237601	237618	237625	-	-	3.25	5.8 x 1.7	12	2405 160 H...
	180	7	237649	237656	-	237663	-	-	3.5	6.2 x 1.8	12	2405 180 H...
half-round	140	5 1/2	-	237861	237878	237885	237892	-	3.0	5.0 x 1.7	12	2402 140 H...
	160	6 1/4	-	237908	237915	237922	237939	-	3.25	5.7 x 1.8	12	2402 160 H...
	180	7	237946	237953	-	237960	237977	-	3.5	6.0 x 2.0	12	2402 180 H...
	200	8	237984	237991	-	238004	238011	-	3.75	6.4 x 1.8	12	2402 200 H...
barette	140	5 1/2	-	237175	384039	384053	-	-	3.0	5.0 x 2.1	12	2411 140 H...
	160	6 1/4	-	237205	384091	237229	384138	-	3.25	5.3 x 2.1	12	2411 160 H...
	180	7	-	237250	237267	237274	-	-	3.5	5.6 x 2.3	12	2411 180 H...
flat with rounded edges	160	6 1/4	-	-	-	238400	-	-	3.25	5.5 x 1.4	12	2415 160 H...
	180	7	-	238417	-	-	-	-	3.5	6.0 x 1.5	12	2415 180 H...

Continued on next page

Profile	Length [mm]	Length [inch]	Cut 00	Cut 0	Cut 1	Cut 2	Cut 3	Cut 4	Shank dia. [mm]	Cross section [mm]		Description
			EAN 4007220									
hand with rounded edges	140	5 1/2	-	-	383865	-	-	-	3.0	5.1 x 1.3	12	2416 140 H...
	160	6 1/4	-	383889	383902	383926	-	-	3.25	5.5 x 1.4	12	2416 160 H...
	180	7	-	383940	-	-	-	-	3.5	6.0 x 1.5	12	2416 180 H...
crossing oval	160	6 1/4	-	-	-	238042	-	-	3.25	3.8 x 2.5	12	2409 160 H...
	180	7	-	238059	-	-	-	-	3.5	4.0 x 2.9	12	2409 180 H...

Needle file sets

Needle file sets

Contains an application-oriented selection of needle files.

Contents:
12 needle files:
- flat (2406)
- hand (2401)
- crossing oval (2403)
- three square (2407)
- square (2408)
- round (2410)
- knife (2405)
- half-round (2402)
- barrette (2411)
- flat with round edges (2415)
- hand with round edges (2416)
- crossing oval round-oval (2409)

Ordering notes:
- Supplied in a PVC plastic pouch or a practical plastic box.
- Please specify the desired cut.



266


NFB

Length [mm]	Length [inch]	Swiss cut 0	Swiss cut 1	Swiss cut 2	Contents [pcs.]		Description
		EAN 4007220					
140	5 1/2	-	235539	-	12	1	266/14 P 140 H...
160	6 1/4	-	235553	-	12	1	266/16 P 160 H...
180	7	235560	-	-	12	1	266/18 P 180 H...
200	8	235577	-	-	12	1	266/20 P 200 H...
140	5 1/2	-	345955	345962	12	1	NFB 2492 140 H...
160	6 1/4	-	392232	235515	12	1	NFB 2493 160 H...

Needle file set

Contains an application-oriented selection of PFERD needle files.

Contents:
6 needle files:
- flat (101)
- hand (102)
- three square (104)
- half-round (108)
- square (105)
- round (106)

Ordering notes:
- Supplied in a handy box to protect against dirt and damage.



Length [mm]	Length [inch]	Swiss cut 1	Contents [pcs.]		Description
		EAN 4007220			
160	6 1/4	009222	6	1	PF 263 160 H1



Handy files

Precision files similar to needle files. Suitable for work on the smallest areas of metals and plastics that are hard to reach, e.g. in tool and mould construction for refining pressing, forging and casting tools.

Advantages:
- Precise shape with a slim, fine design.
- Highly tapered.
- The high level of robustness enables a higher operating pressure.
- Can be used without a file handle thanks to the forged tang.

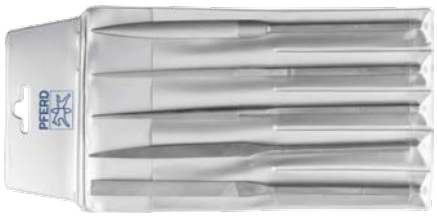
Materials that can be worked:
steels up to 1,200 N/mm², plastics

Applications:
deburring, fine finishing, surface work, work on edges (chamfering, rounding)

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Swiss cut 00	Swiss cut 1	Cross section [mm]		Description
			EAN 4007220				
hand	215	8 1/2	346372	346389	10.3 x 2.8	12	2601 215 H...
three square	215	8 1/2	346396	346402	10.0	12	2607 215 H...
square	215	8 1/2	346419	346426	6.0 x 6.0	12	2608 215 H...
half-round	215	8 1/2	346457	346464	12.8 x 3.7	12	2602 215 H...

Handy file sets



Handy file sets

Contains an application-oriented selection of handy files for work on the smallest areas that are hard to reach.

Contents:
Five handy files:
- hand (2601)
- three square (2607)
- square (2608)
- round (2610)
- half-round (2602)

Ordering notes:
- Supplied in a plastic pouch to protect against dirt, corrosion and damage.
- Please specify the desired cut.

Length [mm]	Length [inch]	Swiss cut 00	Swiss cut 1	Contents [pcs.]		Description
		EAN 4007220				
215	8 1/2	346488	346501	5	1	2627 215 H...

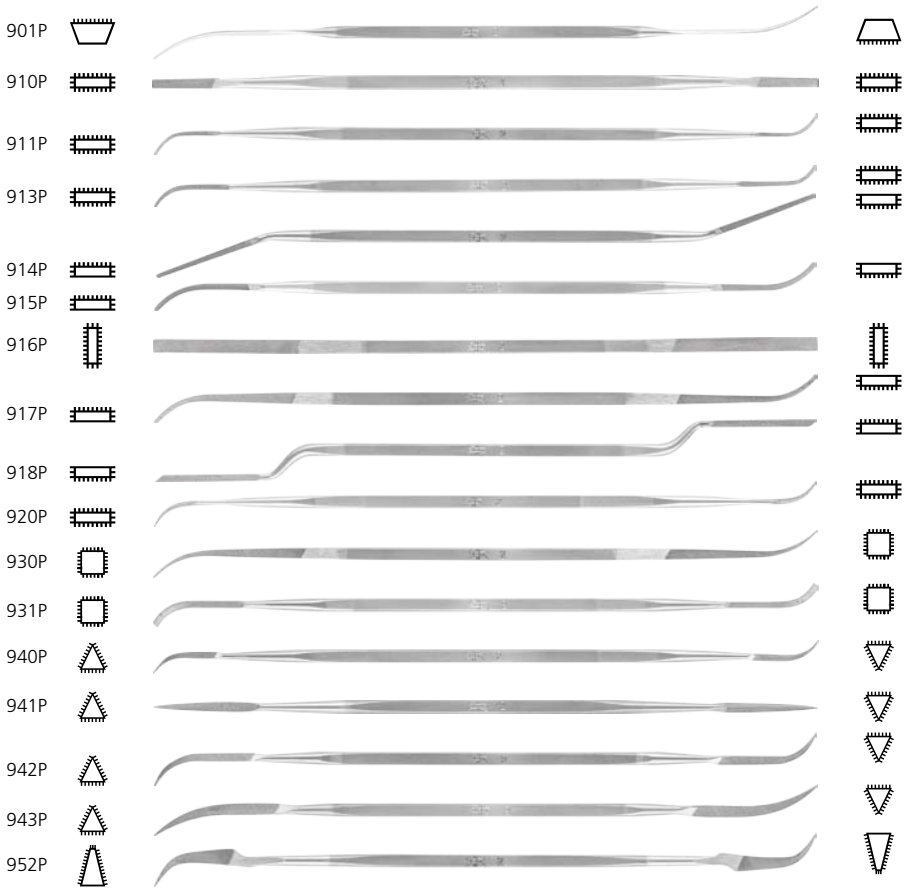
Riffler files series 901P–952P

Length 150 mm, smallest type of riffler files.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

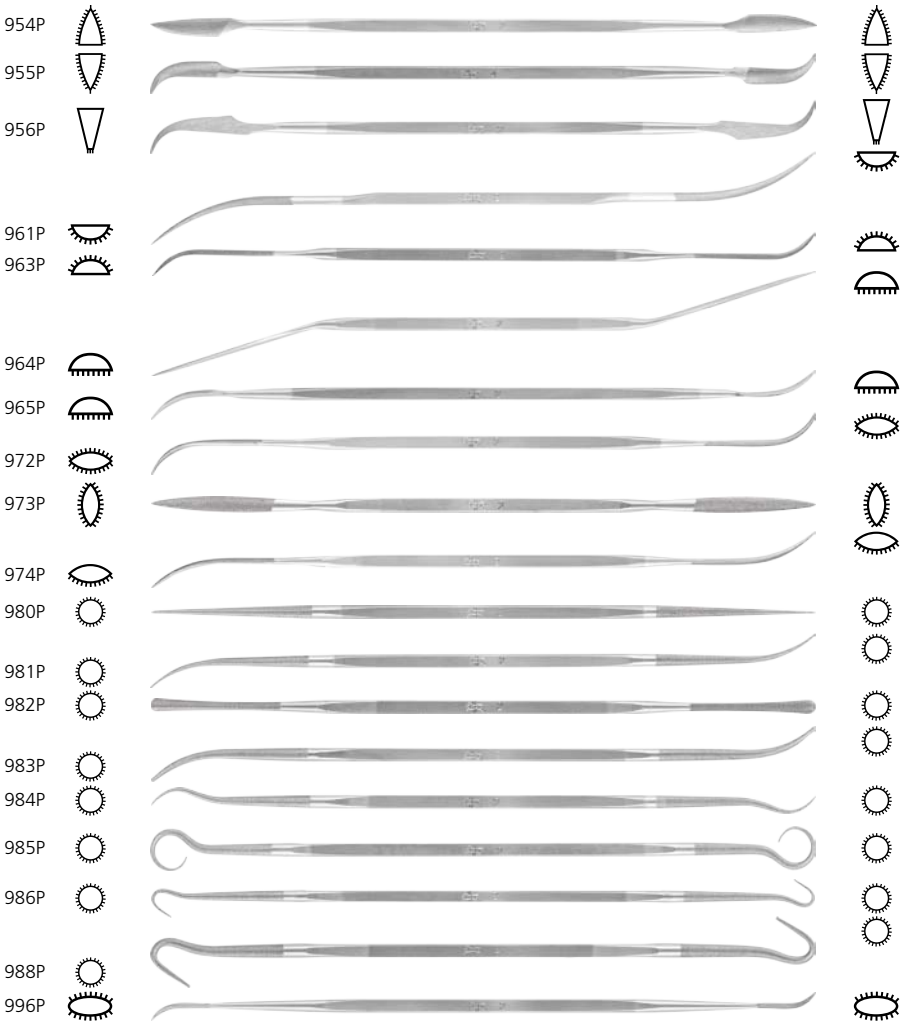
Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Please specify the desired cut.



Profile	Length [mm]	Length [inch]	Swiss cut 2	Swiss cut 4	Cross section [mm]	Suitable arbors		Description
			EAN 4007220					
901P	150	6	014950	-	4.0 x 1.3	RFH 150	12	901P 150 H...
910P	150	6	-	346099	2.3 x 1.2	RFH 150	12	910P 150 H...
911P	150	6	014974	-	2.3 x 1.2	RFH 150	12	911P 150 H...
913P	150	6	014998	-	2.7 x 1.5	RFH 150	12	913P 150 H...
914P	150	6	015018	-	3.5 x 1.5	RFH 150	12	914P 150 H...
915P	150	6	346105	-	3.5 x 1.5	RFH 150	12	915P 150 H...
916P	150	6	015032	-	3.2 x 1.5	RFH 150	12	916P 150 H...
917P	150	6	015056	-	3.2 x 1.5	RFH 150	12	917P 150 H...
918P	150	6	015070	-	3.8 x 1.7	RFH 150	12	918P 150 H...
920P	150	6	346112	-	4.9 x 1.5	RFH 150	12	920P 150 H...
930P	150	6	015094	-	3.2 x 3.2	RFH 150	12	930P 150 H...
931P	150	6	346129	-	1.7 x 1.7	RFH 150	12	931P 150 H...
940P	150	6	346136	-	1.7	RFH 150	12	940P 150 H...
941P	150	6	346143	-	2.2	RFH 150	12	941P 150 H...
942P	150	6	015117	015124	2.6	RFH 150	12	942P 150 H...
943P	150	6	346150	398708	3.0	RFH 150	12	943P 150 H...
952P	150	6	015131	015148	1.4 x 4.2	RFH 150	12	952P 150 H...

Precision files
Riffler files, riffler rasps



Riffler files series 954P–996P

Length 150 mm, smallest type of riffler files.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Swiss cut 2	Swiss cut 4	Cross section [mm]	Suitable arbors		Description
			EAN 4007220					
954P	150	6	015155	-	1.5 x 4.0	RFH 150	12	954P 150 H...
955P	150	6	-	346167	1.5 x 4.0	RFH 150	12	955P 150 H...
956P	150	6	346174	-	1.6 x 4.1	RFH 150	12	956P 150 H...
961P	150	6	346181	-	4.1 x 2.4	RFH 150	12	961P 150 H...
963P	150	6	015179	-	4.6 x 1.3	RFH 150	12	963P 150 H...
964P	150	6	346198	-	4.5 x 1.4	RFH 150	12	964P 150 H...
965P	150	6	015193	-	5.2 x 1.5	RFH 150	12	965P 150 H...
972P	150	6	015216	-	3.6 x 2.1	RFH 150	12	972P 150 H...
973P	150	6	346204	-	3.6 x 2.1	RFH 150	12	973P 150 H...
974P	150	6	015230	-	3.6 x 2.1	RFH 150	12	974P 150 H...
980P	150	6	346211	-	3.5	RFH 150	12	980P 150 H...
981P	150	6	015254	015261	3.5	RFH 150	12	981P 150 H...
982P	150	6	015278	-	3.0	RFH 150	12	982P 150 H...
983P	150	6	346228	-	3.2	RFH 150	12	983P 150 H...
984P	150	6	346235	-	3.2	RFH 150	12	984P 150 H...
985P	150	6	015292	015308	3.2	RFH 150	12	985P 150 H...
986P	150	6	346259	-	2.6	RFH 150	12	986P 150 H...
988P	150	6	346273	-	3.2	RFH 150	12	988P 150 H...
996P	150	6	345696	-	2.2 x 1.4	RFH 150	12	996P 150 H...

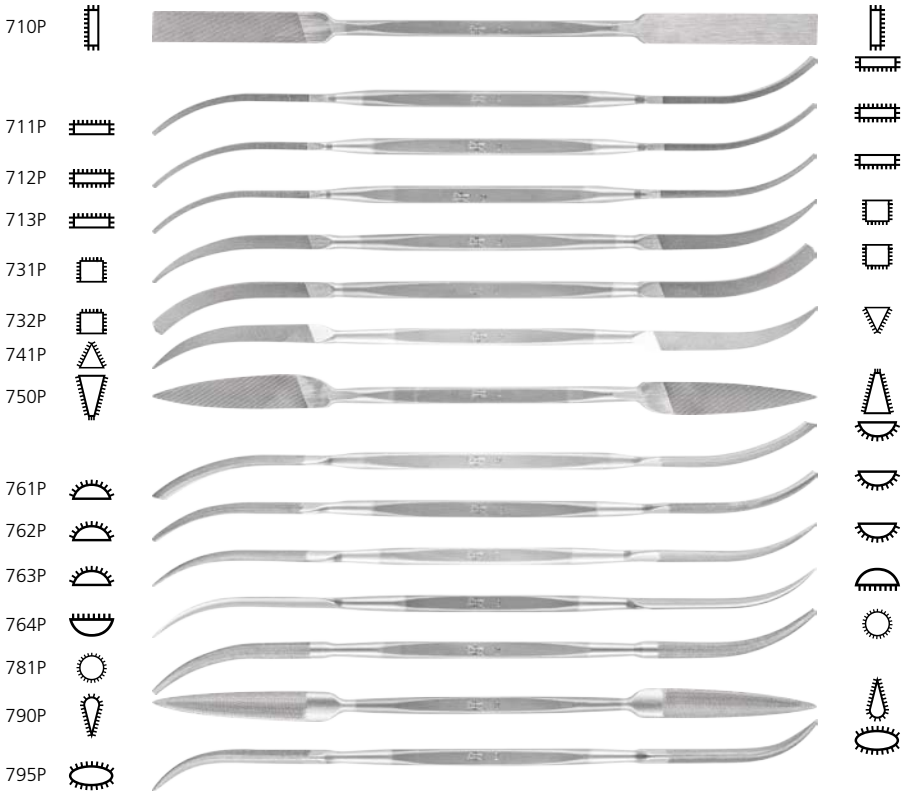
Riffler files series 710P–795P

Length 180 mm, medium-sized type of riffler files.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

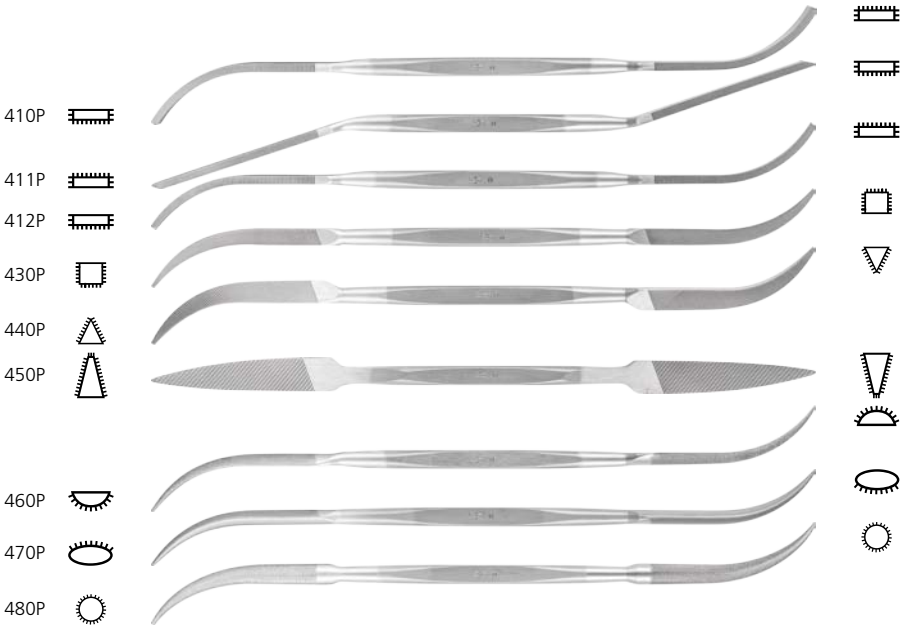
Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Please specify the desired cut.



Profile	Length [mm]	Length [inch]	Swiss cut 0	Swiss cut 2	Cross section [mm]	Suitable arbors		Description
			EAN 4007220					
710P	180	7	014752	014769	8.5 x 2.5	RFH 180	12	710P 180 H...
711P	180	7	014776	014783	8.5 x 2.5	RFH 180	12	711P 180 H...
712P	180	7	014790	014806	8.2 x 2.5	RFH 180	12	712P 180 H...
713P	180	7	345702	345719	8.2 x 2.5	RFH 180	12	713P 180 H...
731P	180	7	014813	014820	4.5 x 4.5	RFH 180	12	731P 180 H...
732P	180	7	345726	345733	4.5 x 4.5	RFH 180	12	732P 180 H...
741P	180	7	014837	014844	6.5	RFH 180	12	741P 180 H...
750P	180	7	014851	014868	9.5 x 2.5	RFH 180	12	750P 180 H...
761P	180	7	345740	345757	9.2 x 3.2	RFH 180	12	761P 180 H...
762P	180	7	-	014882	9.3 x 3.2	RFH 180	12	762P 180 H...
763P	180	7	345764	345771	9.5 x 3.3	RFH 180	12	763P 180 H...
764P	180	7	-	345788	9.5 x 3.3	RFH 180	12	764P 180 H...
781P	180	7	014912	014929	5.0	RFH 180	12	781P 180 H...
790P	180	7	-	345795	8.5 x 4.0	RFH 180	12	790P 180 H...
795P	180	7	-	014943	8.0 x 4.3	RFH 180	12	795P 180 H...





Riffler files series 410P–480P

Length 300 mm, largest type of riffler files.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Please specify the desired cut.

Profile	Length [mm]	Length [inch]	Swiss cut 0	Swiss cut 2	Cross section [mm]		Description
			EAN 4007220				
410P	300	12	345818	345825	15.0 x 4.0	6	410P 300 H...
411P	300	12	345924	345931	15.0 x 4.4	6	411P 300 H...
412P	300	12	345801	-	15.0 x 4.4	6	412P 300 H...
430P	300	12	345863	345870	8.0 x 8.0	6	430P 300 H...
440P	300	12	345849	345856	12.0 x 12.0	6	440P 300 H...
450P	300	12	345900	-	15.0 x 12.0	6	450P 300 H...
460P	300	12	345917	-	15.0 x 6.0	6	460P 300 H...
470P	300	12	345832	-	14.0 x 7.0	6	470P 300 H...
480P	300	12	345887	345894	10.0	6	480P 300 H...



Set of riffler files PF 900

Contains an application-oriented selection of riffler files.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Matching arbor = RFH 150

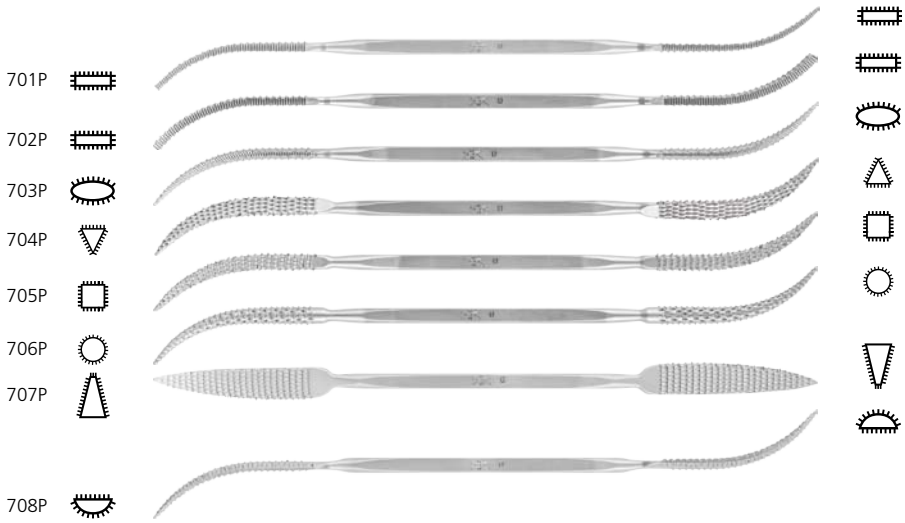
Length [mm]	Length [inch]	Swiss cut 2	Contents [pcs.]	Contents		Description
		EAN 4007220				
150	6	009239	4	914P, 930P, 963P, 981P	1	PF 900

Riffler rasps series 701P–708P

190 mm long riffler file with precise Swiss rasp cut.

Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

Materials that can be worked:
steels up to 1,200 N/mm²



Profile	Length [mm]	Length [inch]	Swiss cut 0 EAN 4007220	Cross section [mm]	Suitable arbors		Description
701P	190	7 1/2	346280	8.2 x 3.3	RFH 180	12	701P 190 H0
702P	190	7 1/2	346297	8.1 x 3.5	RFH 180	12	702P 190 H0
703P	190	7 1/2	346303	7.6 x 4.4	RFH 180	12	703P 190 H0
704P	190	7 1/2	346310	6.4	RFH 180	12	704P 190 H0
705P	190	7 1/2	346327	4.9	RFH 180	12	705P 190 H0
706P	190	7 1/2	346334	5.5	RFH 180	12	706P 190 H0
707P	190	7 1/2	346341	9.2 x 3.6	RFH 180	12	707P 190 H0
708P	190	7 1/2	346358	9.3 x 3.8	RFH 180	12	708P 190 H0

Riffler rasp set 720P

Contains an application-oriented selection of riffler rasps.

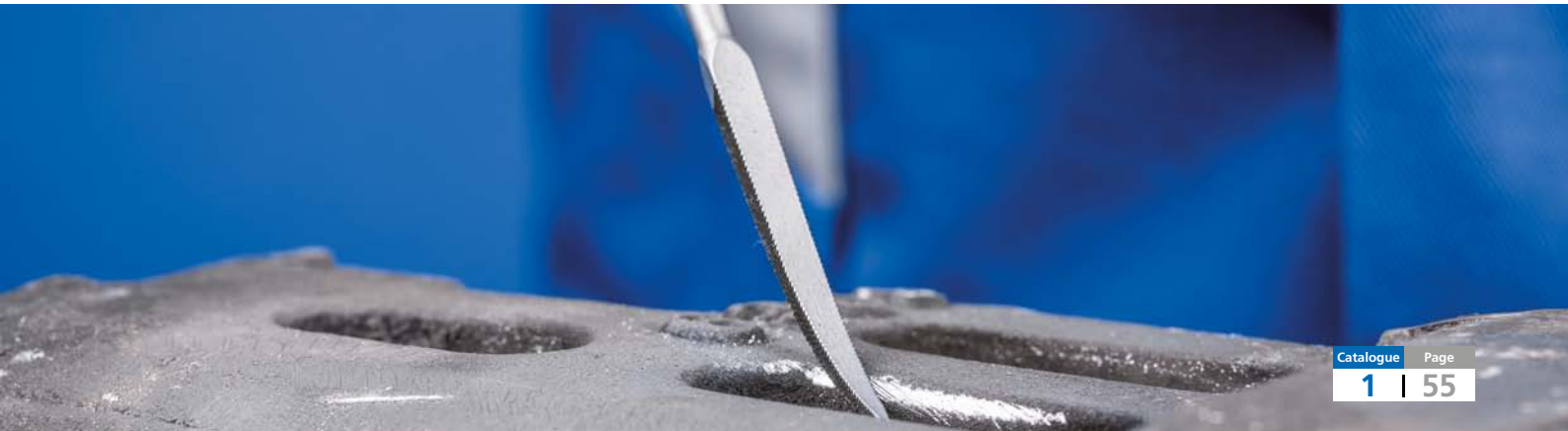
Advantages:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.

Materials that can be worked:
steels up to 1,200 N/mm²

Ordering notes:
- Supplied in a plastic pouch to protect against dirt, corrosion and damage.
- Matching arbor = RFH 180



Length [mm]	Length [inch]	Swiss cut 0 EAN 4007220	Contents [pcs.]	Contents		Description
190	7 1/2	535905	8	701P, 702P, 703P, 704P, 705P, 706P, 707P, 708P	1	720P



FH 2+3



FH 4+5



FH 4/1



FH 5/1



Ergonomic file handles

Ergonomic file handles for comfortable and safe work.

Advantages:
- Protects hands against sharp edges and corners.
- Ergonomic shape with optimized haptics.
- Files do not roll away.
- Soft plastic on the outside with a hard, stable inner part.
- Without plasticizer.

Ordering notes:
- Available in different types and two different packaging units.

PFERDVALUE:

HapticFilter

Suitable for file length [mm]	EAN 4007220	Overall length [mm]	Suitable for		Description
100, 125, 150	535714	110	key files	10	FH 2-10
	535721	110	key files	100	FH 2-100
	535738	110	all tangs	10	FH 3-10
	535745	110	all tangs	100	FH 3-100
200, 250	535752	115	profiles three square, square, round, special profiles	10	FH 4-10
	535769	115	profiles three square, square, round, special profiles	100	FH 4-100
	535776	115	profiles hand, flat, half-round	10	FH 4/1-10
	535783	115	profiles hand, flat, half-round	100	FH 4/1-100
300, 350	535790	115	profiles three square, square, round, special profiles	10	FH 5-10
	535806	115	profiles three square, square, round, special profiles	100	FH 5-100
	535813	115	profiles hand, flat, half-round	10	FH 5/1-10
	535820	115	profiles hand, flat, half-round	100	FH 5/1-100

PH 8
PH 9



PH 11



PH 13



Plastic file handles

Plastic file handles for good guidance and power transmission.

Advantages:
- Wide collar guarantees fatigue-free work and increases safety.
- Good force transmission and control of the file.
- Air chambers help absorb hand moisture.
- File handle made from sturdy plastic.
- Contains no plasticizers.

Ordering notes:
- Available in four different types and two different packaging units.

Suitable for file length [mm]	EAN 4007220	Overall length [mm]	Suitable for		Description
100, 125, 150	015476	90	key files	10	PH 08/10
	301890	90	key files	100	PH 08/100
	015483	90	all tangs	10	PH 09/10
	301906	90	all tangs	100	PH 09/100
200, 250	015490	110	all tangs	10	PH 11/10
	301913	110	all tangs	100	PH 11/100
300, 350	015506	120	all tangs	10	PH 13/10
	301920	120	all tangs	100	PH 13/100

Plastic file handle, quick-mounting type



Quick-mounting handle for needle files, diamond files and smaller machinist's and precision files.

Advantages:
- Reliably clamps the file tangs into the handle by simply twisting the two halves of the handle.

Suitable for file length [mm]	Suitable for tang diameter [mm]	EAN 4007220	Overall length [mm]		Description
140, 160, 180, 200	3.0/3.25/3.5/3.75	806555	90	10	SH 220

Needle file holder

NFH 211



NFH 212



Quick-mounting handles for needle files with 3–4.5 mm tang diameter.

Advantages:
- Handy and lightweight.
- Available in two materials.

Suitable for	Suitable for tang diameter [mm]	EAN 4007220	Overall length [mm]		Description
Needle file diameter 3–4.5 mm	3–4.5	267783	100	10	NFH 211-3 K
		669532	92	10	NFH 212

Riffler file holder

Riffler file holder



Riffler file holder for files in 150 and 180 mm lengths.

Advantages:
- Safe and optimum file control.
- One of the file points is always covered safely by the file handle.
- Quick and easy tool changes.
- Contains no plasticizers.
- Reusable.

Suitable for file length [mm]	EAN 4007220		Description
150	015322	10	RFH 150
180	015346	10	RFH 180

File handles, file sleeves, file brush
Plastic sleeves, empty



Plastic sleeves, empty

Plastic sleeves for storing individual files without a handle.

Advantages:
- Enables the file to be hung up by the eyelet.
- Protects against damage, dirt and corrosion.

Suitable for file length [mm]	EAN 4007220		Description
150	015520	25	KH 150
200	015537	25	KH 200
250	015544	25	KH 250
300	015551	25	KH 300

File brush



File brush

The file brush is for easy cleaning of clogged files. Comes with a robust handle made from wood and wear-resistant steel wire.

Advantages:
- Easy cleaning.
- Long tool life.

Applications:
cleaning

Length [mm]	Length [inch]	EAN 4007220		Description
232	9.2	015315	5	HBF 10 ST 0,15



Hand deburrer

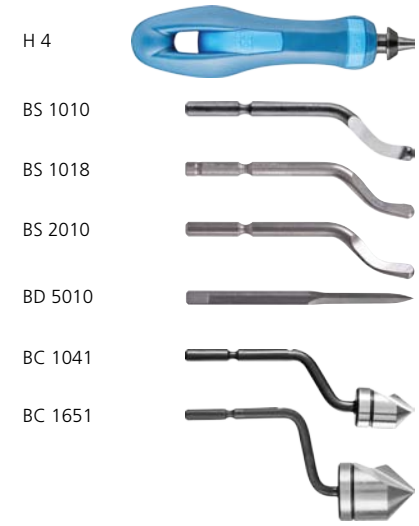
Hand deburrer for efficient deburring, chamfering and reworking of different materials and contours. Hard-to-reach areas, bores, inner and outer diameters, thread and grooves can be worked on effortlessly by hand.

PFERD offers:
- Three **deburring blades** for work on steel, aluminium, non-ferrous metals, cast iron, plastics and other soft materials.
- One **mini blade** for general work on the smallest geometries made of various materials.
- Two rotatable **deburring countersinks** for general work on bores made of various materials.

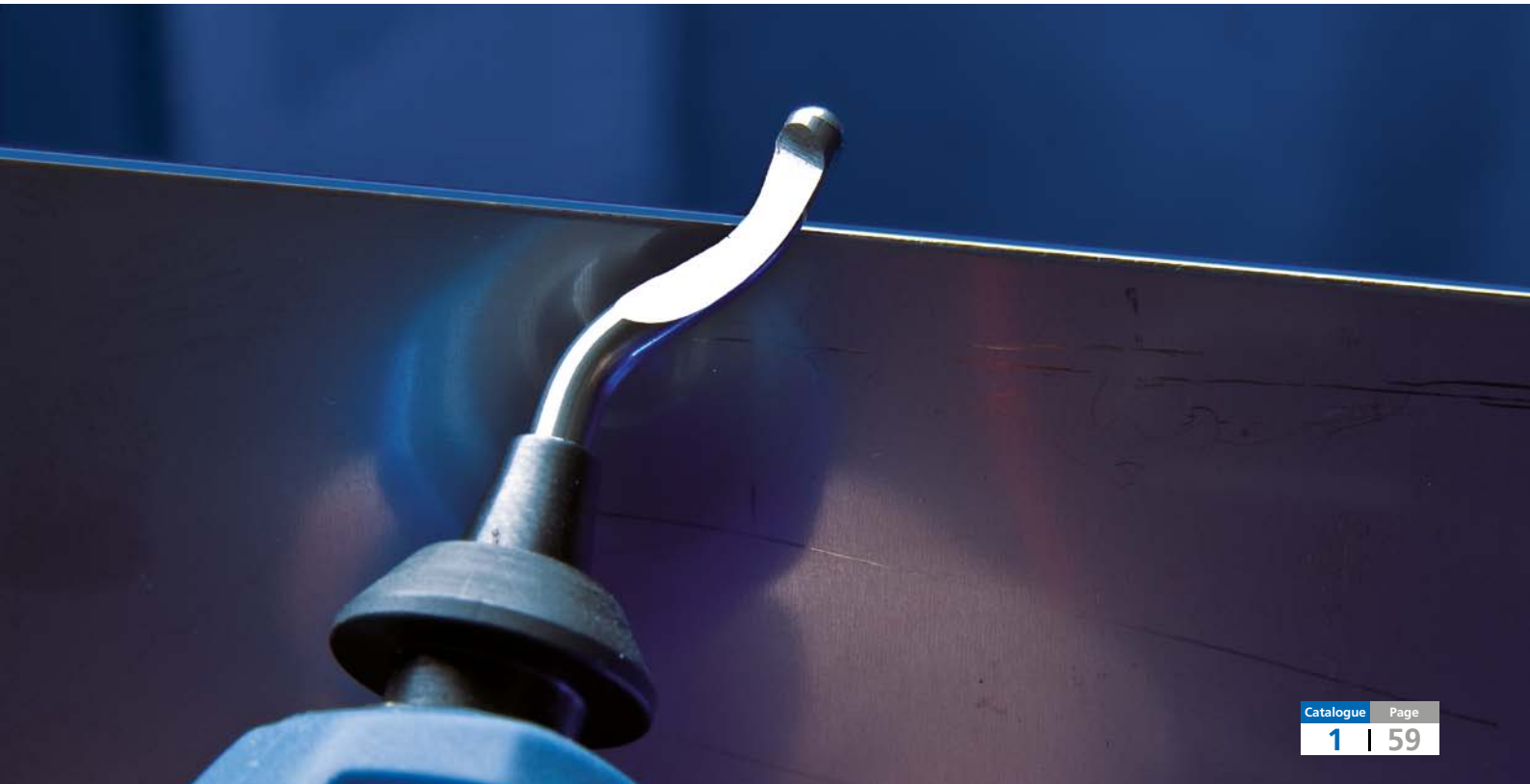
Advantages:
- Three different, easily changeable deburrers (blades, mini-blades and countersinks).
- Easy to control and use with the special holder.
- Outstanding adjustment to the workpiece contours.
- The pivot-mounted adapter system makes handling and changing the deburrer very easy.
- Ergonomic file handle protects hands against sharp edges and prevents the tool from rolling away.

PFERDVALUE:

Haptic Filter



Dia. [mm]	EAN 4007220	Use for		Description
Holder for hand deburrer				
-	807897	all types	1	H 4
Deburring blades				
3	807903	steel, aluminium	10	BS 1010
	807910	plastics, other soft materials	10	BS 1018
	807927	non-ferrous metals, cast iron	10	BS 2010
Mini-blade				
3	807934	general use	1	BD 5010
Deburring countersink				
3	807941	general use	1	BC 1041
	807958	general use	1	BC 1651



Quality tools from a single source



Catalogue section 1

Files



Catalogue section 2

Milling tools



Catalogue section 3

Mounted points



Catalogue section 4

Fine grinding and polishing tools



Catalogue section 5

Diamond and CBN tools



Catalogue section 6

Cut-off wheels, flap discs and grinding wheels



Catalogue section 7

Cut-off wheels for stationary applications



Catalogue section 8

Industrial power brushes



Catalogue section 9

Tool drives



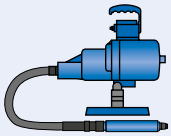
Milling tools
Table of contents

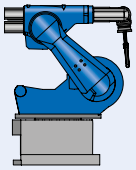
General information on milling tools 3
The fast way to the best tool 4
General information on tungsten carbide burrs 6

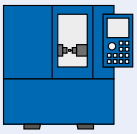
Milling











Tungsten carbide burrs for universal applications

- Z1, Z3, Z3 PLUS, Z4 and Z5 for fine and coarse stock removal 12

Tungsten carbide burrs for high-performance applications

- ALLROUND for versatile use 26
- STEEL for steel and cast steel 33
- INOX for stainless steel (INOX) 44
- ALU and NON-FERROUS for aluminium and non-ferrous metals 50
- CAST for cast iron 57
- TITANIUM for titanium 62
- PLAST, FVK and FVK-S for GRP/CRP 66
- TOUGH and TOUGH-S for tough applications 68
- MICRO for finishing work 74
- EDGE, Z3, Z3 PLUS, Z5 and special cuts for work on edges 80

HSS rotary cutters

- ALU, Z1, Z2 and Z3 for fine and coarse stock removal 88
- Special shapes 96
- HSS engraving cutters 97
- Finishing cutters 98

Burr sets and versions with long shanks or HICOAT coatings can be found on the pages for the respective product group.

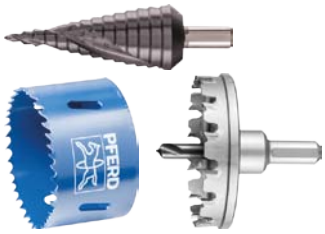


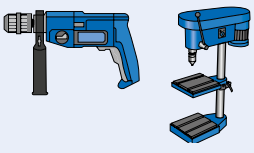


Milling tools with cutting inserts

- **ALU**MASTER High Speed Disc 102
- EDGE FINISH system for work on edges 106

Cutting out holes





HSS step drills, HSS hole saws, TC hole cutters

- HSS step drills 110
- HSS hole saws 111
- TC hole cutters 118

PFERD milling tools are manufactured in compliance with the highest quality standards. The broad product range offers the best tool solution for any application. Outstanding quality, a long service life and excellent stock removal rates allow economical work with diverse materials, delivering excellent results. The quality of PFERD tools has been certified according to ISO 9001.

All tools and more information:
www.pferd.com

Technical customer support

If you have any questions about the optimization of your burr applications, our sales representatives and technical advisers will be happy to help or visit you. PFERD works alongside you to provide application engineering solutions for working with diverse materials. Please do not hesitate to contact us for further information. You can find our worldwide sales offices at **www.pferd.com**.



Well packed and presented

PFERD packaging provides optimum protection for tools. All burrs and tungsten carbide hole cutters are supplied individually packed in a sturdy plastic box. HSS hole saws are supplied in a practical cardboard box. Furthermore, all packaging can be presented at the **PFERD**TOOL-CENTER. The packaging labels contain technical information, the designation and the EAN code.



PFERDTOOL-CENTER

On the **PFERD**TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool. A lockable display cabinet is available for burrs.

If you have questions, your or PFERD representative will be happy to assist you.



PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

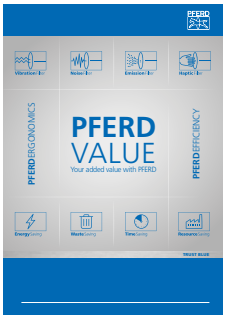
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



Application	Material group			Application	High-performance application	P.	Universal application	P.
Deburring, chamfering, milling out for the preparation of build-up welding, machining weld seams, machining contours, cleaning cast material	Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	STEEL	33	3 PLUS	12
					ALLROUND	26		
				Fine stock removal	MICRO	74	5	
		Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	STEEL	33	3 PLUS	
					ALLROUND	26		
				Fine stock removal	MICRO	74	5	
	Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	INOX	44	4	12
					ALLROUND	26		
				Fine stock removal	MICRO	74	5	
	Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	ALU	50	1	12
				Fine stock removal			-	
			Brass, copper, zinc	Coarse stock removal	NON-FERROUS	50	1	
					ALU	50		
					ALLROUND	26		
				Fine stock removal	ALU	50	3	
		Hard non-ferrous metals	Bronze, titanium/ titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	TITANIUM	62	4	
					ALU	50		
					NON-FERROUS	50		
					INOX	44		
					ALLROUND	26		
				Fine stock removal	MICRO	74	5	
		High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Coarse stock removal	On request	-	4	
				Fine stock removal	MICRO	74	5	
	Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/ nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	CAST	57	3 PLUS	12
					ALLROUND	26		
				Fine stock removal	MICRO	74	3	
Milling out, machining contours	Plastics, other materials	Thermoplastics, fibre-reinforced plastics (GRP/CRP) with a fibre content ≤ 40 %		Coarse stock removal	PLAST	66	-	-
Trimming, contour milling, cutting out holes		Thermoplastics, fibre-reinforced plastics (GRP/CRP) with a fibre content > 40 %			FVK/FVKS	66		
					ALU	50		
					NON-FERROUS	50		

Special applications

Application	High-performance application	Page	Universal application	Page
Work on edges	TC burrs for work on edges	80	-	-
	EDGE FINISH system for work on edges	106	-	-
Problems with broken teeth	TC burrs – TOUGH, TOUGH-S cuts	68	HSS rotary cutters	88
Cutting out round holes	TC hole cutters	118	HSS step drills, HSS hole saws	110/111
Machining butt welds and fillet welds, work on edges/ chamfering using an angle grinder	**ALU**MASTER High Speed Disc	102	-	-





Burrs with a long shank

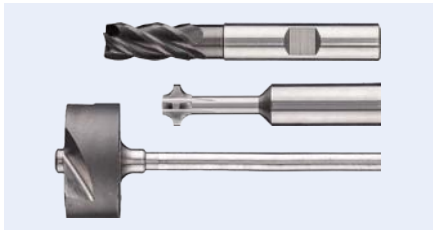
Tungsten carbide burrs with long shanks are particularly well suited to working in hard-to-reach areas. PFERD holds long-shank versions in stock for the respective product groups.

Long-shank versions are available with the 3 PLUS, STEEL, Z5 and TOUGH cuts. All long shanks can be individually shortened, and additional versions can be custom-made on request.



HICOAT coatings

PFERD offers tungsten carbide burrs with HICOAT coatings to tackle particularly demanding applications. The anti-wear coatings enable effective chip removal thanks to the improved anti-adhesion characteristics and increase the tools' service life. Two different coatings are available. The HICOAT coating HC-FEP is specifically designed for iron and steel materials. The HICOAT coating HC-NFE is mainly used for long-chipping and lubricating aluminium alloys and non-ferrous metals. For further details please see pages 12 and 50.



Products made to order

If you cannot find the solution for your particular application in our comprehensive catalogue range, we are happy to produce milling tools to meet your wishes and requirements. Our sales representatives and technical advisers will be happy to assist you in the analysis of your tasks. Your specifications and wishes, drawings relating to cuts, shank diameters, special lengths, special shapes and coatings can thus be taken into account. For more information about products made to order, please see page 100. You will also find information on solid carbide milling cutters there.



Robot applications

PFERD milling tools can be used on robots. The optimum tool for your application depends on the operating conditions.

Our sales representatives and our technical customer support team will be happy to assist you in selecting the most suitable tool.



Resharpening

PFERD offers resharpening of tungsten carbide burrs, subject to a minimum resharpening quantity of 25 units (unmixed items). Regrinding of HSS rotary cutters or tungsten carbide burrs with a shank diameter of 3 mm is not recommended for economic reasons. In each individual case, our production specialists will decide whether regrinding makes sense from an economic point of view and is technically feasible. The following cuts can be resharpened (only applies to a shank diameter of 6 and 8 mm):

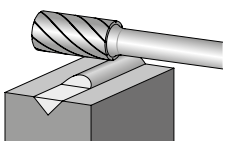
- 1 cut
- 3 cut
- 3 PLUS cut
- 4 cut
- 5 cut
- INOX
- ALU
- TITANIUM
- TOUGH
- TOUGH-S
- MICRO

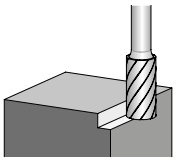
Long-shank versions and HICOAT versions can also be resharpened. Please contact us for further details.

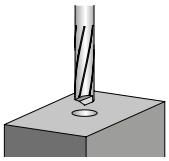


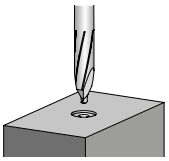
PFERDPRAXIS **brochures**

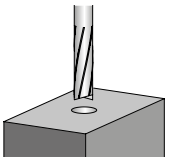
Our **PFERD**PRAXIS brochures contain a wealth of useful information on material properties as well as tips and tricks for using PFERD tools on specific materials.

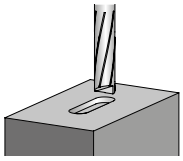
Cylindrical shape

ZYA

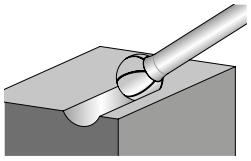
with end cut

ZYAS

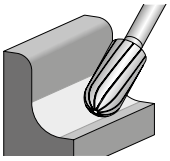
with drill cut

ZYA BS

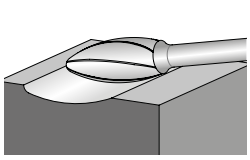
with centre drill

ZYA ZBS

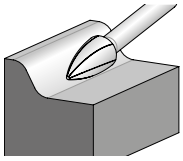
with end cut (two teeth)

ZYA STS

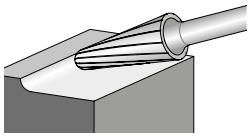
with flat end cut (two teeth)

ZYA FSTS

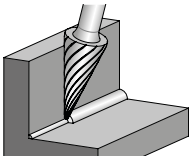
Ball shape

KUD

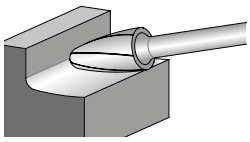
Cylindrical shape with radius end

WRC

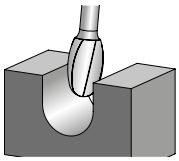
Flame shape

B

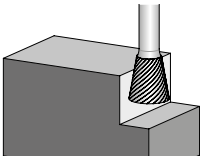
Pointed tree shape

SPG

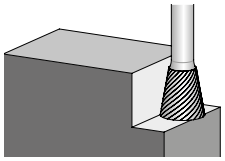
Conical shape with radius end

KEL

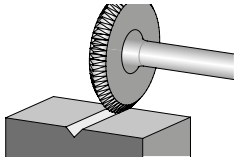
Conical pointed shape

SKM

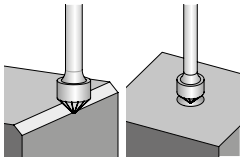
Tree shape with radius end

RBF

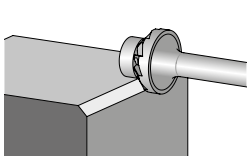
Oval shape

TRE

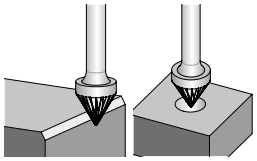
Inverted cones

WKN

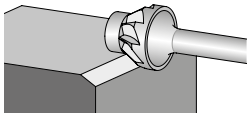
with end cut

WKNS

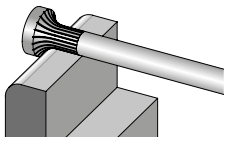
Rim shape

N

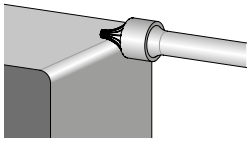
Conical counterbore shape 90°

KSK

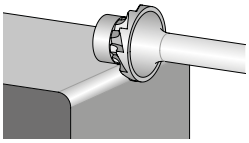
EDGE 45°

KSK EDGE

Conical counterbore shape 60°

KSJ

EDGE 30°

KSJ EDGE

Radius burrs

R

Concave radius burrs

V

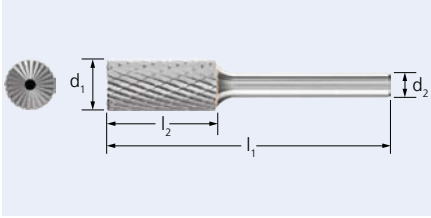
EDGE R3.0

V EDGE

Ordering instructions

Please state the EAN code or designation, cut and shank diameter when ordering.

Ordering example: TC burrs
EAN 4007220**045176**
ZYAS 1225 6 Z3 PLUS
❶ ❷ ❸ ❹ ❺

Explanation of the designation
❶ Shape.
❷ Only for cylindrical shape with end cut.
❸ Burr diameter x cut length d_1 x l_2 [mm].
❹ Shank diameter d_2 [mm].
❺ Cut (add desired cut if several are available).



TC burrs

PFERD cuts for universal applications

1 cut
(C according to DIN 8033)



- Machining of non-ferrous metals, steel and cast iron.
- High stock removal.

3 cut
(MY according to DIN 8033)



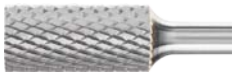
- Machining of steel, cast iron, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.
- Good surface.

3 PLUS cut
(MX according to DIN 8033)



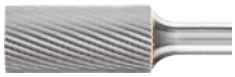
- Similar to 3 cut, but with cross cut.
- Machining of steel, cast iron, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.

4 cut
(MX according to DIN 8033)

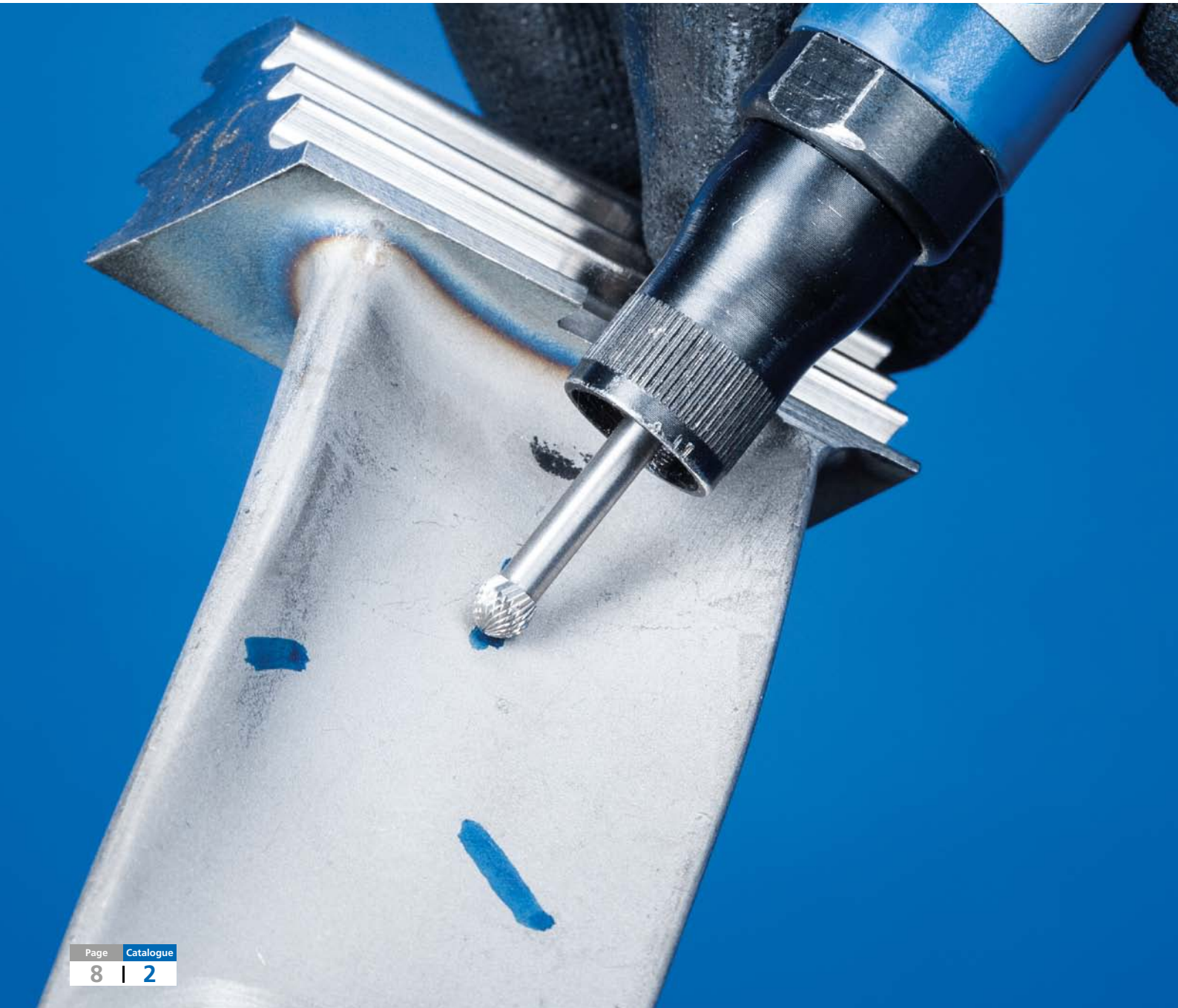


- Machining of stainless steel (INOX), steel and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- High stock removal with short chips.
- Good surface.

5 cut
(F according to DIN 8033)



- Fine machining of steel, cast iron, stainless steel (INOX) and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- Good surface.



TC burrs

PFERD cuts for high-performance applications

ALLROUND cut



- High stock removal rate on key materials such as steel, cast steel, stainless steel (INOX), non-ferrous metals and cast iron.
- Similar to the 3 PLUS cut but with a significantly higher stock removal rate.

STEEL cut



- Extremely high stock removal rate on steel and cast steel.
- Smooth milling.
- Reduced vibration and less noise.

INOX cut



- Extremely high stock removal rate on all austenitic, rust and acid-resistant steels, stainless steel (INOX) and soft titanium alloys.
- Significantly reduced vibration and less noise.

ALU cut



- High stock removal rate on aluminium and aluminium alloys, non-ferrous metals and plastics.
- Smooth milling.

NON-FERROUS cut



- High stock removal rate on non-ferrous metals, brass, copper, plastics and fibre-reinforced plastics.
- Suitable for universal use.

CAST cut



- Extremely high stock removal rate on cast iron.
- Smooth milling.
- Reduced vibration and less noise.

TITANIUM cut



- Outstanding stock removal rate and service life on hard titanium alloys.
- Significantly increased aggressiveness, large chips and very good chip removal.
- Reduced vibration and less noise.

EDGE cut



- Creates exact edge shapes – with either 30° or 45° chamfering or a defined radius of 3.0 mm.
- Safe and comfortable to guide.

PLAST cut



- Trimming and contour milling of workpieces made from less hard glass and carbon-fibre-reinforced duroplastics (GRP and CRP with ≤ 40 % fibre content) and fibre-reinforced thermoplastics.
- Minimized delamination and fraying through straight cut.
- Highly suitable for use on machines and on robots.
- Reduced vibration and less noise.

FVK cut



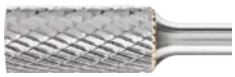
- Trimming and contour milling of workpieces made from hard glass and carbon-fibre-reinforced duroplastics (also GRP and CRP > 40 %).

FVKS cut



- Similar to the FVK cut.
- Smooth milling.

TOUGH cut



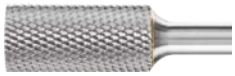
- High stock removal rate on cast iron, steel < 54 HRC.
- Extremely resistant to impacts.
- Also suitable for use with high surface contact angles > 1/3 and under impact loads.

TOUGH-S cut



- High stock removal rate on cast iron, steel < 54 HRC.
- Similar to the TOUGH cut, but with smoother milling and shorter chips.
- Extremely resistant to impacts.
- Also suitable for use with high surface contact angles > 1/3 and under impact loads.

MICRO cut



- Good stock removal on almost all materials < 68 HRC.
- High surface quality.
- Reduced vibration and less noise.

HICOAT coatings



- In general, all PFERD tungsten carbide burrs are also available with HICOAT coatings.
- Improved anti-adhesion characteristics.
- Effective chip discharge.
- Lower thermal loads.
- Increased service life.
- Also suitable for use at higher cutting speeds when compared with uncoated burrs.

Products made to order

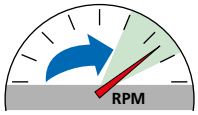


If you cannot find the solution for your particular application in our extensive catalogue range, we produce PFERD premium-quality burrs, tailor-made to meet the requirements of your job.
Further information on PFERD products made to order can be found on page 100.

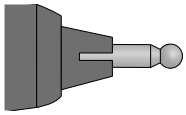
TC burrs
Recommendations for use and instances of misuse

Recommendations for use:

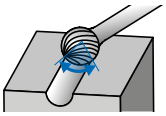
An optimum rotational speed and power output for the tool drive (airpowered or electric grinders, flexible shaft drive) are required for cost-effective use of tungsten carbide burrs.



- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For cost-effective use of burrs with a shank diameter > 6 mm, a tool drive output of 300–500 watts is required when used at a higher rotational speed and cutting speed.
- Use the highest rotational speed possible within the recommended rotational speed and cutting speed ranges.
- For applications with low stock removal (deburring, chamfering, minor work on surfaces), the rotational speed can be increased by up to 100 % (this excludes tungsten carbide burrs with long shanks).

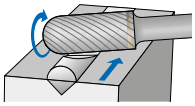


- Use only rigid clamping systems and drives as impacts on the tools and tool chatter lead to premature wear.



1/3 of the total surface

- The burr surface in contact with the workpiece must not exceed 1/3 of the total burr surface. Failure to comply with this recommendation will result in rough milling behaviour and possibly in broken teeth. If this cannot be avoided, we recommend using the TOUGH and TOUGH-S cuts.



In direction of rotation = fine finish

- In general, burrs are used counterrotationally or with a swinging motion. To achieve fine finishes, pass the tool rapidly over the workpiece in the direction of rotation.

Safety notes:

= Wear eye protection!

= Wear hearing protection!

= Wearing protective gloves is recommended. Handle the tool drive with both hands.

= Observe the recommended rotational speed, especially when using burrs with long shanks!

Avoiding misuse

Figure	Consequences of misuse	Solution
	The burr becomes clogged during use.	Use the correct cut for the material being machined. Use tools with a HICOAT coating or use grinding oil.
	Pronounced discolouration can be seen in the transition between the toothed section and the shank.*	Observe the recommended rotational speeds and/or reduce the contact pressure and surface contact angle.
	The toothed section detaches from the shank.	
	There are flying sparks.	Reduce the rotational speed and contact pressure and make sure that the surface contact angle is no more than 1/3 of the burr surface.
	Parts break off from the toothed section.	Avoid impact loads when using the tool.

Figure	Consequences of misuse	Solution
	The shank breaks.	Only use rigid drives and undamaged clamping systems, and replace them if necessary.
incorrect  correct 	The clamping length is incorrect.	Do not chose a burr clamping depth that is too small. **In general,** the minimum clamping depth is 2/3 of the shank length (does not apply to burrs with long shanks).
	The shank bends on burrs with a long shank.	Observe the recommended rotational speeds and safety notes for burrs with a long shank.
	Signs of wear such as rough running and strong vibrations occur, as well as increased flying sparks.	Do not use burrs beyond the end of their service life. Use a new burr instead.

* On TC burrs designed for high-performance applications, blue discolouration is extremely difficult to avoid on account of the very high stock removal rate. However, this does not constitute a safety risk.

Tungsten carbide burrs with a long shank are ideal for cost-effectively machining small, hard-to-reach areas on components. Long-shank versions are available with the 3 PLUS, 5, STEEL and TOUGH cuts.

Tungsten carbide burrs with a long shank can be shortened if required.
Tungsten carbide burrs with the designation **GL 75 mm** are made from solid tungsten carbide, which means they can only be shortened using diamond tools.
GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)

Safety notes:

Not suitable for robotic or stationary applications. **Risk of bending**. Use only rigid clamping systems/drives.

= Observe the prescribed rotational speed!

Safety note – maximum rotational speed [RPM] for burrs with long shanks

When working with long-shank burrs, it is crucial that the burr is in contact with the workpiece (or inserted in the bore or slot to be machined) before the drive system is turned on. As a rule, the tool must remain in contact with the workpiece for as long as the machine is running. Failure to observe this procedure may result in shank failure (bending) and hence an increased risk of accidents. If continuous contact between the tool and the workpiece is not guaranteed, the ❸ **maximum idling speeds stated in the table must not be exceeded**.

For safety reasons, the maximum application speeds ❷ **with contact with the workpiece** require a reduction in the recommended speed of tungsten carbide burrs with standard shanks. The reduced speeds are stated in the table below.

To determine the recommended rotational speed range [RPM], please proceed as follows:

❶ Select the required burr diameter.
❷ For the maximum application speed [RPM] with contact with the workpiece, please refer to the right-hand side of the table.

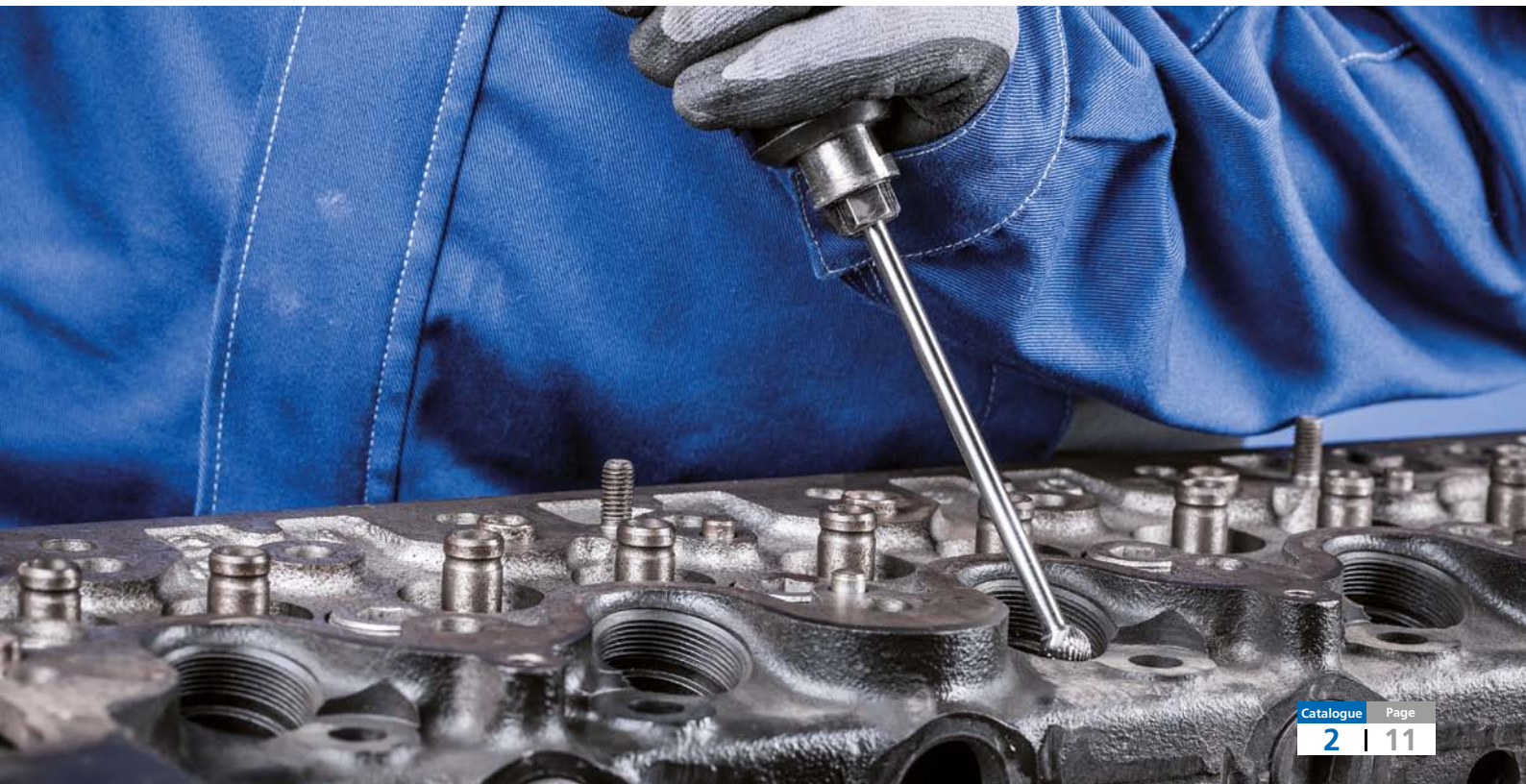
Example:
TC burr, SL 150 mm,
3 PLUS cut,
burr dia. 12 mm.
Coarse stock removal on steels
up to 1,200 N/mm².
Maximum application speed with contact with the workpiece: 7,000 RPM

❶ Burr dia. [mm]	❸ Maximum idling speed [RPM] without contact with the workpiece		❷ Maximum application speed [RPM] with contact with the workpiece	
	Shank length [mm]			
	75	150	75	150
3	10,000	-	31,000	-
6	6,000	8,000	15,000	15,000
8	-	6,000	-	11,000
10	-	4,000	-	9,000
12	-	3,000	-	7,000

Extensions for drive spindles

In some applications, drive spindle extensions are an economic alternative to customized burrs with long shanks. For more information please see page 25.





TC burrs for universal applications

For fine and coarse stock removal

TC burrs for universal applications are suitable for fine and coarse stock removal on the key materials used in industrial manufacturing. They provide a good stock removal rate and are not specific to a particular material.



Advantages:

- Good stock removal rate through optimum matching of tungsten carbide, geometry, cut and available coating.
- Long tool life.
- Reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- High surface quality.

Materials that can be worked:

- Steel, cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Applications:

- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds.
  Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

PFERDVALUE:

PFERDEFFICIENCY recommends burrs with HICOAT coating for long fatigue-free and resource-saving work with perfect results in a very short period of time.

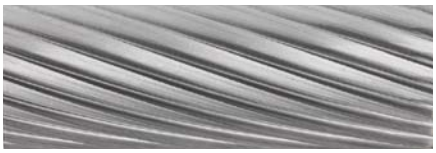
WasteSaving **Time**Saving

1 cut
(C according to DIN 8033)



- Machining of non-ferrous metals, steel and cast iron.
- High stock removal.

3 cut
(MY according to DIN 8033)



- Machining of cast iron, steel, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.
- Good surface.

3 PLUS cut
(MX according to DIN 8033)



- Similar to 3 cut, but with cross cut.
- Machining of cast iron, steel, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.

4 cut
(MX according to DIN 8033)



- Machining of stainless steel (INOX), steel and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- High stock removal with short chips.
- Good surface.

5 cut
(F according to DIN 8033)



- Fine machining of cast iron, steel, stainless steel (INOX) and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- Good surface.

HICOAT coating HC-FEP for iron and steel materials



- High hardness and wear resistance.
- Effective chip removal through improved anti-adhesion characteristics.
- Very high resistance against thermal load.
- Increased service life.
- Also suitable for use at higher cutting speeds when compared with uncoated burrs.

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Determine the type of application.
❸ Select the cut.
❹ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

❺ Select the required burr diameter.
❻ The cutting speed range and the burr diameter determine the recommended rotational speed range.



❶ Material group			❷ Application	❸ Cut	❹ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	1	600–900 m/min
				3 PLUS	450–600 m/min
				HICOAT HC-FEP	450–750 m/min
			Fine stock removal	5	450–600 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	3	250–350 m/min
				3 PLUS	
				4	
				HICOAT HC-FEP	250–450 m/min
			Fine stock removal	5	350–450 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	1	250–450 m/min
				3	250–350 m/min
				3 PLUS	
				4	250–450 m/min
			Fine stock removal	5	350–450 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	1	600–900 m/min
		Brass, copper, zinc	Coarse stock removal	1	600–900 m/min
			Fine stock removal	3	450–600 m/min
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	3	250–350 m/min
				4	
			Fine stock removal	5	350–450 m/min
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Coarse stock removal	3 PLUS	250–450 m/min
				4	
			Fine stock removal	5	350–600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	1	600–900 m/min
				3 PLUS	450–600 m/min
			Fine stock removal	3	450–600 m/min

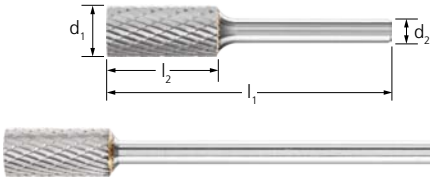
Example:
TC burr,
3 PLUS cut,
burr dia. 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Cutting speed: 450–600 m/min
Rotational speed range: 12,000–16,000 RPM

❺ Burr dia. [mm]	❻ Cutting speeds [m/min]					
	250	350	450	600	750	900
	Rotational speeds [RPM]					
1.5	53,000	74,000	95,000	127,000	159,000	191,000
2	40,000	56,000	72,000	95,000	119,000	143,000
3	27,000	37,000	48,000	64,000	80,000	95,000
4	20,000	28,000	36,000	48,000	60,000	72,000
6	13,000	19,000	24,000	32,000	40,000	48,000
8	10,000	14,000	18,000	24,000	30,000	36,000
10	8,000	11,000	14,000	19,000	24,000	29,000
12	7,000	9,000	12,000	16,000	20,000	24,000
16	5,000	7,000	9,000	12,000	15,000	18,000
20	4,000	6,000	7,000	10,000	12,000	14,000
25	3,000	4,000	6,000	8,000	10,000	11,000

Safety note:

Please observe the reduced rotational speeds for long-shank versions. They can be found on page 11.

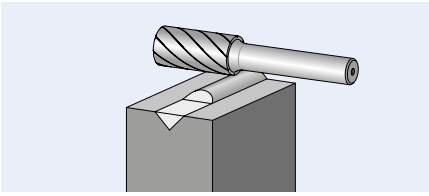
TC burrs for universal applications
For fine and coarse stock removal



Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032 with cut conforming to DIN 8033.

GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)



Ordering notes:
- Please complete the description with the desired cut.

Safety notes:
Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

PFERDVALUE:
HICOAT coating
WasteSaving TimeSaving

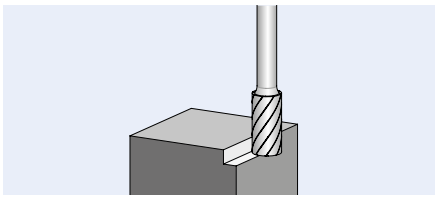
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 3 PLUS HC-FEP	Cut 4	Cut 5		Description
				EAN 4007220							
Shank dia. 3 mm											
2	10	3	40	-	-	233771	-	233788	233795	1	ZYA 0210/3 Z ...
3	13	3	43	-	-	233801	-	402627	233818	1	ZYA 0313/3 Z ...
6	7	3	37	-	-	233825	-	-	233832	1	ZYA 0607/3 Z ...
	13	3	43	-	-	233849	-	-	233856	1	ZYA 0613/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm											
3	13	3	75	-	-	779699	-	-	779644	1	ZYA 0313/3 Z ... GL 75
6	13	3	88	-	-	779606	-	-	779583	1	ZYA 0613/3 Z ... SL 75
Shank dia. 6 mm											
4	13	6	55	-	-	045435	-	045459	045466	1	ZYA 0413/6 Z ...
6	16	6	55	-	045473	045480	835548	045503	045510	1	ZYA 0616/6 Z ...
8	20	6	60	-	045534	045541	-	045565	045572	1	ZYA 0820/6 Z ...
10	13	6	53	-	-	045596	-	045626	045640	1	ZYA 1013/6 Z ...
	20	6	60	045862	045855	045879	-	045916	045930	1	ZYA 1020/6 Z ...
	25	6	65	-	-	045978	-	046012	-	1	ZYA 1025/6 Z ...
12	25	6	65	045671	045657	045695	835555	045732	045756	1	ZYA 1225/6 Z ...
16	25	6	65	-	045787	045800	-	045848	-	1	ZYA 1625/6 Z ...
Long shank dia. of 6 mm, SL 150 mm											
6	16	6	172	-	-	090114	-	-	-	1	ZYA 0616/6 Z ... SL 150
8	20	6	170	-	-	617632	-	-	-	1	ZYA 0820/6 Z ... SL 150
10	20	6	170	-	-	090121	-	-	-	1	ZYA 1020/6 Z ... SL 150
12	25	6	175	-	-	617649	-	-	-	1	ZYA 1225/6 Z ... SL 150
Shank dia. 8 mm											
12	25	8	65	-	-	045701	-	-	-	1	ZYA 1225/8 Z ...
16	25	8	65	-	-	045817	-	-	-	1	ZYA 1625/8 Z ...

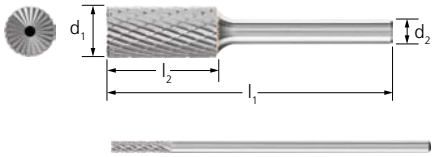


Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut according to DIN 8033.

GL = total length (solid tungsten carbide)





Ordering notes:

- Please complete the description with the desired cut.

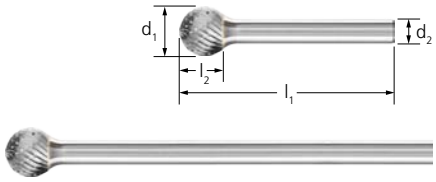
Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 3	Cut 3 PLUS	Cut 4	Cut 5		Description
				EAN 4007220					
Shank dia. 3 mm									
2	10	3	40	-	049471	049457	049464	1	ZYAS 0210/3 Z ...
3	13	3	43	-	049501	072394	049488	1	ZYAS 0313/3 Z ...
6	7	3	37	-	049532	-	049518	1	ZYAS 0607/3 Z ...
	13	3	43	-	049563	402634	049549	1	ZYAS 0613/3 Z ...
Long shank dia. of 3 mm, GL 75 mm									
3	13	3	75	-	779705	-	779712	1	ZYAS 0313/3 Z ... GL 75
Shank dia. 6 mm									
4	13	6	55	-	044926	044940	044957	1	ZYAS 0413/6 Z ...
6	16	6	55	044964	044971	044995	045008	1	ZYAS 0616/6 Z ...
8	20	6	60	045015	045022	045046	045053	1	ZYAS 0820/6 Z ...
10	13	6	53	-	045084	-	-	1	ZYAS 1013/6 Z ...
	20	6	60	045299	045305	045336	045350	1	ZYAS 1020/6 Z ...
	25	6	65	-	045374	045404	-	1	ZYAS 1025/6 Z ...
12	25	6	65	045145	045176	045213	045237	1	ZYAS 1225/6 Z ...
16	25	6	65	045244	045251	045275	045282	1	ZYAS 1625/6 Z ...
Shank dia. 8 mm									
12	25	8	65	-	045183	-	-	1	ZYAS 1225/8 Z ...



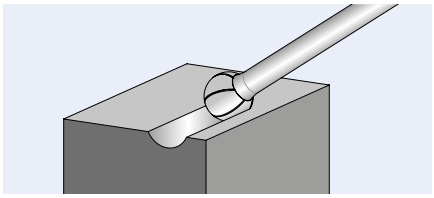
TC burrs for universal applications
For fine and coarse stock removal



Ball shape KUD

Ball-shaped burr according to DIN 8032 with cut conforming to DIN 8033.

GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)



Ordering notes:
- Please complete the description with the desired cut.

Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

PFERDVALUE:
HICOAT coating

WasteSaving TimeSaving

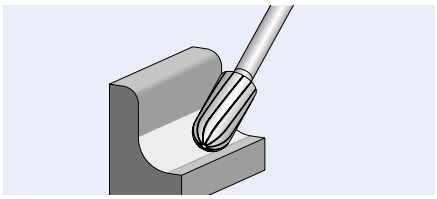
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 3 PLUS HC-FEP	Cut 4	Cut 5		Description
				EAN 4007220							
Shank dia. 3 mm											
1.5	1	3	33	-	-	955444	-	-	955451	1	KUD 01,51/3 Z ...
2	1.5	3	33	-	-	955468	-	-	955475	1	KUD 021,5/3 Z ...
3	2	3	33	-	-	049778	-	392058	049761	1	KUD 0302/3 Z ...
4	3	3	34	-	-	049792	-	394915	049785	1	KUD 0403/3 Z ...
6	5	3	35	-	-	049815	-	393192	049808	1	KUD 0605/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm											
3	2	3	75	-	-	780060	-	-	780053	1	KUD 0302/3 Z ... GL 75
6	5	3	80	-	-	780039	-	-	780022	1	KUD 0605/3 Z ... SL 75
Shank dia. 6 mm											
4	3	6	45	-	-	046791	-	-	046807	1	KUD 0403/6 Z ...
6	5	6	45	046814	046838	046821	835586	046845	046852	1	KUD 0605/6 Z ...
8	7	6	47	046876	046890	046883	-	046906	046913	1	KUD 0807/6 Z ...
10	9	6	49	046944	046937	046951	835593	046975	046982	1	KUD 1009/6 Z ...
12	10	6	51	-	047002	047033	835609	047071	047088	1	KUD 1210/6 Z ...
16	14	6	54	047125	-	047132	-	047170	047187	1	KUD 1614/6 Z ...
20	18	6	58	-	047194	047224	-	-	-	1	KUD 2018/6 Z ...
Long shank dia. of 6 mm, SL 150 mm											
6	5	6	155	-	-	090237	-	-	-	1	KUD 0605/6 Z ... SL 150
8	7	6	157	-	-	617687	-	-	-	1	KUD 0807/6 Z ... SL 150
10	9	6	159	-	-	090244	-	-	-	1	KUD 1009/6 Z ... SL 150
12	10	6	160	-	-	617694	-	-	-	1	KUD 1210/6 Z ... SL 150
Shank dia. 8 mm											
12	10	8	51	-	-	047040	-	-	-	1	KUD 1210/8 Z ...
16	14	8	54	-	-	047149	-	-	-	1	KUD 1614/8 Z ...
20	18	8	58	-	-	047231	-	-	-	1	KUD 2018/8 Z ...

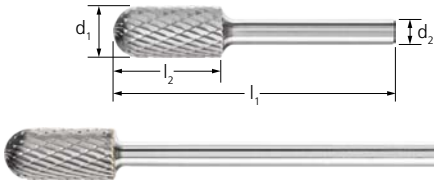


Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 with cut conforming to DIN 8033.
Combination of cylindrical and ball-shaped geometries.

GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)





Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

PFERDVALUE:
HICOAT coating

Waste Saving Time Saving

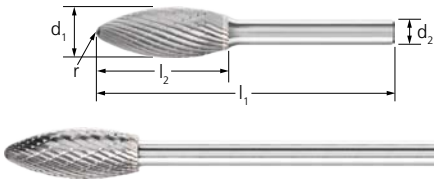
Ordering notes:

- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 1	3	3 PLUS	3 PLUS HC-FEP	4	5		Description
				EAN 4007220							
Shank dia. 3 mm											
2	10	3	40	-	-	049631	-	395837	049624	1	WRC 0210/3 Z ...
3	13	3	43	-	-	049662	-	393161	049648	1	WRC 0313/3 Z ...
6	13	3	43	-	-	049693	-	393178	049679	1	WRC 0613/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm											
3	13	3	75	-	-	779767	-	-	779750	1	WRC 0313/3 Z ... GL 75
6	13	3	88	-	-	779743	-	-	779729	1	WRC 0613/3 Z ... SL 75
Shank dia. 6 mm											
4	13	6	55	-	-	046173	-	046197	-	1	WRC 0413/6 Z ...
6	16	6	55	046227	046210	046234	835562	046258	046265	1	WRC 0616/6 Z ...
8	20	6	60	046296	046289	046302	-	046326	046333	1	WRC 0820/6 Z ...
10	20	6	60	046371	046357	046388	-	046425	046449	1	WRC 1020/6 Z ...
	25	6	65	-	046708	046715	-	046746	-	1	WRC 1025/6 Z ...
12	25	6	65	046487	046463	046500	835579	046548	046562	1	WRC 1225/6 Z ...
16	25	6	65	046623	046609	046630	-	046678	-	1	WRC 1625/6 Z ...
Long shank dia. of 6 mm, SL 150 mm											
6	16	6	172	-	-	090336	-	-	-	1	WRC 0616/6 Z ... SL 150
8	20	6	170	-	-	617656	-	-	-	1	WRC 0820/6 Z ... SL 150
10	20	6	170	-	-	090343	-	-	-	1	WRC 1020/6 Z ... SL 150
12	25	6	175	-	-	617663	-	-	-	1	WRC 1225/6 Z ... SL 150
Shank dia. 8 mm											
10	20	8	60	-	-	046395	-	-	-	1	WRC 1020/8 Z ...
12	25	8	65	-	-	046517	-	046555	-	1	WRC 1225/8 Z ...
16	25	8	65	-	-	046647	-	-	-	1	WRC 1625/8 Z ...



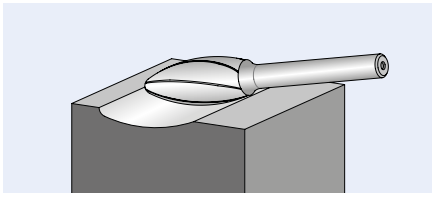
TC burrs for universal applications
For fine and coarse stock removal



Flame shape B

Flame-shaped burr according to ISO 7755/8 with cut conforming to DIN 8033.

SL = shank length (long steel shank)



Ordering notes:

- Please complete the description with the desired cut.

Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

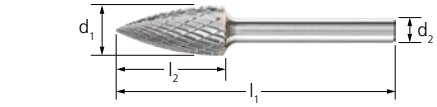
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut 3	Cut 3 PLUS	Cut 5		Description
					EAN 4007220				
Shank dia. 3 mm									
3	7	3	37	0.8	-	955482	049570	1	B 0307/3 Z ...
6	13	3	43	1.0	-	955499	049594	1	B 0613/3 Z ...
Shank dia. 6 mm									
8	20	6	60	1.5	046050	046067	-	1	B 0820/6 Z ...
10	25	6	65	1.7	-	955505	-	1	B 1025/6 Z ...
12	30	6	70	2.1	046098	046111	-	1	B 1230/6 Z ...
16	35	6	75	2.6	-	046142	-	1	B 1635/6 Z ...
Long shank dia. of 6 mm, SL 150 mm									
8	20	6	170	1.5	-	617755	-	1	B 0820/6 Z ... SL 150
10	25	6	175	1.7	-	090480	-	1	B 1025/6 Z ... SL 150
12	30	6	180	2.1	-	617779	-	1	B 1230/6 Z ... SL 150



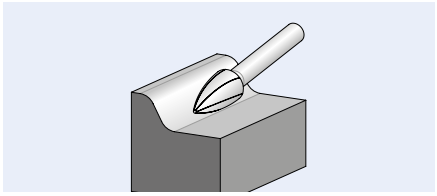
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with cut conforming to DIN 8033, flattened tip.

GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)







Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

PFERDVALUE**:**
HICOAT coating

Waste Saving Time Saving

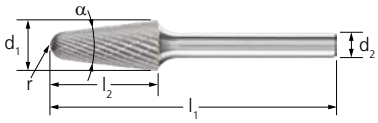
Ordering notes:

- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 3 PLUS HC-FEP	Cut 4	Cut 5		Description
				EAN 4007220							
Shank dia. 3 mm											
3	7	3	37	-	-	049921	-	470626	049907	1	SPG 0307/3 Z ...
	13	3	43	-	-	049952	-	393208	049938	1	SPG 0313/3 Z ...
6	13	3	43	-	-	049983	-	393215	049969	1	SPG 0613/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm											
3	13	3	75	-	-	779972	-	-	779965	1	SPG 0313/3 Z ... GL 75
6	13	3	88	-	-	779828	-	-	779811	1	SPG 0613/3 Z ... SL 75
Shank dia. 6 mm											
6	18	6	55	047934	047927	047941	835630	047965	047972	1	SPG 0618/6 Z ...
8	20	6	60	-	-	955512	-	-	955543	1	SPG 0820/6 Z ...
10	20	6	60	048016	047996	048023	-	048061	048085	1	SPG 1020/6 Z ...
12	25	6	65	048139	048115	048146	835654	048184	048207	1	SPG 1225/6 Z ...
	30	6	70	048368	048344	048382	-	048429	048443	1	SPG 1230/6 Z ...
16	30	6	70	048252	048238	048276	-	048313	-	1	SPG 1630/6 Z ...
Long shank dia. of 6 mm, SL 150 mm											
6	18	6	172	-	-	090497	-	-	-	1	SPG 0618/6 Z ... SL 150
8	20	6	170	-	-	955611	-	-	-	1	SPG 0820/6 Z ... SL 150
10	20	6	170	-	-	090640	-	-	-	1	SPG 1020/6 Z ... SL 150
12	25	6	175	-	-	955628	-	-	-	1	SPG 1225/6 Z ... SL 150
Shank dia. 8 mm											
10	20	8	60	-	-	048030	-	-	-	1	SPG 1020/8 Z ...
12	25	8	65	-	-	048153	-	-	-	1	SPG 1225/8 Z ...
16	30	8	70	048269	-	048283	-	-	-	1	SPG 1630/8 Z ...

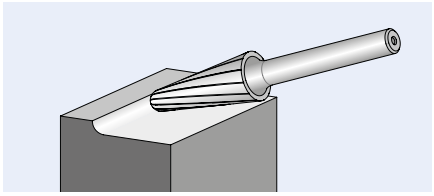


TC burrs for universal applications
For fine and coarse stock removal



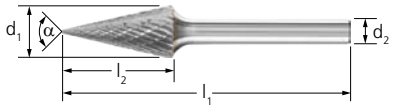
Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032 with cut conforming to DIN 8033.



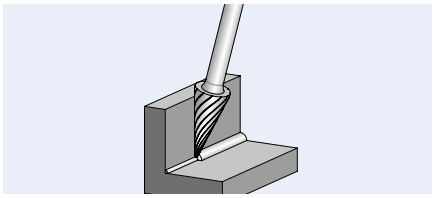
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 4	Cut 5		Description
						EAN 4007220						
Shank dia. 6 mm												
8	20	6	60	16°	1.25	-	-	955581	955604	-	1	KEL 0820/6 Z ...
10	20	6	60	14°	2.9	-	048467	048481	048504	-	1	KEL 1020/6 Z ...
12	25	6	65	14°	3.3	-	048528	048559	048597	-	1	KEL 1225/6 Z ...
	30	6	70	14°	2.6	048627	048603	048634	048672	048689	1	KEL 1230/6 Z ...
16	30	6	70	14°	4.8	-	-	048719	048733	-	1	KEL 1630/6 Z ...
Shank dia. 8 mm												
12	25	8	65	14°	3.3	-	-	048566	-	-	1	KEL 1225/8 Z ...
	30	8	70	14°	2.6	-	-	048641	-	-	1	KEL 1230/8 Z ...



Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with cut conforming to DIN 8033, flattened tip.



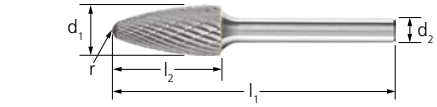
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 1	Cut 3	Cut 3 PLUS	Cut 4	Cut 5		Description
					EAN 4007220						
Shank dia. 3 mm											
3	7	3	37	21°	-	-	049839	-	049822	1	SKM 0307/3 Z ...
	11	3	41	14°	-	-	049853	451816	049846	1	SKM 0311/3 Z ...
6	13	3	43	25°	-	-	049877	-	049860	1	SKM 0613/3 Z ...
Shank dia. 6 mm											
6	18	6	55	18°	047286	047279	047293	047316	047323	1	SKM 0618/6 Z ...
10	20	6	60	28°	-	047330	047354	047378	047385	1	SKM 1020/6 Z ...
12	25	6	65	26°	047415	047392	047422	047460	047477	1	SKM 1225/6 Z ...
Shank dia. 8 mm											
12	25	8	65	26°	-	-	047439	-	-	1	SKM 1225/8 Z ...

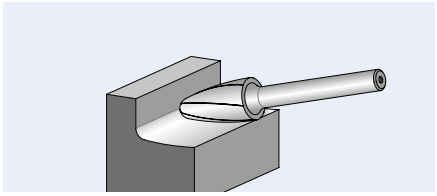
Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 with cut conforming to DIN 8033.

GL = total length (solid tungsten carbide)
SL = shank length (long steel shank)







Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

PFERDVALUE**:**
HICOAT coating

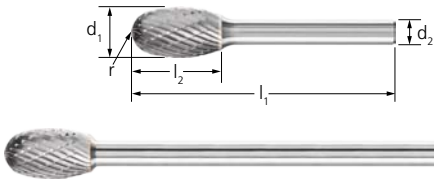
Waste Saving Time Saving

Ordering notes:

- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 3 PLUS HC-FEP	Cut 4	Cut 5		Description
					EAN 4007220							
Shank dia. 3 mm												
3	7	3	37	0.75	-	-	049891	-	-	049884	1	RBF 0307/3 Z ...
	13	3	43	0.75	-	-	955550	-	-	955567	1	RBF 0313/3 Z ...
6	13	3	43	1.5	-	-	050019	-	400722	049990	1	RBF 0613/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm												
3	7	3	75	0.75	-	-	780015	-	-	780008	1	RBF 0307/3 Z ... GL 75
6	13	3	88	1.5	-	-	779996	-	-	779989	1	RBF 0613/3 Z ... SL 75
Shank dia. 6 mm												
6	18	6	55	1.5	-	047590	047606	835616	047620	047637	1	RBF 0618/6 Z ...
8	20	6	60	1.2	-	047644	047651	-	047675	-	1	RBF 0820/6 Z ...
10	20	6	60	2.5	-	047682	047705	-	047729	047736	1	RBF 1020/6 Z ...
12	25	6	65	2.5	047774	047750	047781	835623	047828	047835	1	RBF 1225/6 Z ...
16	30	6	70	3.6	-	047859	047873	-	047910	-	1	RBF 1630/6 Z ...
Long shank dia. of 6 mm, SL 150 mm												
6	18	6	172	1.5	-	-	090657	-	-	-	1	RBF 0618/6 Z ... SL 150
8	20	6	170	1.2	-	-	617731	-	-	-	1	RBF 0820/6 Z ... SL 150
10	20	6	170	2.5	-	-	090756	-	-	-	1	RBF 1020/6 Z ... SL 150
12	25	6	175	2.5	-	-	617748	-	-	-	1	RBF 1225/6 Z ... SL 150
Shank dia. 8 mm												
12	25	8	65	2.5	-	-	047798	-	-	-	1	RBF 1225/8 Z ...
16	30	8	70	3.6	-	-	047880	-	-	-	1	RBF 1630/8 Z ...

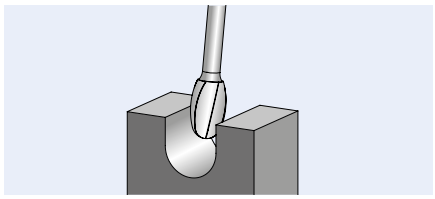




Oval shape TRE

Oval burr according to DIN 8032 with cut conforming to DIN 8033.

GL = total length (solid tungsten carbide), SL = shank length (long steel shank)



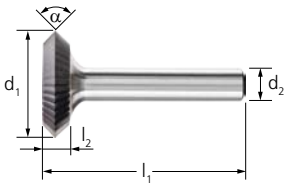
Ordering notes:

- Please complete the description with the desired cut.

Safety notes:

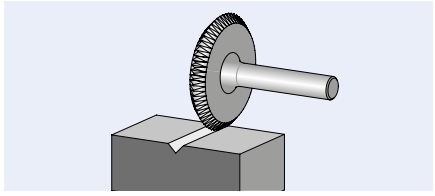
Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut 1	Cut 3	Cut 3 PLUS	Cut 4	Cut 5		Description
							EAN 4007220				
Shank dia. 3 mm											
3	7	3	37	1.2	-	-	049754	-	049747	1	TRE 0307/3 Z ...
6	10	3	40	2.8	-	-	050040	-	050026	1	TRE 0610/3 Z ...
Long shank dia. of 3 mm, SL/GL 75 mm											
3	7	3	75	1.2	-	-	779804	-	779798	1	TRE 0307/3 Z ... GL 75
6	10	3	85	2.8	-	-	779781	-	779774	1	TRE 0610/3 Z ... SL 75
Shank dia. 6 mm											
6	10	6	50	2.8	-	-	048771	-	048801	1	TRE 0610/6 Z ...
8	13	6	53	3.7	-	-	048894	048917	048924	1	TRE 0813/6 Z ...
10	16	6	56	4.0	-	-	048832	048856	-	1	TRE 1016/6 Z ...
12	20	6	60	5.0	048955	048931	048962	049006	049020	1	TRE 1220/6 Z ...
16	25	6	65	6.5	049075	-	049099	049136	-	1	TRE 1625/6 Z ...
Long shank dia. of 6 mm, SL 150 mm											
6	10	6	160	2.8	-	-	090817	-	-	1	TRE 0610/6 Z ... SL 150
8	13	6	163	3.7	-	-	617700	-	-	1	TRE 0813/6 Z ... SL 150
10	16	6	166	4.0	-	-	090824	-	-	1	TRE 1016/6 Z ... SL 150
12	20	6	170	5.0	-	-	617724	-	-	1	TRE 1220/6 Z ... SL 150
Shank dia. 8 mm											
12	20	8	60	5.0	-	-	048979	-	-	1	TRE 1220/8 Z ...
16	25	8	65	6.5	-	-	049105	-	-	1	TRE 1625/8 Z ...



Rim shape N

Rim-shaped burr, circumferential cut is 90° and symmetric, tapered tip. The rim shape is particularly well suited to producing and processing prism-shaped keyways.



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3		Description
					EAN 4007220		
Shank dia. 8 mm							
25	3	8	43	90°	048740	1	N 2503/8 Z3
	6	8	46	90°	048757	1	N 2506/8 Z3

Set 1500 cuts 3 PLUS and 5



Set 1500 – cuts 3 PLUS and 5 – contains 22 tungsten carbide burrs in the most common shapes and dimensions for general applications. The sturdy plastic box protects the tools from dirt and damage.

Contents:
22 tungsten carbide burrs,
shank diameter of 6 mm, cut 3 PLUS
1 piece each:

- ZYAS 0616/6 Z3 PLUS
- ZYAS 1013/6 Z3 PLUS
- ZYAS 1225/6 Z3 PLUS
- KUD 0605/6 Z3 PLUS
- KUD 0807/6 Z3 PLUS
- KUD 1210/6 Z3 PLUS
- KUD 1614/6 Z3 PLUS
- WRC 0616/6 Z3 PLUS
- WRC 1225/6 Z3 PLUS
- SPG 0618/6 Z3 PLUS
- SPG 1020/6 Z3 PLUS
- SPG 1225/6 Z3 PLUS
- SKM 0618/6 Z3 PLUS
- SKM 1020/6 Z3 PLUS

Shank diameter of 3 mm, cut 5
1 piece each:

- ZYAS 0210/3 Z5
- ZYAS 0313/3 Z5
- WRC 0210/3 Z5
- WRC 0313/3 Z5
- SPG 0307/3 Z5
- RBF 0307/3 Z5
- TRE 0307/3 Z5
- WKN 0307/3 Z5

Cut		Description
3 PLUS, 5 		
EAN 4007220		
Shank dia. 3 and 6 mm		
055885	1	1500 Z3 PLUS/Z5

Set 1501 cut 5



Set 1501 – cut 5 – contains 15 small tungsten carbide burrs in the most common shapes and dimensions for general applications. The sturdy plastic box protects the tools from dirt and damage.

Contents:
15 tungsten carbide burrs,
shank diameter of 3 mm, cut 5
1 piece each:

- ZYAS 0210/3 Z5
- ZYAS 0313/3 Z5
- ZYAS 0607/3 Z5
- ZYAS 0613/3 Z5
- B 0307/3 Z5
- KUD 0403/3 Z5
- WRC 0210/3 Z5
- WRC 0313/3 Z5
- SPG 0307/3 Z5
- SKM 0613/3 Z5
- RBF 0307/3 Z5
- RBF 0613/3 Z5
- TRE 0307/3 Z5
- TRE 0610/3 Z5
- WKNS 0307/3 Z5

Cut		Description
5 		
EAN 4007220		
Shank dia. 3 mm		
055892	1	1501 Z5



TC burr sets for universal applications
For fine and coarse stock removal



Set 1506 cut 3 PLUS

Set 1506 – cut 3 PLUS – contains five tungsten carbide burrs in the shapes and dimensions most commonly used in the workshop.
The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
Five further unused slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm, cut 3 PLUS
1 piece each:
- ZYA 0616/6 Z3 PLUS
- KUD 0605/6 Z3 PLUS
- WRC 0616/6 Z3 PLUS
- SPG 0618/6 Z3 PLUS
- RBF 0618/6 Z3 PLUS

Cut		Description
3 PLUS 		
EAN 4007220		
Shank dia. 6 mm		
801017	1	1506 Z3 PLUS

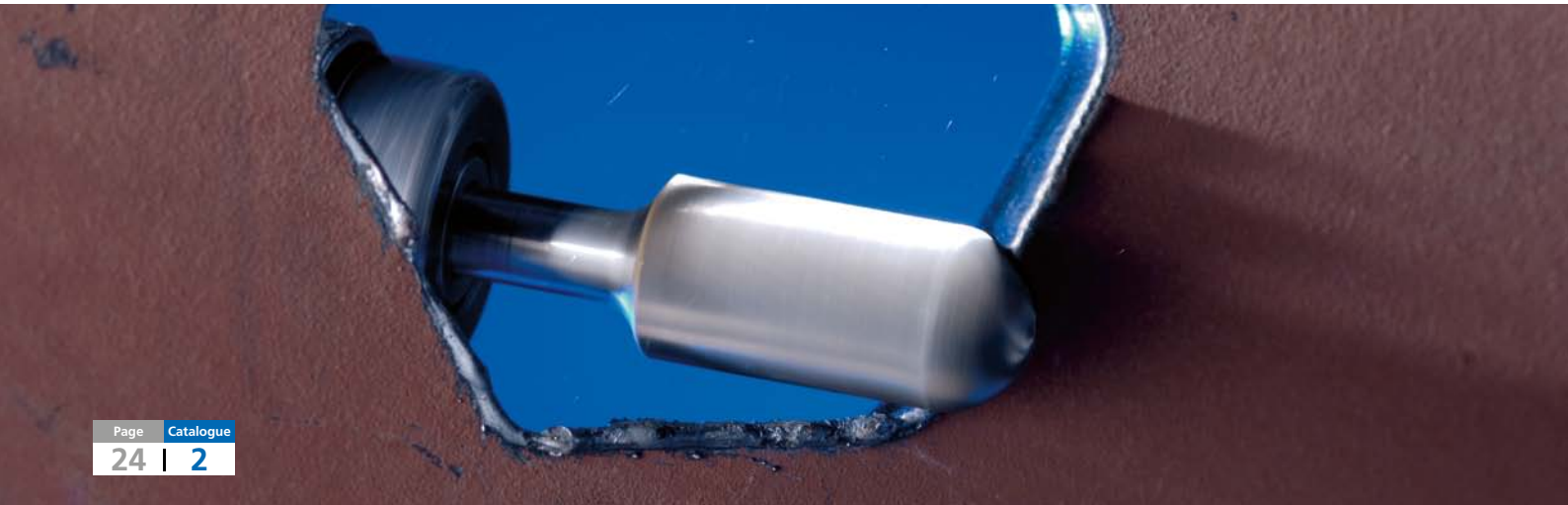


Set 1512 cut 3 PLUS

Set 1512 – cut 3 PLUS – contains five tungsten carbide burrs in the shapes and dimensions most commonly used in the workshop.
The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
Five further unused slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm, cut 3 PLUS
1 piece each:
- ZYA 1225/6 Z3 PLUS
- KUD 1210/6 Z3 PLUS
- WRC 1225/6 Z3 PLUS
- SPG 1225/6 Z3 PLUS
- RBF 1225/6 Z3 PLUS

Cut		Description
3 PLUS 		
EAN 4007220		
Shank dia. 6 mm		
801338	1	1512 Z3 PLUS



Burrs (shank dia. 3, 6 and 8 mm) can be extended with drive spindle extensions. They allow access to hard-to-reach areas. The drive spindle extension is mounted in the collet of the tool drive (air-powered or electric), or in the handpiece of the flexible shaft drive. In some applications, spindle extensions are an economical alternative to customized burrs with long shanks.



Safety notes:

- For safety reasons, it is not possible to use drive spindle extensions in combination with long-shank burrs.
- For additional safety notes, please refer to catalogue section 9.

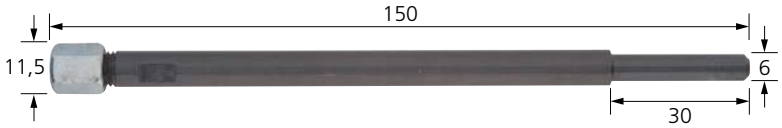
= Read the safety notes!



More detailed information and ordering data for drive spindle extensions can be found in catalogue section 9.

Extension SPV 150-3 S6 for shank diameter of 3 mm

EAN 4007220**185308**



Extension SPV 150-6 S8 for shank diameter of 6 mm

EAN 4007220**185315**



Extension SPV 150-8 S8 for shank diameter of 8 mm

EAN 4007220**184400**



Extension SPV 100-6 S8 for shank diameter of 6 mm

EAN 4007220**185261**



Extension SPV 100-6 SPG 6 for shank diameter of 6 mm

EAN 4007220**656051**



Extension SPV 75-6 S8 for shank diameter of 6 mm

EAN 4007220**185278**



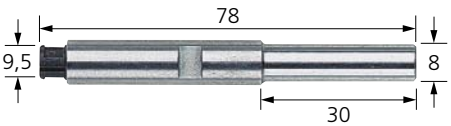
Extension SPV 75-6 SPG 6 for shank diameter of 6 mm

EAN 4007220**333143**



Extension SPV 50-3 S8 for shank diameter of 3 mm

EAN 4007220**185254**



TC burrs for high-performance applications

ALLROUND cut for versatile use

With the innovative ALLROUND cut, PFERD has developed unique burrs for versatile use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. The ALLROUND cut offers all the benefits of the tried-and-tested 3 PLUS cut, but its stock removal rate is up to 30 % higher for steel. It enables comfortable working with reduced vibration and less noise. They also offer significant time savings and a high economic value.

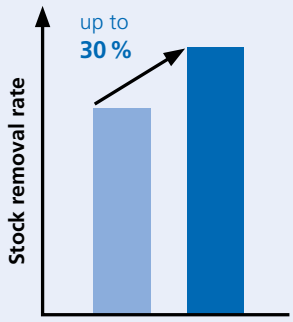
Advantages:

- Significantly better stock removal rate than burrs with a conventional cross cut.
- Saves money and time through its very high stock removal rate on key materials.
- Comfortable working with reduced vibration and less noise.

Materials that can be worked:

- Steel, cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Performance values for applications on steel



- Conventional burrs with cross cut
- Tungsten carbide burrs, ALLROUND cut

Applications:

- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

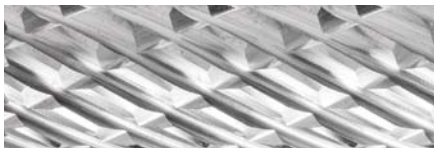
- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives: from 300 watts.
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

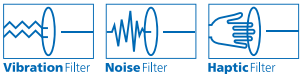
Safety note:

- The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.



PFERDVALUE:

PFERDERGONOMICS recommends burrs with ALLROUND cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with ALLROUND cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.





Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

❸ Select the required burr diameter.
❹ The cutting speed range and the burr diameter determine the recommended rotational speed range.

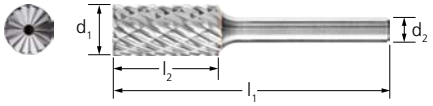
❶ Material group			Application	Cut	❷ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	ALLROUND	450–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	ALLROUND	250–450 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	ALLROUND	450–600 m/min
Non-ferrous metals	Soft non-ferrous metals	Brass, copper, zinc	Coarse stock removal	ALLROUND	450–750 m/min
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	ALLROUND	450–600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	ALLROUND	450–900 m/min

Example:
TC burr,
ALLROUND cut,
burr dia. 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Cutting speed: 450–750 m/min
Rotational speed range: 12,000–20,000 RPM

❸ Burr dia. [mm]	❹ Cutting speeds [m/min]				
	250	450	600	750	900
	Rotational speeds [RPM]				
6	13,000	24,000	32,000	40,000	48,000
8	10,000	18,000	24,000	30,000	36,000
10	8,000	14,000	19,000	24,000	29,000
12	7,000	12,000	16,000	20,000	24,000
16	5,000	9,000	12,000	15,000	18,000

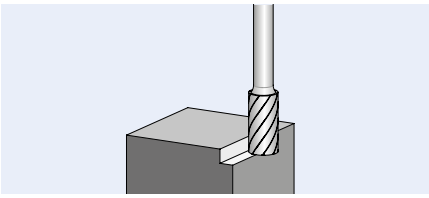


TC burrs for high-performance applications
ALLROUND cut for versatile use



Cylindrical shape ZYAS with end cut

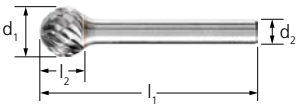
Cylindrical burr according to DIN 8032 with circumferential and end cut.



PFERDVALUE:

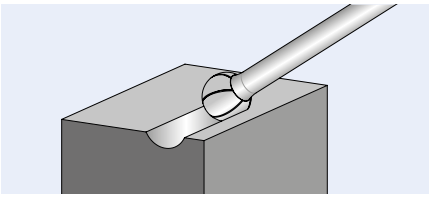
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm						
6	16	6	55	092866	1	ZYAS 0616/6 ALLROUND
8	20	6	60	092897	1	ZYAS 0820/6 ALLROUND
10	20	6	60	092903	1	ZYAS 1020/6 ALLROUND
12	25	6	65	092941	1	ZYAS 1225/6 ALLROUND
16	25	6	65	092958	1	ZYAS 1625/6 ALLROUND



Ball shape KUD

Ball-shaped burr according to DIN 8032.



PFERDVALUE:

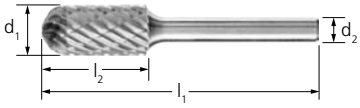
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

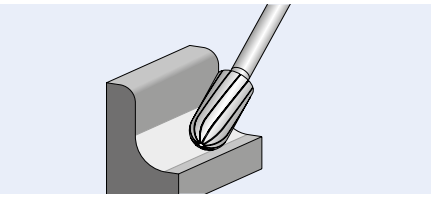
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm						
6	5	6	45	093009	1	KUD 0605/6 ALLROUND
8	7	6	47	093030	1	KUD 0807/6 ALLROUND
10	9	6	49	093108	1	KUD 1009/6 ALLROUND
12	10	6	51	093115	1	KUD 1210/6 ALLROUND
16	14	6	54	093146	1	KUD 1614/6 ALLROUND



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.





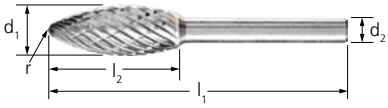
PFERDVALUE:

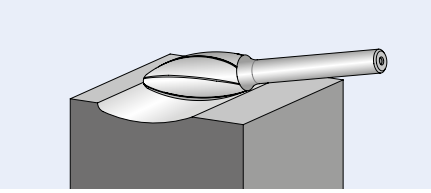
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm						
6	16	6	55	093153	1	WRC 0616/6 ALLROUND
8	20	6	60	093184	1	WRC 0820/6 ALLROUND
10	20	6	60	093191	1	WRC 1020/6 ALLROUND
12	25	6	65	093221	1	WRC 1225/6 ALLROUND
16	25	6	65	093238	1	WRC 1625/6 ALLROUND

Flame shape B

Flame-shaped burr according to ISO 7755/8.





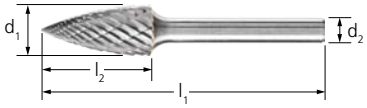
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm							
8	20	6	60	1.5	093269	1	B 0820/6 ALLROUND
10	25	6	65	1.7	093276	1	B 1025/6 ALLROUND
12	30	6	70	2.1	093306	1	B 1230/6 ALLROUND
16	35	6	75	2.6	093313	1	B 1635/6 ALLROUND

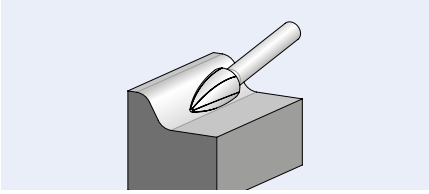


TC burrs for high-performance applications
ALLROUND cut for versatile use



Pointed tree shape SPG

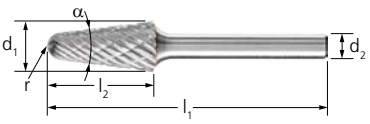
Pointed tree-shaped burr according to DIN 8032, flattened tip.



PFERDVALUE:

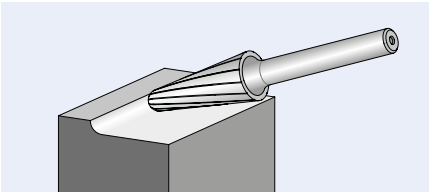
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm						
6	18	6	55	093344	1	SPG 0618/6 ALLROUND
8	20	6	60	093351	1	SPG 0820/6 ALLROUND
10	20	6	60	093382	1	SPG 1020/6 ALLROUND
12	25	6	65	093399	1	SPG 1225/6 ALLROUND
16	30	6	70	093436	1	SPG 1630/6 ALLROUND



Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.



PFERDVALUE:

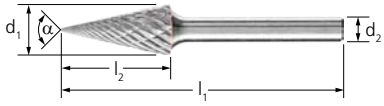
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

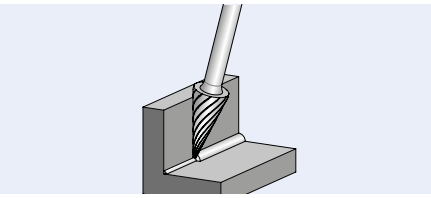
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm								
8	20	6	60	16°	1.25	093481	1	KEL 0820/6 ALLROUND
10	20	6	60	14°	2.9	093498	1	KEL 1020/6 ALLROUND
12	25	6	70	14°	3.3	093535	1	KEL 1225/6 ALLROUND
16	30	6	70	14°	4.8	093542	1	KEL 1630/6 ALLROUND



Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with cut conforming to DIN 8033, flattened tip.





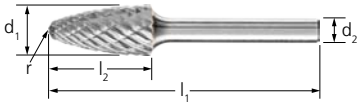
PFERDVALUE:

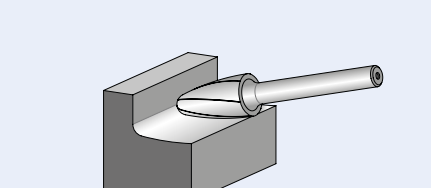
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut ALLROUND		Description
					EAN 4007220		
Shank dia. 6 mm							
6	18	6	55	18°	093696	1	SKM 0618/6 ALLROUND
8	20	6	60	22°	093702	1	SKM 0820/6 ALLROUND
10	20	6	60	28°	093719	1	SKM 1020/6 ALLROUND
12	25	6	65	26°	093726	1	SKM 1225/6 ALLROUND

Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.





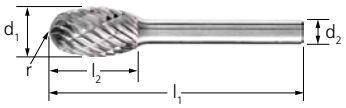
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut ALLROUND		Description
					EAN 4007220		
Shank dia. 6 mm							
6	18	6	55	1.5	093580	1	RBF 0618/6 ALLROUND
8	20	6	60	1.2	093641	1	RBF 0820/6 ALLROUND
10	20	6	60	2.5	093658	1	RBF 1020/6 ALLROUND
12	25	6	65	2.5	093672	1	RBF 1225/6 ALLROUND
16	30	6	70	3.6	093689	1	RBF 1630/6 ALLROUND

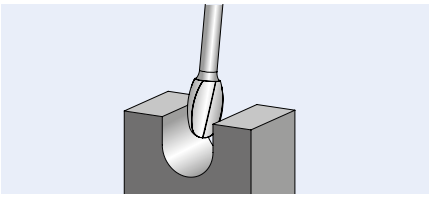


TC burrs for high-performance applications
ALLROUND cut for versatile use



Oval shape TRE

Oval burr according to DIN 8032 with cut conforming to DIN 8033.



PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm							
6	10	6	50	2.8	093733	1	TRE 0610/6 ALLROUND
8	13	6	53	3.7	093740	1	TRE 0813/6 ALLROUND
10	16	6	56	4.0	093757	1	TRE 1016/6 ALLROUND
12	20	6	60	5.0	093764	1	TRE 1220/6 ALLROUND
16	25	6	65	6.5	093771	1	TRE 1625/6 ALLROUND



Set 1412 ALLROUND

Set 1412 ALLROUND contains five tungsten carbide burrs for versatile use on key materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage. The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools. Five further slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm,
ALLROUND cut
1 piece each:
- ZYAS 1225/6 ALLROUND
- KUD 1210/6 ALLROUND
- WRC 1225/6 ALLROUND
- SPG 1225/6 ALLROUND
- RBF 1225/6 ALLROUND

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Cut ALLROUND EAN 4007220		Description
Shank dia. 6 mm		
133576	1	1412 ALLROUND



TC burrs for high-performance applications

STEEL cut for steel and cast steel

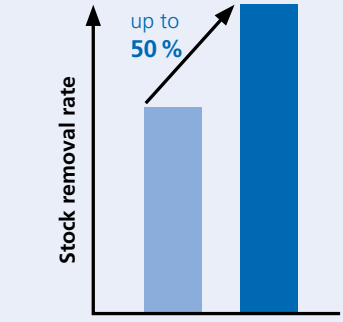
With the innovative STEEL cut, PFERD has developed unique burrs for working with steel and cast steel. They are characterized by significantly increased aggressiveness and good guidance. Thus they ensure safe and precise work.
The extremely high stock removal rate makes burrs with the STEEL cut impressive, with significant time savings and a high economic value.



Advantages:

- Up to 50 % higher stock removal rate when used on steel and cast steel in comparison to conventional cross-cut burrs.
- Significantly increased aggressiveness, large chips and very good chip removal through the innovative tooth geometry.
- Workpiece is protected through much lower thermal load.

Performance values for applications on steel and cast steel



- Conventional burrs with cross cut
- Tungsten carbide burrs, STEEL cut

Applications:

- Milling out
- Levelling
- deburring
- Cutting out holes
- Surface work
- Work on weld seams

Materials that can be worked:

- Steel
- Cast steel

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives: from 300 watts.
- Please observe the rotational speed recommendations.

Matching tool drives:

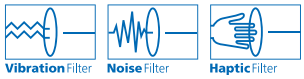
- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

Safety note:

- The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.

PFERDVALUE:

PFERDERGONOMICS recommends burrs with STEEL cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with STEEL cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.





More PFERD tools and information on working with steel can be found in our PRAXIS brochure "PFERD tools for use on construction steel".

Recommended rotational speed range [RPM]

To determine the recommended rotational speed range [RPM], please proceed as follows:

❶ Refer to the table for the cutting speed.
❷ Select the required burr diameter.
❸ The cutting speed range and the burr diameter determine the recommended rotational speed range.

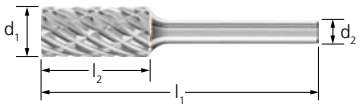
Safety note:

Please observe the reduced rotational speeds for burrs with a long shank. They can be found on page 11.

Material group			Application	Cut	❶ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	STEEL	450–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel			

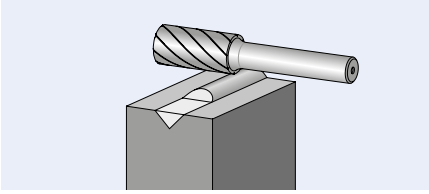
Example:
TC burr,
STEEL cut,
burr dia. of 12 mm.
Cutting speed: 450–750 m/min
Rotational speed range:
12,000–20,000 RPM

❷ Burr dia. [mm]	❸ Cutting speeds [m/min]	
	450	750
	Rotational speeds [RPM]	
6	24,000	40,000
8	18,000	30,000
10	14,000	24,000
12	12,000	20,000
16	9,000	15,000



Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.



PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

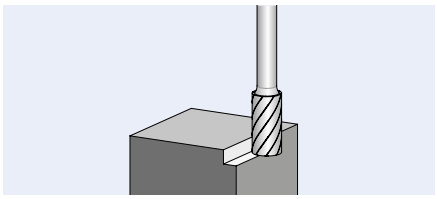
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	16	6	55	937198	24,000–40,000	1	ZYA 0616/6 STEEL
8	20	6	60	937211	18,000–30,000	1	ZYA 0820/6 STEEL
10	20	6	60	937235	14,000–24,000	1	ZYA 1020/6 STEEL
12	25	6	65	937242	12,000–20,000	1	ZYA 1225/6 STEEL
16	25	6	65	002360	9,000–15,000	1	ZYA 1625/6 STEEL

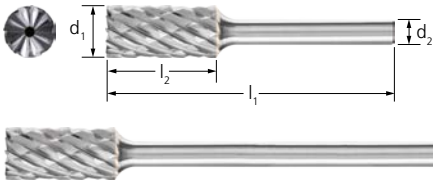


Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032. Shape ZYAS with circumferential and end cut.

SL = shank length (long steel shank)





Safety notes:

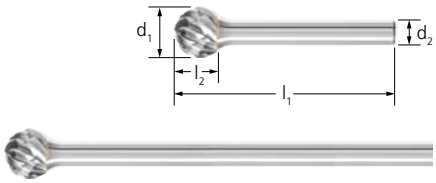
The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	16	6	55	937259	24,000–40,000	1	ZYAS 0616/6 STEEL
8	20	6	60	937266	18,000–30,000	1	ZYAS 0820/6 STEEL
10	20	6	60	937310	14,000–24,000	1	ZYAS 1020/6 STEEL
12	25	6	65	937341	12,000–20,000	1	ZYAS 1225/6 STEEL
16	25	6	65	002889	9,000–15,000	1	ZYAS 1625/6 STEEL
Long shank dia. of 6 mm, SL 150 mm							
8	20	6	170	091173	11,000	1	ZYAS 0820/6 STEEL SL 150
10	20	6	170	091289	9,000	1	ZYAS 1020/6 STEEL SL 150
12	25	6	175	091982	7,000	1	ZYAS 1225/6 STEEL SL 150

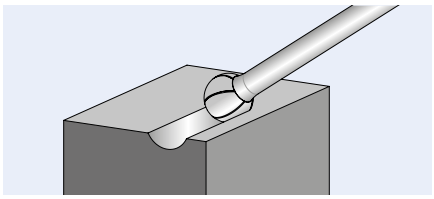




Ball shape KUD

Ball-shaped burr according to DIN 8032.

SL = shank length (long steel shank)



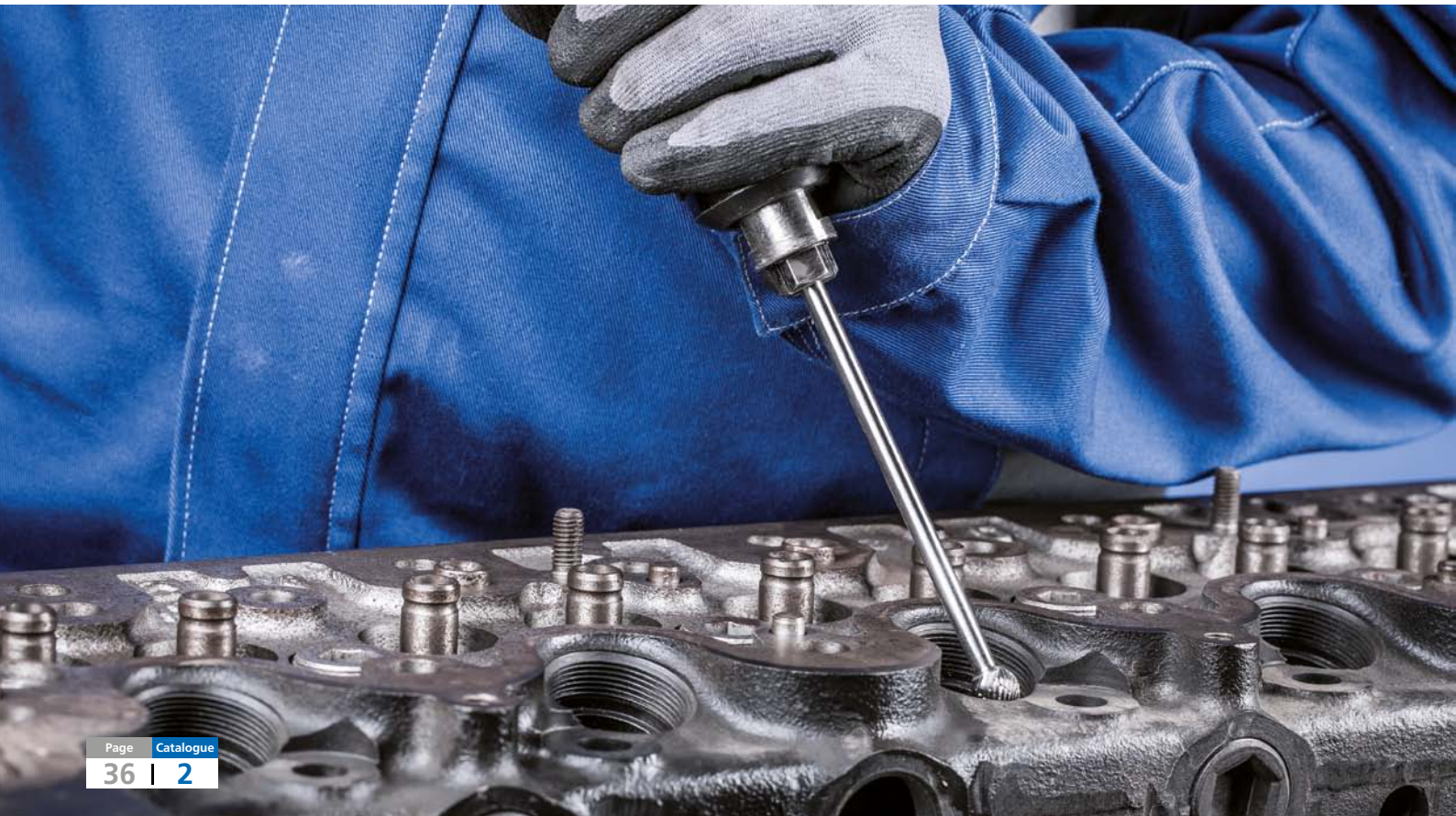
Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

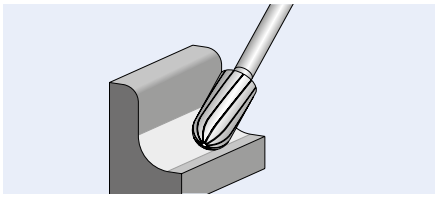
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	5	6	45	936832	24,000–40,000	1	KUD 0605/6 STEEL
8	7	6	47	936849	18,000–30,000	1	KUD 0807/6 STEEL
10	9	6	49	936863	14,000–24,000	1	KUD 1009/6 STEEL
12	10	6	51	936870	12,000–20,000	1	KUD 1210/6 STEEL
16	14	6	54	003008	9,000–15,000	1	KUD 1614/6 STEEL
Long shank dia. of 6 mm, SL 150 mm							
10	9	6	159	092002	9,000	1	KUD 1009/6 STEEL SL 150
12	10	6	160	087206	7,000	1	KUD 1210/6 STEEL SL 150

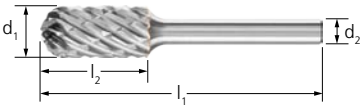


Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.

SL = shank length (long steel shank)







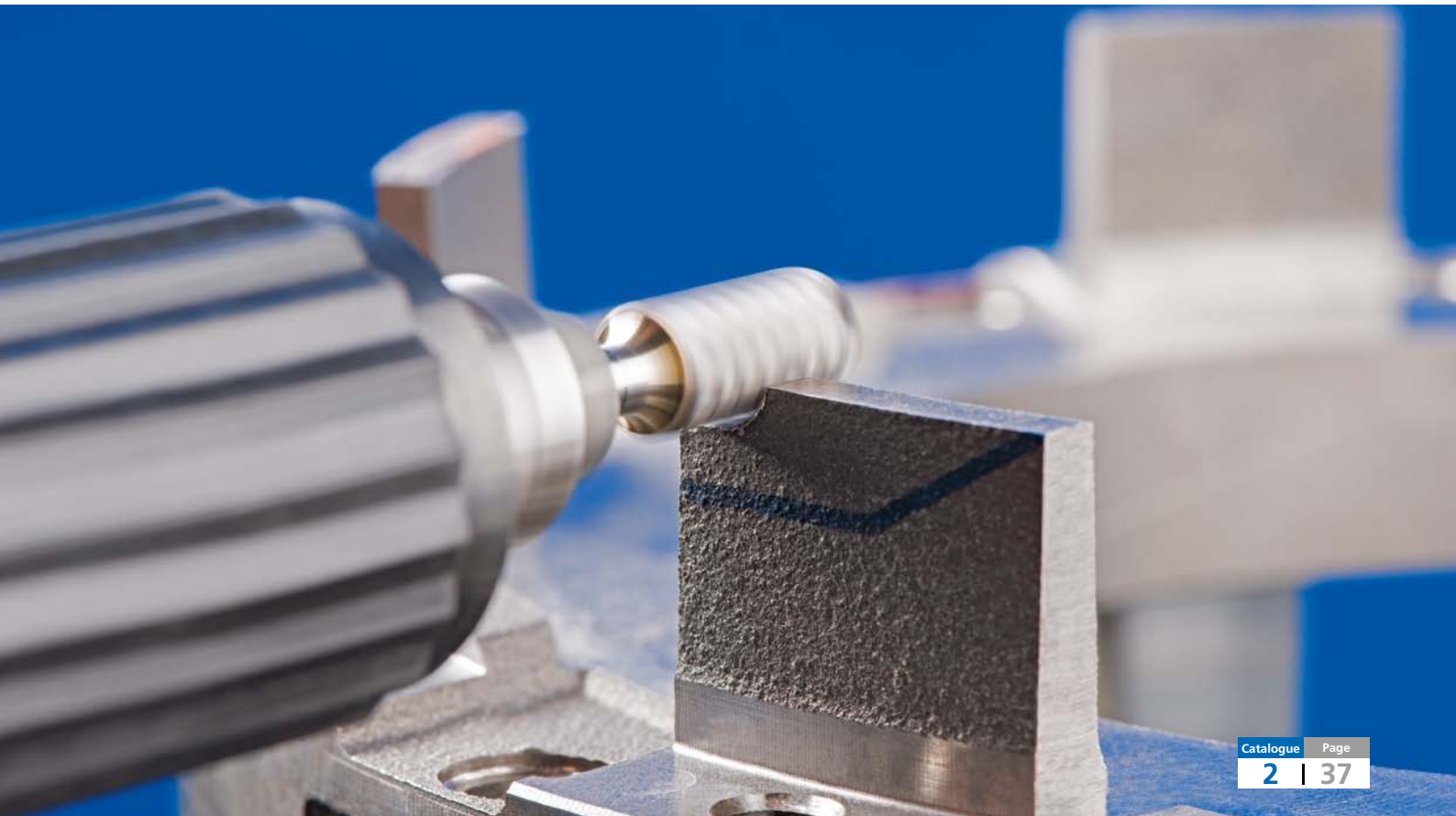
Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

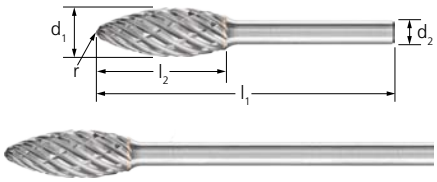
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut STEEL	RPM		Description
				EAN 4007220			
Shank dia. 6 mm							
6	16	6	55	937129	24,000–40,000	1	WRC 0616/6 STEEL
8	20	6	60	937150	18,000–30,000	1	WRC 0820/6 STEEL
10	20	6	60	937174	14,000–24,000	1	WRC 1020/6 STEEL
12	25	6	65	936696	12,000–20,000	1	WRC 1225/6 STEEL
16	25	6	65	003022	9,000–15,000	1	WRC 1625/6 STEEL
Long shank dia. of 6 mm, SL 150 mm							
8	20	6	170	092309	11,000	1	WRC 0820/6 STEEL SL 150
10	20	6	170	092422	9,000	1	WRC 1020/6 STEEL SL 150
12	25	6	175	092439	7,000	1	WRC 1225/6 STEEL SL 150



TC burrs for high-performance applications

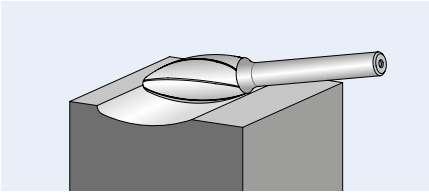
STEEL cut for steel and cast steel



Flame shape B

Flame-shaped burr according to ISO 7755/8.

SL = shank length (long steel shank)



Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm								
8	20	6	60	1.5	936719	18,000–30,000	1	B 0820/6 STEEL
10	25	6	65	1.7	092590	14,000–24,000	1	B 1025/6 STEEL
12	30	6	70	2.1	936764	12,000–20,000	1	B 1230/6 STEEL
16	35	6	75	2.6	003039	9,000–15,000	1	B 1635/6 STEEL
Long shank dia. of 6 mm, SL 150 mm								
10	25	6	175	1.7	092446	9,000	1	B 1025/6 STEEL SL 150
12	30	6	180	2.1	092453	7,000	1	B 1230/6 STEEL SL 150

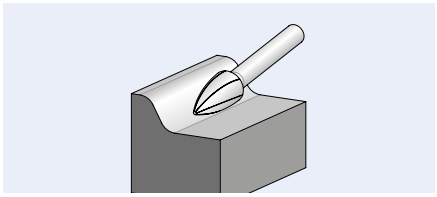


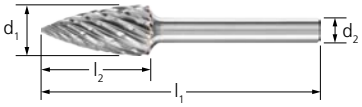


Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.

SL = shank length (long steel shank)







Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

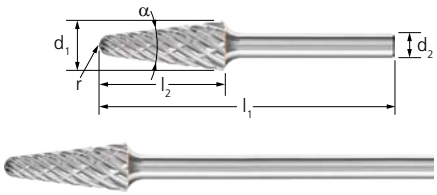
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	18	6	55	936979	24,000–40,000	1	SPG 0618/6 STEEL
8	20	6	60	936993	18,000–30,000	1	SPG 0820/6 STEEL
10	20	6	60	937013	14,000–24,000	1	SPG 1020/6 STEEL
12	25	6	65	937082	12,000–20,000	1	SPG 1225/6 STEEL
16	30	6	70	003046	9,000–15,000	1	SPG 1630/6 STEEL
Long shank dia. of 6 mm, SL 150 mm							
8	20	6	170	092460	11,000	1	SPG 0820/6 STEEL SL 150
10	20	6	170	092477	9,000	1	SPG 1020/6 STEEL SL 150
12	25	6	175	092484	7,000	1	SPG 1225/6 STEEL SL 150



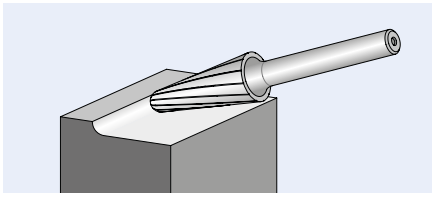
TC burrs for high-performance applications
STEEL cut for steel and cast steel



Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.

SL = shank length (long steel shank)



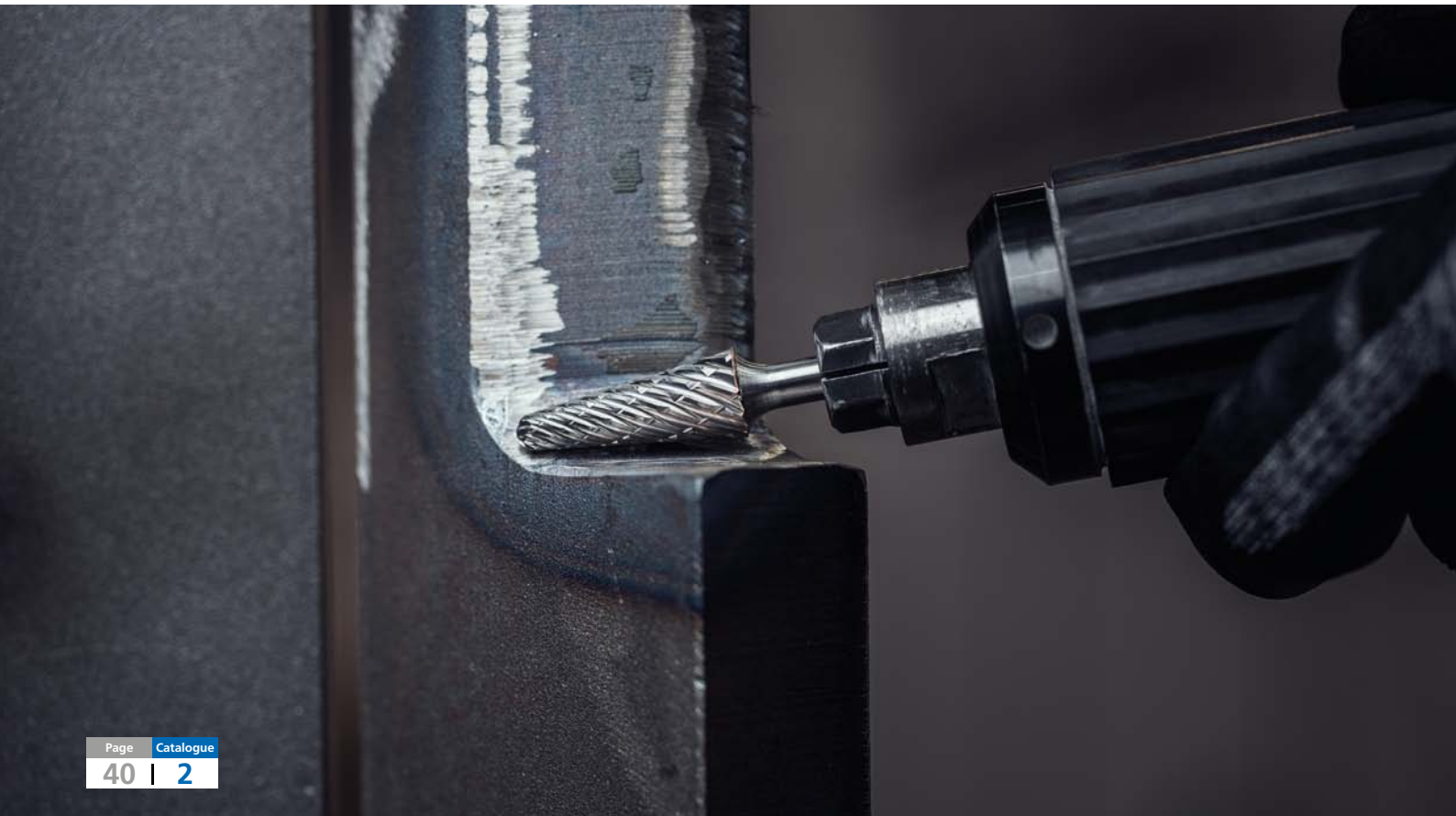
Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

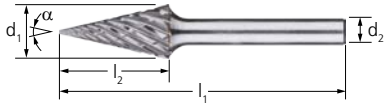
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm									
10	20	6	60	14°	2.9	936771	14,000–24,000	1	KEL 1020/6 STEEL
12	30	6	70	14°	2.6	936818	12,000–20,000	1	KEL 1230/6 STEEL
16	30	6	70	14°	4.8	003053	9,000–15,000	1	KEL 1630/6 STEEL
Long shank dia. of 6 mm, SL 150 mm									
10	20	6	170	14°	2.9	092576	9,000	1	KEL 1020/6 STEEL SL 150
12	30	6	180	14°	2.6	092583	7,000	1	KEL 1230/6 STEEL SL 150



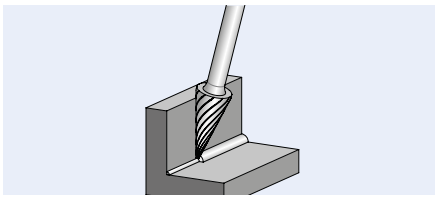
Conical pointed shape SKM





Conical pointed burr according to DIN 8032 with cut conforming to DIN 8033, flattened tip.

SL = shank length (long steel shank)



Safety notes:

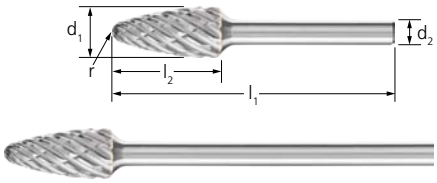
The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm								
6	18	6	55	18°	092736	24,000–40,000	1	SKM 0618/6 STEEL
8	20	6	60	22°	092774	18,000–30,000	1	SKM 0820/6 STEEL
10	20	6	60	28°	092781	14,000–24,000	1	SKM 1020/6 STEEL
12	25	6	65	26°	092859	12,000–20,000	1	SKM 1225/6 STEEL
Long shank dia. of 6 mm, SL 150 mm								
10	20	6	170	28°	092545	9,000	1	SKM 1020/6 STEEL SL 150
12	25	6	175	26°	092569	7,000	1	SKM 1225/6 STEEL SL 150

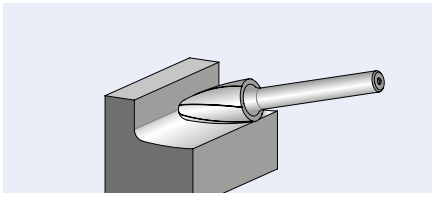




Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.

SL = shank length (long steel shank)



Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

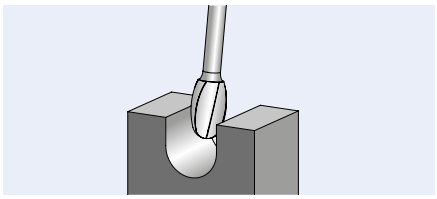
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm								
6	18	6	55	1.5	936887	24,000–40,000	1	RBF 0618/6 STEEL
8	20	6	60	1.2	936900	18,000–30,000	1	RBF 0820/6 STEEL
10	20	6	60	2.5	936924	14,000–24,000	1	RBF 1020/6 STEEL
12	25	6	65	2.5	936931	12,000–20,000	1	RBF 1225/6 STEEL
16	30	6	70	3.6	003060	9,000–15,000	1	RBF 1630/6 STEEL
Long shank dia. of 6 mm, SL 150 mm								
8	20	6	170	1.2	092491	11,000	1	RBF 0820/6 STEEL SL 150
10	20	6	170	2.5	092507	9,000	1	RBF 1020/6 STEEL SL 150
12	25	6	175	2.5	092514	7,000	1	RBF 1225/6 STEEL SL 150

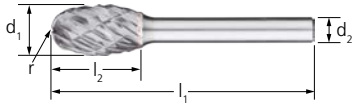


Oval shape TRE

Oval burr according to ISO 7755/8.

SL = shank length (long steel shank)







Safety notes:

The rotational speeds for long-shank burrs relate to applications where the tool is in contact with the workpiece. More safety notes can be found on page 11.

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut STEEL EAN 4007220	RPM		Description
Shank dia. 6 mm								
8	13	6	53	3.7	092637	18,000–30,000	1	TRE 0813/6 STEEL
10	16	6	56	4.0	092644	14,000–24,000	1	TRE 1016/6 STEEL
12	20	6	60	5.0	092682	12,000–20,000	1	TRE 1220/6 STEEL
16	25	6	65	6.5	092729	9,000–15,000	1	TRE 1625/6 STEEL
Long shank dia. of 6 mm, SL 150 mm								
10	16	6	160	4.0	092521	9,000	1	TRE 1016/6 STEEL SL 150
12	20	6	170	5.0	092538	7,000	1	TRE 1220/6 STEEL SL 150

Set 1812 STEEL

Set 1812 STEEL contains five tungsten carbide burrs for processing steel and cast steel in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage. The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools. Five further slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm,
STEEL cut
1 piece each:
- ZYA 1225/6 STEEL
- KUD 1210/6 STEEL
- WRC 1225/6 STEEL
- SPG 1225/6 STEEL
- RBF 1225/6 STEEL

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving



Cut STEEL EAN 4007220		Description
Shank dia. 6 mm		
004357	1	1812 STEEL

TC burrs for high-performance applications
INOX cut for stainless steel (INOX)

With the INOX cut, PFERD has developed innovative burrs for work on stainless steel (INOX). The INOX cut is characterized by an extremely high stock removal rate on all austenitic as well as rust- and acid-resistant steels. It creates significantly less vibration than a comparable cross cut.

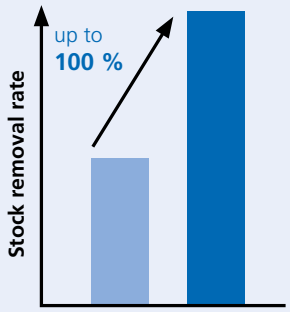
Advantages:

- Outstanding stock removal rate and tool life due to the innovative tooth geometry.
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to the reduced heat generation.

Materials that can be worked:

- Stainless steel (INOX)
- Soft titanium alloys (tensile strength < 500 N/mm²)

Performance values for applications on stainless steel (INOX)



- Conventional burrs with cross cut
- Tungsten carbide burrs, INOX cut

Applications:

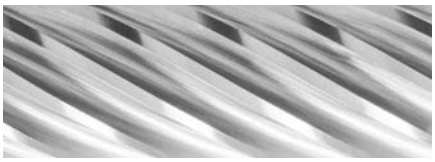
- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations. The RPMs shown in the product tables on the product pages are for work on stainless steel (INOX) only.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

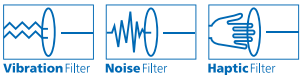


Safety note:

- The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.

PFERDVALUE:

PFERDERGONOMICS recommends burrs with INOX cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with INOX cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



Recommended rotational speed range [RPM]

To determine the recommended rotational speed range [RPM], please proceed as follows:

❶ Select the material group to be machined.
❷ Refer to the table for the cutting speed.
❸ Select the required burr diameter.
❹ The cutting speed range and the burr diameter determine the recommended rotational speed range.



More PFERD tools and information on working with stainless steel (INOX) can be found in our PRAXIS brochure "PFERD tools for use on stainless steel (INOX)".

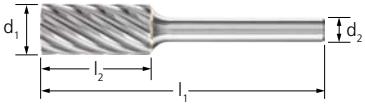
❶ Material group			Application	Cut	❷ Cutting speed
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	INOX	450–600 m/min
Non-ferrous metals	Non-ferrous metals	Titanium/titanium alloys	Coarse stock removal	INOX	250–450 m/min

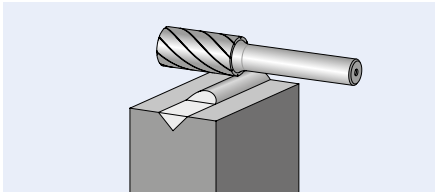
Example:
TC burr,
INOX cut,
burr dia. of 12 mm.
Coarse stock removal on stainless steel (INOX).
Cutting speed: 450–600 m/min
Rotational speed range:
12,000–16,000 RPM

❸ Burr dia. [mm]	❹ Cutting speeds [m/min]		
	250	450	600
	Rotational speeds [RPM]		
3	27,000	48,000	64,000
4	20,000	36,000	48,000
5	16,000	29,000	40,000
6	13,000	24,000	32,000
8	10,000	18,000	24,000
10	8,000	14,000	19,000
12	7,000	12,000	16,000

Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.





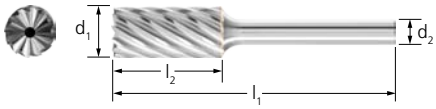
PFERDVALUE:

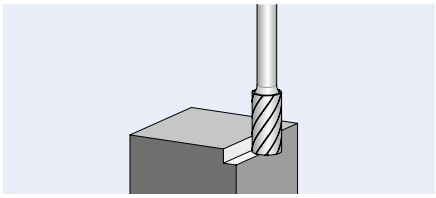
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	13	3	43	930380	27,000–64,000	1	ZYA 0313/3 INOX
6	13	3	43	930403	13,000–32,000	1	ZYA 0613/3 INOX
Shank dia. 6 mm							
6	16	6	55	900499	13,000–32,000	1	ZYA 0616/6 INOX
8	20	6	60	952245	10,000–24,000	1	ZYA 0820/6 INOX
10	20	6	60	952252	8,000–19,000	1	ZYA 1020/6 INOX
12	25	6	65	900505	7,000–16,000	1	ZYA 1225/6 INOX

Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.





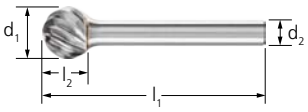
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	13	3	43	034453	27,000–64,000	1	ZYAS 0313/3 INOX
6	13	3	43	034460	13,000–32,000	1	ZYAS 0613/3 INOX
Shank dia. 6 mm							
6	16	6	55	034477	27,000–64,000	1	ZYAS 0616/6 INOX
12	25	6	65	034484	7,000–16,000	1	ZYAS 1225/6 INOX

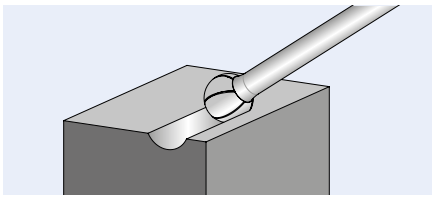


TC burrs for high-performance applications
INOX cut for stainless steel (INOX)



Ball shape KUD

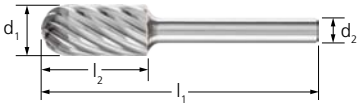
Ball-shaped burr according to DIN 8032.



PFERDVALUE:

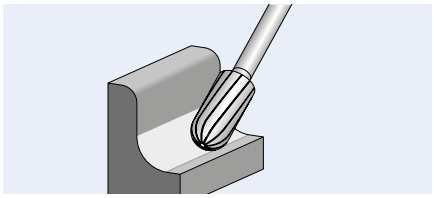
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	2	3	33	930434	27,000–64,000	1	KUD 0302/3 INOX
4	3	3	34	034439	20,000–48,000	1	KUD 0403/3 INOX
5	4	3	35	034446	16,000–40,000	1	KUD 0504/3 INOX
6	5	3	35	930441	13,000–32,000	1	KUD 0605/3 INOX
Shank dia. 6 mm							
6	5	6	45	900536	13,000–32,000	1	KUD 0605/6 INOX
8	7	6	47	952269	10,000–24,000	1	KUD 0807/6 INOX
10	9	6	49	952276	8,000–19,000	1	KUD 1009/6 INOX
12	10	6	51	900543	7,000–16,000	1	KUD 1210/6 INOX



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.



PFERDVALUE:

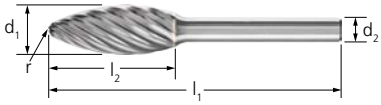
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

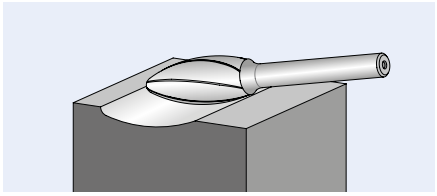
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	13	3	43	930410	27,000–64,000	1	WRC 0313/3 INOX
6	13	3	43	930427	13,000–32,000	1	WRC 0613/3 INOX
Shank dia. 6 mm							
6	16	6	55	900512	13,000–32,000	1	WRC 0616/6 INOX
8	20	6	60	952283	10,000–24,000	1	WRC 0820/6 INOX
10	20	6	60	952290	8,000–19,000	1	WRC 1020/6 INOX
12	25	6	65	900529	7,000–16,000	1	WRC 1225/6 INOX



Flame shape B

Flame-shaped burr according to ISO 7755/8.





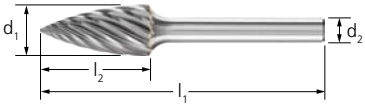
PFERDVALUE:

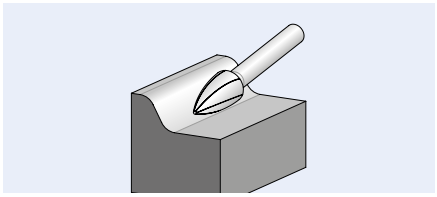
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 6 mm								
8	20	6	60	1.5	952306	10,000–24,000	1	B 0820/6 INOX
10	25	6	65	1.7	952313	8,000–19,000	1	B 1025/6 INOX
12	30	6	70	2.1	930502	7,000–16,000	1	B 1230/6 INOX

Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.



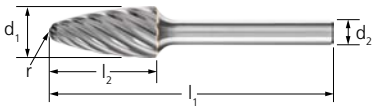


PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

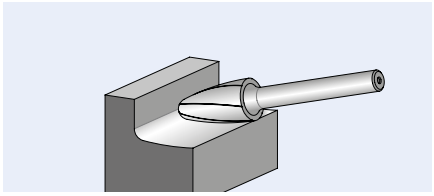
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	7	3	37	034491	27,000–64,000	1	SPG 0307/3 INOX
	13	3	43	034507	27,000–64,000	1	SPG 0313/3 INOX
6	13	3	43	034514	13,000–32,000	1	SPG 0613/3 INOX
Shank dia. 6 mm							
6	18	6	55	936948	13,000–32,000	1	SPG 0618/6 INOX
8	20	6	60	952320	10,000–24,000	1	SPG 0820/6 INOX
10	20	6	60	952337	8,000–19,000	1	SPG 1020/6 INOX
12	25	6	65	936894	7,000–16,000	1	SPG 1225/6 INOX





Tree shape with radius end RBF

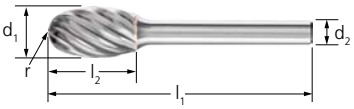
Tree-shaped burr with radius end according to DIN 8032.



PFERDVALUE:

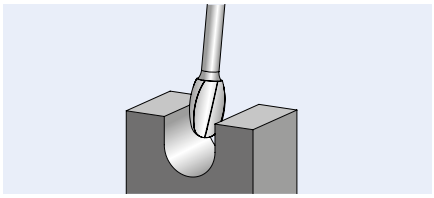
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 3 mm								
3	13	3	43	0.75	930472	27,000–64,000	1	RBF 0313/3 INOX
6	13	3	43	1.5	930489	13,000–32,000	1	RBF 0613/3 INOX
Shank dia. 6 mm								
6	18	6	55	1.5	900550	13,000–32,000	1	RBF 0618/6 INOX
8	20	6	60	1.2	952344	10,000–24,000	1	RBF 0820/6 INOX
10	20	6	60	2.5	952351	8,000–19,000	1	RBF 1020/6 INOX
12	25	6	65	2.5	900567	7,000–16,000	1	RBF 1225/6 INOX



Oval shape TRE

Oval burr according to DIN 8032.



PFERDVALUE:

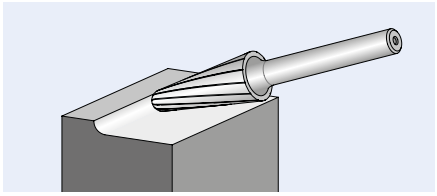
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

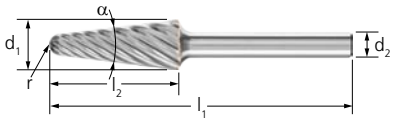
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut INOX EAN 4007220	RPM		Description
Shank dia. 6 mm								
8	13	6	53	3.7	952368	10,000–24,000	1	TRE 0813/6 INOX
10	16	6	56	4.0	952375	8,000–19,000	1	TRE 1016/6 INOX
12	20	6	60	5.0	930519	7,000–16,000	1	TRE 1220/6 INOX



Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.





PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut INOX  EAN 4007220	RPM		Description
Shank dia. 6 mm									
8	20	6	60	16°	1.25	952382	10,000–24,000	1	KEL 0820/6 INOX
10	20	6	60	14°	2.9	952399	8,000–19,000	1	KEL 1020/6 INOX
12	30	6	70	14°	2.6	930496	7,000–16,000	1	KEL 1230/6 INOX

Set 1912 INOX

Set 1912 INOX contains five tungsten carbide burrs for processing stainless steel (INOX) in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
Five further slots are available for other burrs.



Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm, INOX cut
1 piece each:
- ZYA 1225/6 INOX
- KUD 1210/6 INOX
- WRC 1225/6 INOX
- RBF 1225/6 INOX
- SPG 1225/6 INOX

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Cut INOX  EAN 4007220		Description
Shank dia. 6 mm		
068816	1	1912 INOX



TC burrs for high-performance applications

ALU and NON-FERROUS cuts for aluminium/non-ferrous metals

When it comes to machining aluminium and non-ferrous metals, PFERD offers two high-performance cuts and a HICOAT coating which have been designed specifically for demanding machining tasks on long-chipping and lubricating materials.

Applications:

- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds.
  Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 500 watts
- Please observe the rotational speed recommendations.



More PFERD tools and a wealth of useful information on working with aluminium can be found in our PRAXIS brochure "PFERD tools for use on aluminium".



412 ALU grinding oil

Grinding oil can be used as an alternative to the HICOAT coating HC-NFE. **Grinding oil 412 ALU** in a 400 ml aerosol is particularly well suited: EAN 4007220**791332**. Detailed information on grinding oil 412 ALU can be found in catalogue section 4.

ALU cut



PFERD has further developed the ALU cut especially for stock removal on aluminium. This cut is characterized by its high stock removal rate.

Advantages:

- Extremely high stock removal rate.
- Large chips.
- Reduced material adhesion.
- Long tool life and smooth running.
- Can be used with cutting speeds of up to 1,100 m/min.

ALU cut with HICOAT coating HC-NFE



The use of burrs with the PFERD HICOAT coating HC-NFE prevents chips adhering during work on soft aluminium alloys. This increases the tool life and improves the surface quality of the workpiece.

Advantages:

- Mainly used for long-chipping and lubricating non-ferrous metals.
- Highest stock removal rate.
- Effective chip removal through improved anti-adhesion characteristics.
- Lower thermal loads.
- Longer service life.

Materials that can be worked:

- Aluminium
- Bronze
- Copper
- Brass
- Titanium
- Titanium alloys
- Zinc
- Fibre-reinforced plastics (GRP/CRP)
- Thermoplastics

PFERDVALUE:

PFERDEFFICIENCY recommends burrs with HICOAT coating for long fatigue-free and resource-saving work with perfect results in a very short period of time.

WasteSaving **Time**Saving

NON-FERROUS cut



PFERD has developed the NON-FERROUS cut for universal use on non-ferrous metals and fibre-reinforced plastics. This cut is characterized by its high stock removal rate.

Advantages:

- Very good stock removal rate when used on non-ferrous metals such as brass and copper, plastics and fibre-reinforced plastics.

Materials that can be worked:

- Bronze
- Copper
- Brass
- Zinc
- Fibre-reinforced plastics (GRP/CRP)
- Thermoplastics.



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Determine the type of application.
❸ Select the cut.
❹ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

❺ Select the required burr diameter.
❻ The cutting speed range and the burr diameter determine the recommended rotational speed range.

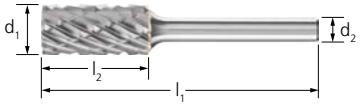
❶ Material group			❷ Application	❸ Cut	❹ Cutting speed
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	ALU HICOAT HC-NFE	600–1,100 m/min
			Fine stock removal	ALU HICOAT HC-NFE	900–1,100 m/min
		Brass, copper, zinc	Coarse stock removal	ALU HICOAT HC-NFE	600–1,100 m/min
				NON-FERROUS	450–600 m/min
			Fine stock removal	ALU HICOAT HC-NFE	900–1,100 m/min
	Hard non-ferrous metals	Hard aluminium alloys (high Si content)	Coarse stock removal	ALU HICOAT HC-NFE	600–1,100 m/min
			Fine stock removal	ALU HICOAT HC-NFE	900–1,100 m/min
		Bronze	Coarse stock removal	ALU HICOAT HC-NFE NON-FERROUS	600–900 m/min
			Fine stock removal	ALU HICOAT HC-NFE	600–1,100 m/min
Plastics, other materials	Thermoplastics, fibre-reinforced plastics (GRP/CRP)		Coarse stock removal	NON-FERROUS ALU HICOAT HC-NFE	600–1,100 m/min
			Fine stock removal	ALU HICOAT HC-NFE	

Example:
TC burr,
ALU cut,
burr dia. of 12 mm.
Coarse stock removal on hard non-ferrous metals, e.g. bronze.
Cutting speed: 600–900 m/min
Rotational speed range:
16,000–24,000 RPM

❺ Burr dia. [mm]	❻ Cutting speeds [m/min]			
	450	600	900	1,100
	Rotational speeds [RPM]			
3	48,000	64,000	95,000	117,000
6	24,000	32,000	48,000	59,000
8	18,000	24,000	36,000	44,000
10	14,000	19,000	29,000	35,000
12	12,000	16,000	24,000	30,000
16	9,000	12,000	18,000	22,000

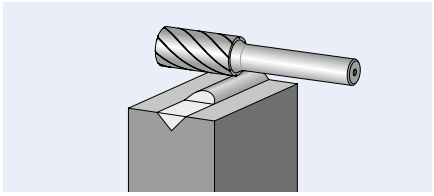


TC burrs for high-performance applications
ALU and NON-FERROUS cuts for aluminium/non-ferrous metals

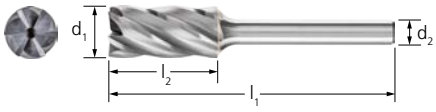


Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.

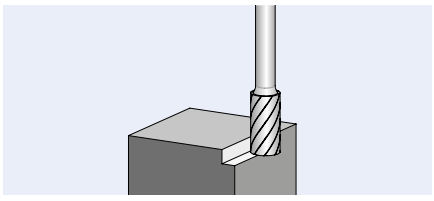


d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut NON-FERROUS  EAN 4007220		Description
Shank dia. 6 mm						
6	16	6	55	221044	1	ZYA 0616/6 NON-FERROUS
12	25	6	65	533314	1	ZYA 1225/6 NON-FERROUS
Shank dia. 8 mm						
12	25	8	65	221051	1	ZYA 1225/8 NON-FERROUS



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.



Ordering notes:
- Please complete the description with the desired cut.

PFERDVALUE:
HICOAT coating



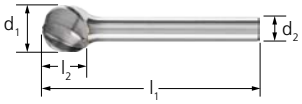
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALU 	ALU HC-NFE  EAN 4007220		Description
Shank dia. 3 mm							
3	13	3	43	803653	-	1	ZYAS 0313/3 ...
6	13	3	43	803660	-	1	ZYAS 0613/3 ...
Shank dia. 6 mm							
6	16	6	55	246986	-	1	ZYAS 0616/6 ...
8	20	6	60	952955	-	1	ZYAS 0820/6 ...
10	20	6	60	533321	-	1	ZYAS 1020/6 ...
12	25	6	65	533345	804117	1	ZYAS 1225/6 ...
16	25	6	65	803974	-	1	ZYAS 1625/6 ...
Shank dia. 8 mm							
12	25	8	65	246979	-	1	ZYAS 1225/8 ...

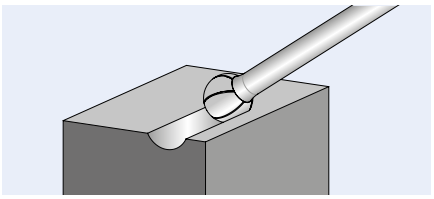




Ball shape KUD

Ball-shaped burr according to DIN 8032.





Ordering notes:
- Please complete the description with the desired cut.

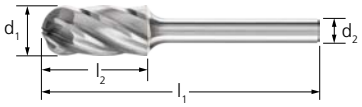
PFERDVALUE:
HICOAT coating

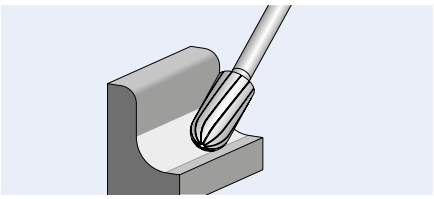
Waste Saving Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut: ALU	Cut: ALU HC-NFE	Cut: NON-FERROUS		Description
				EAN 4007220				
Shank dia. 3 mm								
3	2	3	33	803714	-	-	1	KUD 0302/3 ...
6	5	3	35	803721	-	-	1	KUD 0605/3 ...
Shank dia. 6 mm								
6	5	6	45	869123	-	-	1	KUD 0605/6 ...
8	7	6	47	869130	-	221082	1	KUD 0807/6 ...
10	9	6	49	952962	-	-	1	KUD 1009/6 ...
12	10	6	51	533147	804155	533154	1	KUD 1210/6 ...
16	14	6	54	803998	-	-	1	KUD 1614/6 ...

Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.





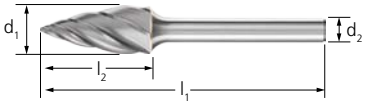
Ordering notes:
- Please complete the description with the desired cut.

PFERDVALUE:
HICOAT coating

Waste Saving Time Saving

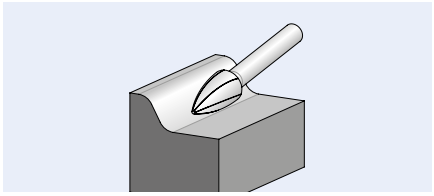
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut: ALU	Cut: ALU HC-NFE	Cut: NON-FERROUS		Description
				EAN 4007220				
Shank dia. 3 mm								
3	13	3	43	803691	-	-	1	WRC 0313/3 ...
6	13	3	43	803707	-	-	1	WRC 0613/3 ...
Shank dia. 6 mm								
6	16	6	55	247006	-	221068	1	WRC 0616/6 ...
8	20	6	60	952979	-	-	1	WRC 0820/6 ...
10	20	6	60	952986	-	-	1	WRC 1020/6 ...
12	25	6	65	533260	804131	533284	1	WRC 1225/6 ...
16	25	6	65	803981	-	-	1	WRC 1625/6 ...
Shank dia. 8 mm								
12	25	8	65	247013	-	-	1	WRC 1225/8 ...

TC burrs for high-performance applications
ALU and NON-FERROUS cuts for aluminium/non-ferrous metals

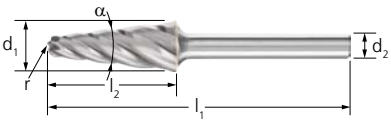


Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.

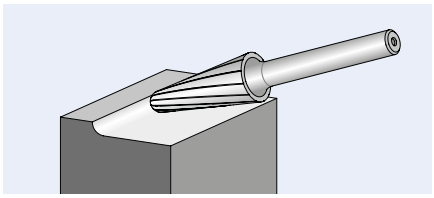


d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALU  EAN 4007220		Description
Shank dia. 3 mm						
3	7	3	37	003350	1	SPG 0307/3 ALU
	13	3	43	003435	1	SPG 0313/3 ALU
6	13	3	43	003442	1	SPG 0613/3 ALU
Shank dia. 6 mm						
6	18	6	55	003503	1	SPG 0618/6 ALU
8	20	6	60	003534	1	SPG 0820/6 ALU
10	20	6	60	003558	1	SPG 1020/6 ALU
12	25	6	65	003596	1	SPG 1225/6 ALU



Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.



Ordering notes:
- Please complete the description with the desired cut.

PFERDVALUE:
HICOAT coating

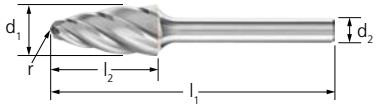


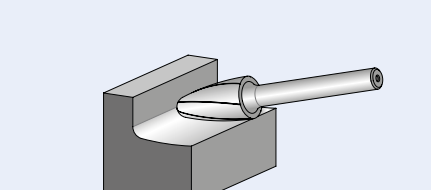
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut ALU 	ALU HC-NFE 	NON-FERROUS 		Description
						EAN 4007220				
Shank dia. 6 mm										
8	20	6	60	16°	1.25	953013	-	-	1	KEL 0820/6 ...
10	20	6	60	14°	2.9	953020	-	221105	1	KEL 1020/6 ...
12	30	6	70	14°	2.6	533109	533093	533116	1	KEL 1230/6 ...
16	30	6	70	14°	4.8	804018	-	-	1	KEL 1630/6 ...
Shank dia. 8 mm										
12	30	8	70	14°	2.6	247037	-	-	1	KEL 1230/8 ...
16	30	8	70	14°	4.8	-	-	221129	1	KEL 1630/8 ...



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.





Ordering notes:

- Please complete the description with the desired cut.

PFERDVALUE**:**
HICOAT coating

Waste Saving Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut ALU	Cut ALU HC-NFE		Description
					EAN 4007220			
Shank dia. 3 mm								
3	13	3	43	0.75	803677	-	1	RBF 0313/3 ...
6	13	3	43	1.5	803684	-	1	RBF 0613/3 ...
Shank dia. 6 mm								
6	18	6	55	1.5	328071	-	1	RBF 0618/6 ...
8	20	6	60	1.2	952993	-	1	RBF 0820/6 ...
10	20	6	60	2.5	953006	-	1	RBF 1020/6 ...
12	25	6	65	2.5	533208	533192	1	RBF 1225/6 ...
16	30	6	70	3.6	804001	-	1	RBF 1630/6 ...
Shank dia. 8 mm								
12	25	8	65	2.5	247020	-	1	RBF 1225/8 ...



TC burrs for high-performance applications
ALU and NON-FERROUS cuts for aluminium/non-ferrous metals



Set 1603 ALU

Set 1603 ALU contains ten small tungsten carbide burrs for processing aluminium in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

Contents:
10 tungsten carbide burrs,
shank diameter of 3 mm, ALU cut
1 piece each:

- ZYAS 0313/3 ALU
- ZYAS 0613/3 ALU
- KUD 0302/3 ALU
- KUD 0605/3 ALU
- WRC 0313/3 ALU
- WRC 0613/3 ALU
- RBF 0313/3 ALU
- RBF 0613/3 ALU
- SPG 0313/3 ALU
- SPG 0613/3 ALU

Cut ALU  EAN 4007220		Description
Shank dia. 3 mm		
004401	1	1603 ALU



Set 1612 ALU

Set 1612 ALU contains five tungsten carbide burrs for processing aluminium in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
Five further slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm, ALU cut
1 piece each:

- ZYAS 1225/6 ALU
- KUD 1210/6 ALU
- WRC 1225/6 ALU
- RBF 1225/6 ALU
- KEL 1230/6 ALU

Cut ALU  EAN 4007220		Description
Shank dia. 6 mm		
068823	1	1612 ALU



TC burrs for high-performance applications

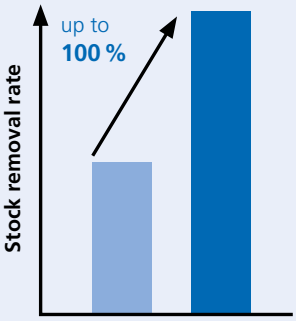
CAST cut for cast iron

With the CAST cut, PFERD has developed innovative burrs especially for work on cast iron. They are characterized by an extremely high stock removal rate on cast iron and impress through smooth milling with significantly reduced vibration and less noise.

Advantages:

- Up to 100 % higher stock removal rate when used on cast iron due to the innovative tooth geometry, when compared with conventional cross-cut burrs.
- Significantly increased aggressiveness, large chips and very good chip removal.
- Comfortable working with reduced vibration and less noise.

Performance values for applications on cast iron



- Conventional burrs with cross cut
- Tungsten carbide burrs, CAST cut

Materials that can be worked:

- Grey cast iron
- Nodular cast iron
- Annealed cast iron

Applications:

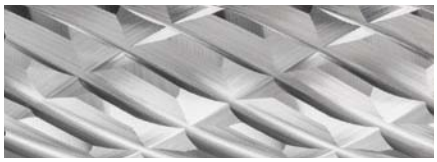
- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives: from 300 watts.
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

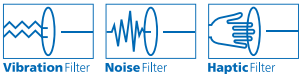


Safety note:

- The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.

PFERDVALUE:

PFERDERGONOMICS recommends burrs with CAST cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with CAST cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



Recommended rotational speed range [RPM]

To determine the recommended rotational speed range [RPM], please proceed as follows:

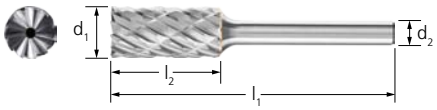
❶ Refer to the table for the cutting speed.
❷ Select the required burr diameter.
❸ The cutting speed range and the burr diameter determine the recommended rotational speed range.

Material group			Application	Cut	❶ Cutting speed
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	CAST	450–750 m/min

Example:
TC burr,
CAST cut,
burr dia. of 12 mm.
Coarse stock removal on cast iron.
Cutting speed: 450–750 m/min
Rotational speed range:
12,000–20,000 RPM

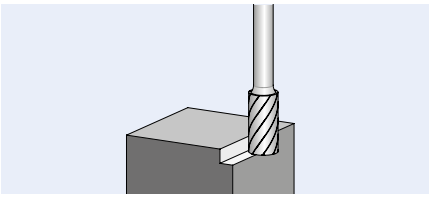
❷ Burr dia. [mm]	❸ Cutting speeds [m/min]	
	450	750
	Rotational speeds [RPM]	
6	24,000	40,000
10	14,000	24,000
12	12,000	20,000

TC burrs for high-performance applications
CAST cut for cast iron



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.



PFERDVALUE:

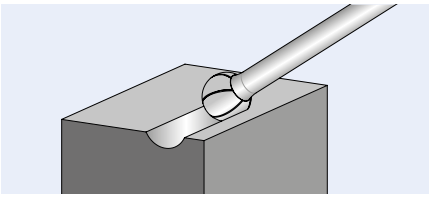
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	16	6	55	952658	24,000–40,000	1	ZYAS 0616/6 CAST
10	20	6	60	952665	14,000–24,000	1	ZYAS 1020/6 CAST
12	25	6	65	952672	12,000–20,000	1	ZYAS 1225/6 CAST
Shank dia. 8 mm							
12	25	8	65	067925	12,000–20,000	1	ZYAS 1225/8 CAST



Ball shape KUD

Ball-shaped burr according to DIN 8032.



PFERDVALUE:

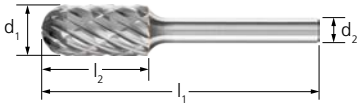
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

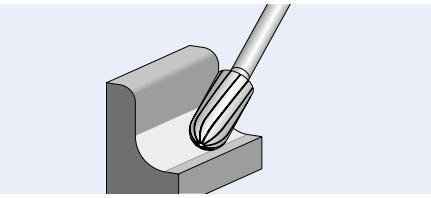
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm							
10	9	6	49	952504	14,000–24,000	1	KUD 1009/6 CAST
12	10	6	51	952511	12,000–20,000	1	KUD 1210/6 CAST
Shank dia. 8 mm							
12	10	8	51	068038	12,000–20,000	1	KUD 1210/8 CAST



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.





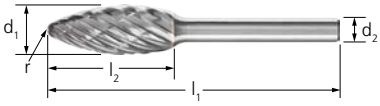
PFERDVALUE:

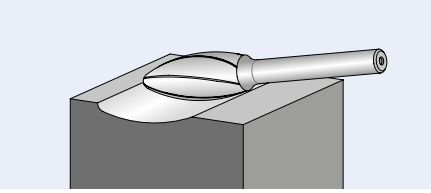
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut CAST  EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	16	6	55	952610	24,000–40,000	1	WRC 0616/6 CAST
10	20	6	60	952627	14,000–24,000	1	WRC 1020/6 CAST
12	25	6	65	952634	12,000–20,000	1	WRC 1225/6 CAST
Shank dia. 8 mm							
12	25	8	65	067932	12,000–20,000	1	WRC 1225/8 CAST

Flame shape B

Flame-shaped burr according to ISO 7755/8.





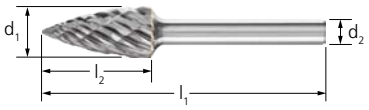
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut CAST  EAN 4007220	RPM		Description
Shank dia. 6 mm								
12	30	6	70	2.1	952450	12,000–20,000	1	B 1230/6 CAST
Shank dia. 8 mm								
12	30	8	70	2.1	068021	12,000–20,000	1	B 1230/8 CAST

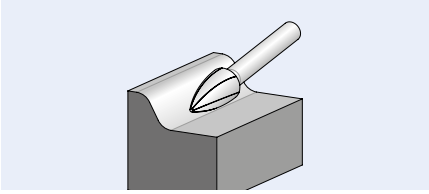


TC burrs for high-performance applications
CAST cut for cast iron



Pointed tree shape SPG

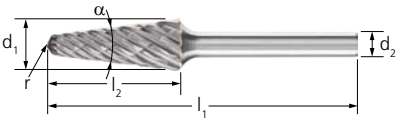
Pointed tree-shaped burr according to DIN 8032, flattened tip.



PFERDVALUE:

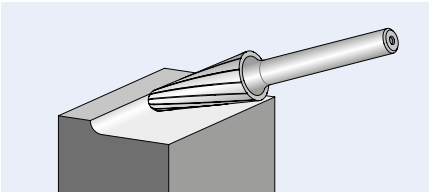
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm							
6	18	6	55	952580	24,000–40,000	1	SPG 0618/6 CAST
10	20	6	60	952597	14,000–24,000	1	SPG 1020/6 CAST
12	25	6	70	952603	12,000–20,000	1	SPG 1225/6 CAST
Shank dia. 8 mm							
12	25	8	70	067956	12,000–20,000	1	SPG 1225/8 CAST



Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.



PFERDVALUE:

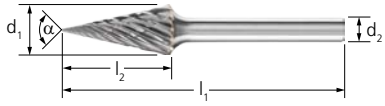
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

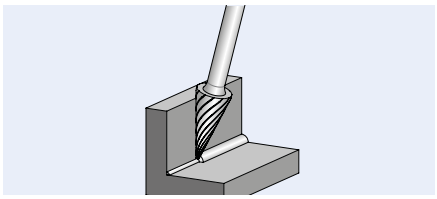
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm									
12	30	6	70	14°	2.6	952474	12,000–20,000	1	KEL 1230/6 CAST
Shank dia. 8 mm									
12	30	8	70	14°	2.6	068014	12,000–20,000	1	KEL 1230/8 CAST



Conical pointed shape SKM

Conical pointed burr according to DIN 8032, flattened tip.





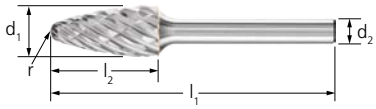
PFERDVALUE:

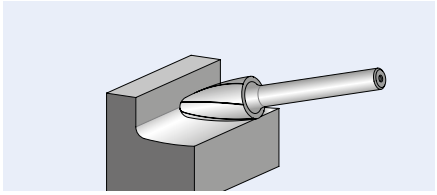
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm								
12	25	6	65	26°	952481	12,000–20,000	1	SKM 1225/6 CAST

Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.





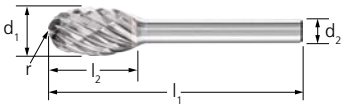
PFERDVALUE:

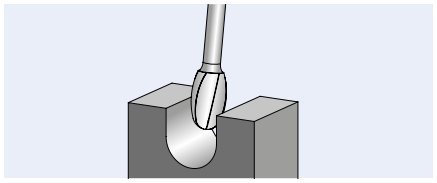
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm								
6	18	6	55	1.5	952528	24,000–40,000	1	RBF 0618/6 CAST
10	20	6	60	2.5	952559	14,000–24,000	1	RBF 1020/6 CAST
12	25	6	65	2.5	952566	12,000–20,000	1	RBF 1225/6 CAST
Shank dia. 8 mm								
12	25	8	65	2.5	067949	12,000–20,000	1	RBF 1225/8 CAST

Oval shape TRE

Oval burr according to DIN 8032.





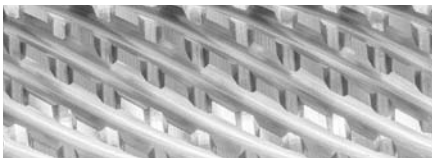
PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut CAST EAN 4007220	RPM		Description
Shank dia. 6 mm								
12	20	6	60	5.0	952467	12,000–20,000	1	TRE 1220/6 CAST

TC burrs for high-performance applications
TITANIUM cut for titanium

The TITANIUM cut has been especially developed for work on hard titanium materials (tensile strength > 500 N/mm²). It is characterized by an extremely high stock removal rate on this material group, which has very challenging stock removal properties. Tungsten carbide burrs with the TITANIUM cut impress with their smooth milling with considerably reduced vibration and less noise.



Advantages:

- Outstanding stock removal rate and tool life due to the innovative tooth geometry.
- Significantly increased aggressiveness, large chips and very good chip removal.
- Comfortable working with reduced vibration and less noise.

Materials that can be worked:

- Titanium
- Hard titanium alloys

Applications:

- Milling out
- Levelling
- Deburring
- Cutting out holes
- Surface work
- Work on weld seams

Recommendations for use:

- Determine the rotational speed in each case depending on the titanium alloy you need to machine.
- Reduce the rotational speed if excessive flying sparks occur. Depending on the titanium alloy you are machining, flying sparks may not be entirely avoidable.
- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds.
  Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

Safety note:

- The very high stock removal rate can cause discolouration on the shank. This does not constitute a safety risk.

PFERDVALUE:

PFERDERGONOMICS recommends burrs with TITANIUM cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with TITANIUM cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



Recommended rotational speed range [RPM]

To determine the recommended rotational speed range [RPM], please proceed as follows:

❶ Refer to the table for the cutting speed.
❷ Select the required burr diameter.
❸ The cutting speed range and the burr diameter determine the recommended rotational speed range.

Material group			Application	Cut	❶ Cutting speed
Non-ferrous metals	Hard non-ferrous metals	Hard titanium alloys	Coarse stock removal	TITANIUM	250–450 m/min

Example:
TC burr,
TITANIUM cut,
burr dia. of 12 mm.
Coarse stock removal on hard titanium alloys.
Cutting speed: 250–450 m/min
Rotational speed range: 7,000–12,000 RPM

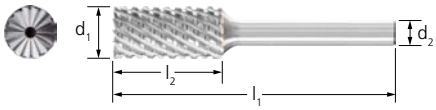
❷ Burr dia. [mm]	❸ Cutting speeds [m/min]	
	250	450
	Rotational speeds [RPM]	
3	27,000	48,000
4	20,000	36,000
5	16,000	29,000
6	13,000	24,000
12	7,000	12,000

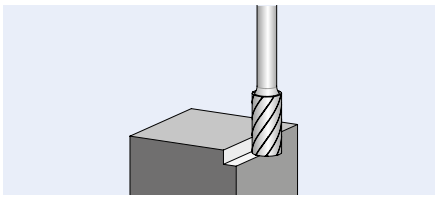
Note:

For soft titanium alloys (tensile strength < 500 N/mm²), we recommend tungsten carbide burrs with the INOX cut. The special tooth geometry on these burrs prevents the flutes becoming clogged, particularly for soft, lubricating materials (see page 44).

Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with cut on circumference and end.





PFERDVALUE:

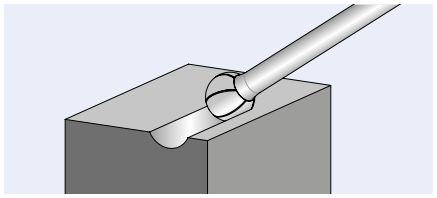
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TITANIUM EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	13	3	43	034217	27,000–48,000	1	ZYAS 0313/3 TITANIUM
6	13	3	43	034224	13,000–24,000	1	ZYAS 0613/3 TITANIUM
Shank dia. 6 mm							
6	16	6	55	034248	13,000–24,000	1	ZYAS 0616/6 TITANIUM
12	25	6	65	034255	7,000–12,000	1	ZYAS 1225/6 TITANIUM

Ball shape KUD

Ball-shaped burr according to DIN 8032.



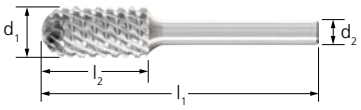


PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

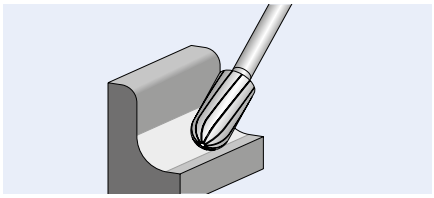
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TITANIUM EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	2	3	33	034149	27,000–48,000	1	KUD 0302/3 TITANIUM
4	3	3	34	034163	20,000–36,000	1	KUD 0403/3 TITANIUM
5	4	3	35	034170	16,000–29,000	1	KUD 0504/3 TITANIUM
6	5	3	35	034187	13,000–24,000	1	KUD 0605/3 TITANIUM
Shank dia. 6 mm							
6	5	6	45	034194	13,000–24,000	1	KUD 0605/6 TITANIUM
12	10	6	51	034200	7,000–12,000	1	KUD 1210/6 TITANIUM





Cylindrical shape with radius end WRC

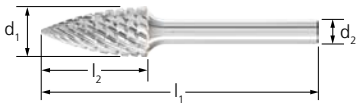
Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.



PFERDVALUE:

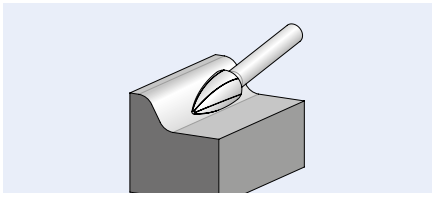
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TITANIUM EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	13	3	43	034309	27,000–48,000	1	WRC 0313/3 TITANIUM
6	13	3	43	034316	13,000–24,000	1	WRC 0613/3 TITANIUM
Shank dia. 6 mm							
6	16	6	55	034330	13,000–24,000	1	WRC 0616/6 TITANIUM
12	25	6	65	034347	7,000–12,000	1	WRC 1225/6 TITANIUM



Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.



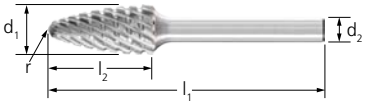
PFERDVALUE:

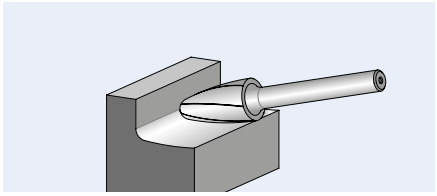
Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TITANIUM EAN 4007220	RPM		Description
Shank dia. 3 mm							
3	7	3	37	034323	27,000–48,000	1	SPG 0307/3 TITANIUM
	13	3	43	034392	27,000–48,000	1	SPG 0313/3 TITANIUM
6	13	3	43	034408	13,000–24,000	1	SPG 0613/3 TITANIUM
Shank dia. 6 mm							
6	18	6	55	034415	13,000–24,000	1	SPG 0618/6 TITANIUM
12	25	6	65	034422	7,000–12,000	1	SPG 1225/6 TITANIUM

Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.





PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut TITANIUM EAN 4007220	RPM		Description
Shank dia. 3 mm								
3	13	3	43	0.75	034354	27,000–48,000	1	RBF 0313/3 TITANIUM
6	13	3	43	1.5	034361	13,000–24,000	1	RBF 0613/3 TITANIUM
Shank dia. 6 mm								
6	18	6	55	1.5	034378	13,000–24,000	1	RBF 0618/6 TITANIUM
12	25	6	65	2.5	034385	7,000–12,000	1	RBF 1225/6 TITANIUM







TC burrs for high-performance applications

PLAST, FVK and FVKS cuts for GRP/CRP

Tungsten carbide burrs with the PLAST, FVK and FVKS cuts are suitable for trimming and contour milling on a wide range of fibre-reinforced plastics (GRP/CRP).

Burrs with a drill cut (BS) or with a centre drill (ZBS) allow combined drilling and milling work. Burrs with an end cut (two teeth, STS) enable holes to be drilled with minimal burr formation, whilst the version with a flat end cut (two teeth, FSTS) is used to mill grooves and pockets. The STS and FSTS versions are suitable only for machine and robot applications. The special tooth geometry allows high feed rates due to the low resistance. In addition, these burrs are characterized by smooth milling.

Recommendations for use:

- The version with a drill cut (BS) is particularly suitable for machine and robot applications, while the version with a centre drill (ZBS) is used for manual applications. It allows secure drilling on almost all surface conditions.
- The versions with an end cut (two teeth, STS) and flat end cut (two teeth, FSTS) are suitable only for machine and robot applications.
- Select a burr diameter greater than the thickness of the material to be machined, to avoid impacts and chattering with the risk of damaging or breaking the tool.
- Increase the rotational speed if the tool tends to chatter.
- If necessary, reduce the rotational speed and contact pressure if melting occurs.
- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

Applications:

- Trimming
- Contour milling
- Deburring
- Milling grooves and pockets (with FSTS)
- Drilling blind holes (with FSTS)
- Drilling with minimal burr formation (with STS)
- Milling out
- Cutting out holes

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

PLAST cut



Tungsten carbide burrs with the PLAST cut are particularly suitable for use on less hard glass and carbon-fibre-reinforced duroplastics (GRP and CRP with ≤ 40 % fibre content) and fibre-reinforced thermoplastics. The cut (similar to PCD milling) minimizes delamination and fraying.

Advantages:

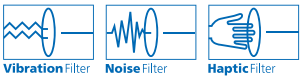
- Particularly suitable for GRP and CRP with ≤ 40 % fibre content.
- Minimizes delamination and fraying due to the special cut that is similar to PCD mills.
- Particularly suitable for use on machines and on robots.
- Very low cutting force.
- High feed rates.

Materials that can be worked:

- Plastics
- Fibre-reinforced plastics (GRP/CRP) with a fibre content ≤ 40 %
- Thermoplastics

PFERDVALUE:

PFERDERGONOMICS recommends burrs with PLAST cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



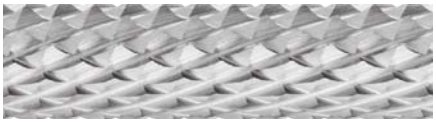
PFERDEFFICIENCY recommends burrs with PLAST cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



FVK cut



FVKS cut



Tungsten carbide burrs with the FVK and FVKS cuts are suitable for universal use on hard glass and carbon-fibre-reinforced duroplastics. Due to its high concentricity, the FVK cut is suitable for tool machines and manual applications. It is characterized by smooth milling and produces a smooth cut edge. The FVKS cut is suitable for use on machines and robots with high feed rates.

Advantages:

- Particularly suitable for GRP and CRP, also with > 40 % fibre content.
- The FVKS cut produces smooth edges and is characterized by smooth milling.

Materials that can be worked:

- Plastics
- Fibre-reinforced plastics (GRP/CRP) with a fibre content > 40 %

Recommended rotational speed range [RPM]

To determine the recommended rotational speed range [RPM], please proceed as follows:

❶ Refer to the table for the cutting speed.
❷ Select the required burr diameter.
❸ The cutting speed range and the burr diameter determine the recommended rotational speed range.

Material group		Application	Cut	❶ Cutting speed
Plastics, other materials	Thermoplastics, fibre-reinforced plastics (GRP/CRP) with a fibre content ≤ 40 %	Trimming, contour milling, cutting out holes, deburring	PLAST	450–900 m/min
	Fibre-reinforced plastics (GRP/CRP) with a fibre content > 40 %		FVK FVKS	

Example:
TC burr,
PLAST cut,
burr dia. of 8 mm.
Trimming plastics.
Cutting speed: 450–900 m/min
Rotational speed range:
18,000–36,000 RPM

❷ Burr dia. [mm]	❸ Cutting speeds [m/min]	
	450	900
	Rotational speeds [RPM]	
6	24,000	48,000
8	18,000	36,000

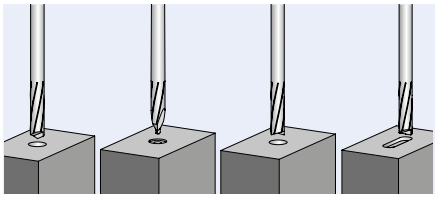




More PFERD tools and useful information on working with plastic can be found in our PRAXIS brochure "PFERD tools for use on plastics". Please contact us for further details.

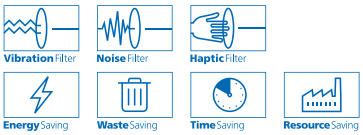
Cylindrical shape ZYA

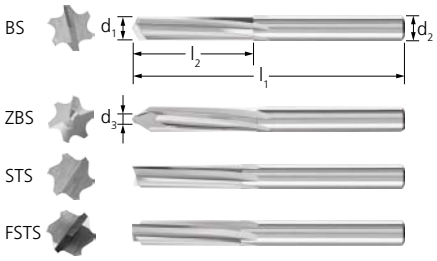
Cylindrical burr.



Ordering notes:
■ Please complete the description with the desired cut.

PFERDVALUE:
PLAST cut:





d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Center drill d_3 [mm]	Cut: PLAST	Cut: FVK	Cut: FVKS	RPM		Description
					EAN 4007220					
Shank dia. of 6 mm with drill cut (BS)										
6	25	6	65	-	900413	050217	808900	24,000–48,000	1	ZYA 0625/6 ... BS
Shank dia. of 8 mm with drill cut (BS)										
8	25	8	65	-	900468	050231	808917	18,000–36,000	1	ZYA 0825/8 ... BS
Shank dia. of 6 mm with centre drill (ZBS)										
6	25	6	65	2.5	900451	869048	869055	24,000–48,000	1	ZYA 0625/6 ... ZBS
Shank dia. 6 mm with end cut (STS)										
6	25	6	65	-	003107	-	-	24,000–48,000	1	ZYA 0625/6 ... STS
Shank dia. 8 mm with end cut (STS)										
8	25	8	65	-	003121	-	-	18,000–36,000	1	ZYA 0825/8 ... STS
Shank dia. 6 mm with flat end cut (FSTS)										
6	25	6	65	-	003138	-	-	24,000–48,000	1	ZYA 0625/6 ... FSTS
Shank dia. 8 mm with flat end cut (FSTS)										
8	25	8	65	-	003152	-	-	18,000–36,000	1	ZYA 0825/8 ... FSTS

TC burrs for high-performance applications

TOUGH and TOUGH-S cuts for tough applications

The TOUGH and TOUGH-S cuts have been specially designed for tough operating conditions in dockyards, foundries and steel construction. They are also ideal for use in all manufacturing sectors where, due to the difficult production environment, tooth breakages or other damage to conventional burrs is a frequent occurrence.

Advantages:

- Innovative, special cuts providing exceptional impact resistance.
- Minimized tooth chipping/breakage, splintering and burr failures due to very robust, high-performance cuts.
- Can also be used at low rotational speeds.
- Due to their extreme impact resistance, they can perfectly be used as long-shank variants.

Applications:

- High-impact applications when using shank extensions
- Applications with a high angle of surface contact
- Milling of narrow contours
- Applications where high rotational speeds are not available

Materials that can be worked:

- Cast iron
- Steel
- Cast steel
- The TOUGH and TOUGH-S cuts can be used on materials up to 54 HRC. For harder materials, it is recommended to perform trials beforehand.

Recommendations for use:

- For the cost-effective use of burrs, work with higher rotational/cutting speeds. Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

TOUGH cut



Tungsten carbide burrs with the TOUGH cut are particularly aggressive and are characterized by high stock removal.

TOUGH-S cut



Tungsten carbide burrs with the TOUGH-S cut are characterized by smooth milling and high stock removal.

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Select the cut.
❸ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

❹ Select the required burr diameter.
❺ The cutting speed range and the burr diameter determine the recommended rotational speed range.

Safety note:

Please observe the reduced rotational speeds for burrs with a long shank. They can be found on page 11.

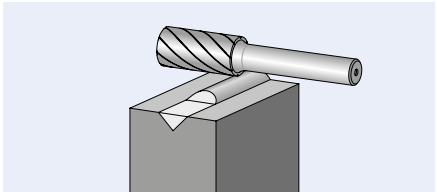
❶ Material group			Application	❷ Cut	❸ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal with impact load	TOUGH	250–600 m/min
				TOUGH-S	
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel		TOUGH	250–350 m/min
				TOUGH-S	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal with impact load	TOUGH	250–600 m/min
				TOUGH-S	

Example:
TC burr,
TOUGH cut,
burr dia. of 12 mm.
Coarse stock removal with impact load on steels up to 1,200 N/mm².
Cutting speed: 250–600 m/min
Rotational speed range: 7,000–16,000 RPM

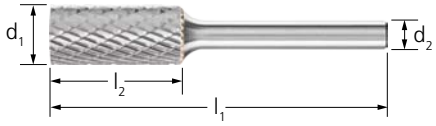
❹ Burr dia. [mm]	❺ Cutting speeds [m/min]		
	250	350	600
	Rotational speeds [RPM]		
8	10,000	14,000	24,000
10	8,000	11,000	19,000
12	7,000	9,000	16,000
16	5,000	7,000	12,000

Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.



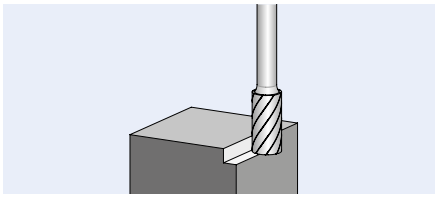
Ordering notes:
- Please complete the description with the desired cut.

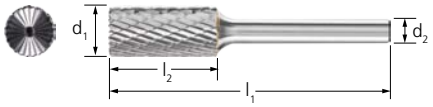


d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TOUGH 	Cut TOUGH-S 		Description
				EAN 4007220			
Shank dia. 6 mm							
8	20	6	60	895504	-	1	ZYA 0820/6 ...
10	20	6	60	895658	-	1	ZYA 1020/6 ...
12	25	6	65	895665	895672	1	ZYA 1225/6 ...

Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.





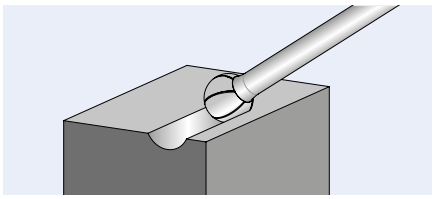
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TOUGH 		Description
				EAN 4007220		
Shank dia. 6 mm						
8	20	6	60	769997	1	ZYAS 0820/6 TOUGH
10	20	6	60	770023	1	ZYAS 1020/6 TOUGH
12	25	6	65	869109	1	ZYAS 1225/6 TOUGH
Shank dia. 8 mm						
12	25	8	65	770054	1	ZYAS 1225/8 TOUGH



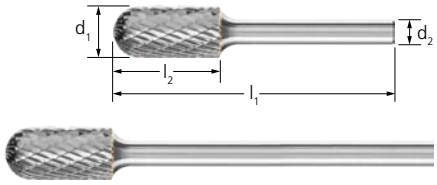


Ball shape KUD

Ball-shaped burr according to DIN 8032.



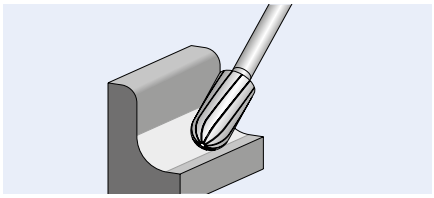
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TOUGH  EAN 4007220		Description
Shank dia. 6 mm						
8	7	6	47	955383	1	KUD 0807/6 TOUGH
12	10	6	51	770160	1	KUD 1210/6 TOUGH



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.

SL = shank length (long steel shank)

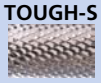


Ordering notes:

- Please complete the description with the desired cut.

Safety notes:

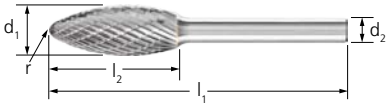
Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

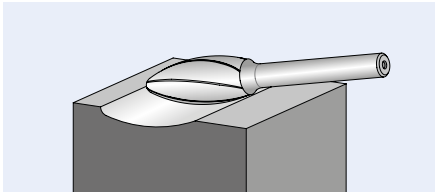
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TOUGH 	TOUGH-S 		Description
				EAN 4007220			
Shank dia. 6 mm							
8	20	6	60	770108	-	1	WRC 0820/6 ...
10	20	6	60	770115	-	1	WRC 1020/6 ...
12	25	6	65	770122	770139	1	WRC 1225/6 ...
Long shank dia. of 6 mm, SL 150 mm							
12	25	6	175	091043	-	1	WRC 1225/6 ... SL 150
Shank dia. 8 mm							
12	25	8	65	769881	-	1	WRC 1225/8 ...



Flame shape B

Flame-shaped burr according to ISO 7755/8.



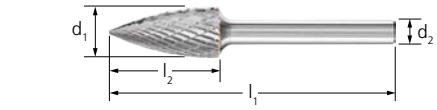


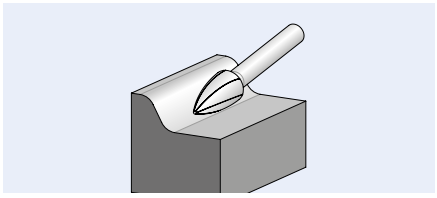
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut TOUGH EAN 4007220		Description
Shank dia. 6 mm							
8	20	6	60	1.5	770061	1	B 0820/6 TOUGH
12	30	6	70	2.1	770085	1	B 1230/6 TOUGH
Shank dia. 8 mm							
12	30	8	70	2.1	770092	1	B 1230/8 TOUGH

Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.

SL = shank length (long steel shank)





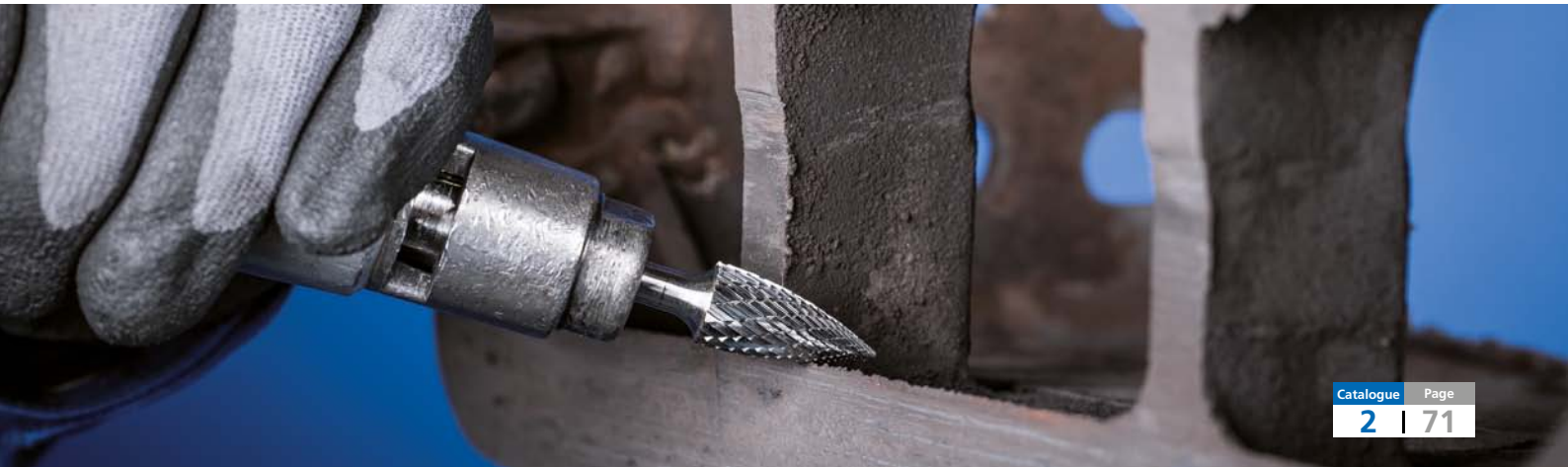
Ordering notes:

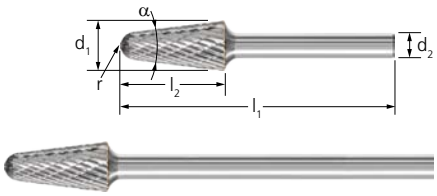
- Please complete the description with the desired cut.

Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut TOUGH	Cut TOUGH-S		Description
				EAN 4007220			
Shank dia. 6 mm							
10	20	6	60	770252	770269	1	SPG 1020/6 ...
12	25	6	65	770276	-	1	SPG 1225/6 ...
Long shank dia. of 6 mm, SL 150 mm							
12	25	6	175	090930	-	1	SPG 1225/6 ... SL 150
Shank dia. 8 mm							
12	25	8	65	770283	-	1	SPG 1225/8 ...

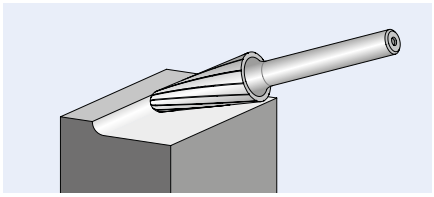




Conical shape with radius end KEL

Conical burr with radius end according to DIN 8032.

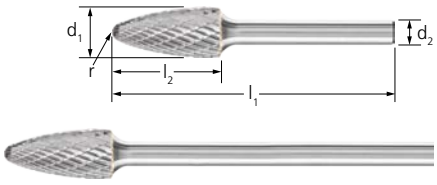
SL = shank length (long steel shank)



Safety notes:

Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

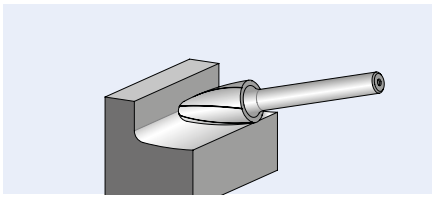
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut TOUGH EAN 4007220		Description
Shank dia. 6 mm								
12	25	6	65	14°	3.3	770320	1	KEL 1225/6 TOUGH
Long shank dia. of 6 mm, SL 150 mm								
12	25	6	175	14°	3.3	091166	1	KEL 1225/6 TOUGH SL 150
Shank dia. 8 mm								
12	25	8	65	14°	3.3	770337	1	KEL 1225/8 TOUGH



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.

SL = shank length (long steel shank)



Ordering notes:

- Please complete the description with the desired cut.

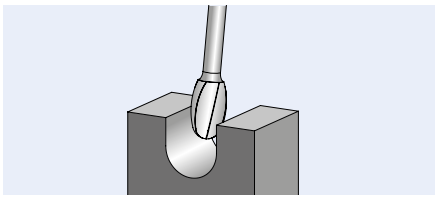
Safety notes:

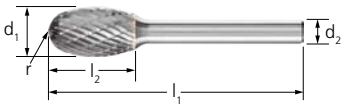
Please observe the reduced rotational speeds for long-shank burrs. They can be found on page 11.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut TOUGH	Cut TOUGH-S		Description
					EAN 4007220			
Shank dia. 6 mm								
8	20	6	60	1.2	770191	-	1	RBF 0820/6 ...
10	20	6	60	2.5	770207	-	1	RBF 1020/6 ...
12	25	6	65	2.5	770214	770238	1	RBF 1225/6 ...
16	25	6	65	4.9	869116	-	1	RBF 1625/6 ...
Long shank dia. of 6 mm, SL 150 mm								
12	25	6	175	2.5	090947	-	1	RBF 1225/6 ... SL 150
Shank dia. 8 mm								
12	25	8	65	2.5	770221	770245	1	RBF 1225/8 ...

Oval shape TRE

Oval burr according to DIN 8032.





d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut TOUGH  EAN 4007220		Description
Shank dia. 6 mm							
10	16	6	56	4.0	770344	1	TRE 1016/6 TOUGH
12	20	6	60	5.0	770351	1	TRE 1220/6 TOUGH

Set 1712 TOUGH

Set 1712 TOUGH contains five tungsten carbide burrs for tough applications in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
Five further unused slots are available for other burrs.

Contents:
5 tungsten carbide burrs,
shank diameter of 6 mm, TOUGH cut
1 piece each:
- WRC 1225/6 TOUGH
- SPG 1225/6 TOUGH
- RBF 1225/6 TOUGH
- KEL 1225/6 TOUGH
- TRE 1220/6 TOUGH



Cut TOUGH  EAN 4007220		Description
Shank dia. 6 mm		
955635	1	1712 TOUGH





TC burrs for high-performance applications
MICRO cut for finishing work

Tungsten carbide burrs with the MICRO cut are specifically designed for finishing and are used in areas in which mounted grinding points are usually used. They offer a higher stock removal rate and produce a high surface quality, particularly compared with conventionally milled surfaces. They also operate with low vibration and little noise. They maintain their geometry over their entire tool life, and are well suited to manual and machine applications. Almost all materials up to a hardness of 68 HRC can be machined.

Advantages:

- High surface quality.
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Work on almost all materials up to 68 HRC.

Applications:

- Finishing
- Very fine cleaning work
- Corrections in tool and mould construction
- Sharpening cutting tools

Materials that can be worked:

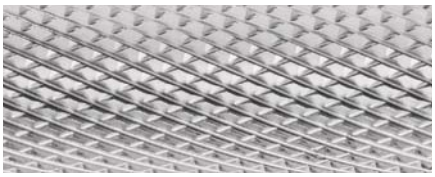
- Steel and cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds.
  Power recommendation for tool drives:
  - Shank diameter of 3 mm: 75 to 300 watts
  - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

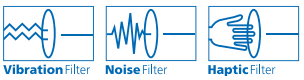
Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot applications
- Machine tools



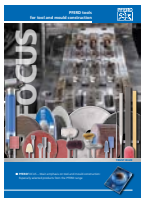
PFERDVALUE:

PFERDERGONOMICS recommends burrs with MICRO cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with MICRO cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.





The PFERD range includes numerous tools which are suitable for use in tool and mould construction. We have compiled these special solutions for you in our FOCUS brochure. Please contact us for further details.



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

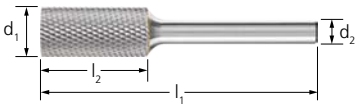
❸ Select the required burr diameter.
❹ The cutting speed range and the burr diameter determine the recommended rotational speed range.

❶ Material group			Application	Cut	❷ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Fine stock removal	MICRO	600–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel			450–600 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Fine stock removal	MICRO	450–600 m/min
Non-ferrous metals	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Fine stock removal	MICRO	450–600 m/min
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)			
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Fine stock removal	MICRO	600–750 m/min

Example:
TC burr,
MICRO cut,
burr dia. of 10 mm.
Fine stock removal on steels up to 1,200 N/mm².
Cutting speed: 600–750 m/min
Rotational speed range:
19,000–24,000 RPM

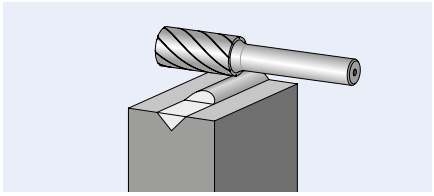
❸ Burr dia. [mm]	❹ Cutting speeds [m/min]		
	450	600	750
	Rotational speeds [RPM]		
2	72,000	95,000	120,000
3	48,000	64,000	80,000
4	36,000	48,000	60,000
6	24,000	32,000	40,000
8	18,000	24,000	30,000
10	14,000	19,000	24,000
12	12,000	16,000	20,000





Cylindrical shape ZYA without end cut

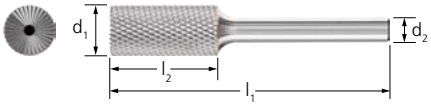
Cylindrical burr according to DIN 8032.



PFERDVALUE:

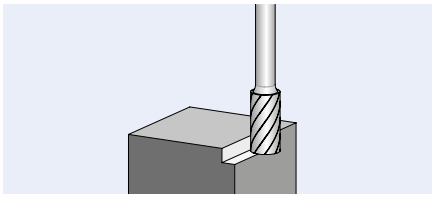
Vibration Filter · Noise Filter · Haptic Filter · Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm						
2	10	3	40	895511	1	ZYA 0210/3 MICRO
3	13	3	43	895535	1	ZYA 0313/3 MICRO
4	13	3	43	895542	1	ZYA 0413/3 MICRO
6	13	3	43	953068	1	ZYA 0613/3 MICRO
Shank dia. 6 mm						
6	16	6	55	895559	1	ZYA 0616/6 MICRO
8	20	6	60	895573	1	ZYA 0820/6 MICRO
10	20	6	60	895603	1	ZYA 1020/6 MICRO
12	25	6	65	953051	1	ZYA 1225/6 MICRO



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.



PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 6 mm						
6	16	6	55	895566	1	ZYAS 0616/6 MICRO
8	20	6	60	895580	1	ZYAS 0820/6 MICRO
10	20	6	60	895610	1	ZYAS 1020/6 MICRO
12	25	6	65	953105	1	ZYAS 1225/6 MICRO

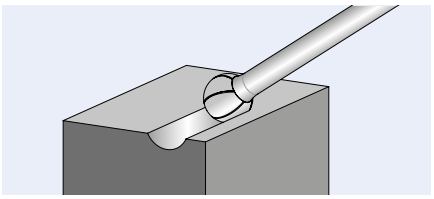




Ball shape KUD

Ball-shaped burr according to DIN 8032.





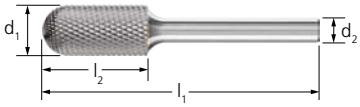
PFERDVALUE:

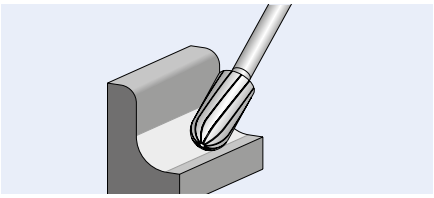
Vibration Filter · Noise Filter · Haptic Filter · Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm						
2	1.5	3	33	895399	1	KUD 021,5/3 MICRO
3	2	3	33	895405	1	KUD 0302/3 MICRO
4	3	3	34	895412	1	KUD 0403/3 MICRO
6	5	3	35	953129	1	KUD 0605/3 MICRO
Shank dia. 6 mm						
6	5	6	45	895436	1	KUD 0605/6 MICRO
8	7	6	47	895474	1	KUD 0807/6 MICRO
10	9	6	49	895481	1	KUD 1009/6 MICRO
12	10	6	51	953112	1	KUD 1210/6 MICRO

Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.



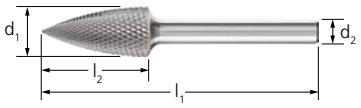


PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Time Saving

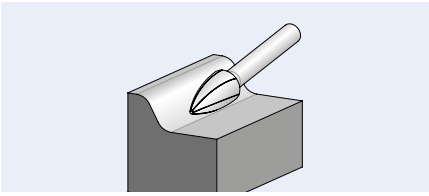
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm						
2	10	3	40	953167	1	WRC 0210/3 MICRO
3	13	3	43	869000	1	WRC 0313/3 MICRO
6	13	3	43	953150	1	WRC 0613/3 MICRO
Shank dia. 6 mm						
6	16	6	55	869017	1	WRC 0616/6 MICRO
8	20	6	60	869024	1	WRC 0820/6 MICRO
10	20	6	60	869031	1	WRC 1020/6 MICRO
12	25	6	65	953136	1	WRC 1225/6 MICRO





Pointed tree shape SPG

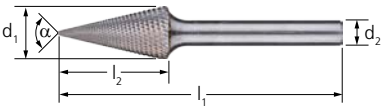
Pointed tree-shaped burr according to DIN 8032, flattened tip.



PFERDVALUE:

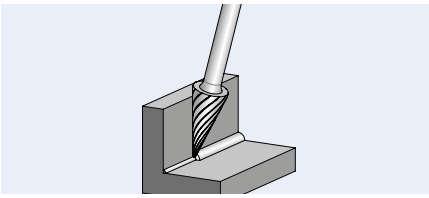
Vibration Filter · Noise Filter · Haptic Filter · Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm						
3	7	3	37	003886	1	SPG 0307/3 MICRO
	13	3	43	003893	1	SPG 0313/3 MICRO
6	13	3	43	003909	1	SPG 0613/3 MICRO
Shank dia. 6 mm						
6	18	6	55	003916	1	SPG 0618/6 MICRO
8	20	6	60	003923	1	SPG 0820/6 MICRO
10	20	8	60	003930	1	SPG 1020/6 MICRO
12	25	6	65	003954	1	SPG 1225/6 MICRO



Conical pointed shape SKM

Conical pointed burr according to DIN 8032, flattened tip.



PFERDVALUE:

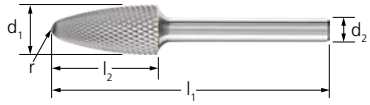
Vibration Filter · Noise Filter · Haptic Filter · Time Saving

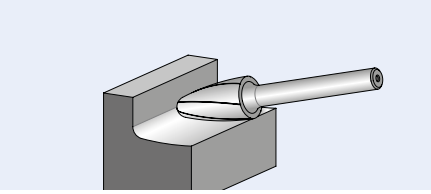
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm							
3	7	3	37	21°	067833	1	SKM 0307/3 MICRO
	11	3	41	14°	067864	1	SKM 0311/3 MICRO
6	13	3	43	25°	067871	1	SKM 0613/3 MICRO
Shank dia. 6 mm							
6	18	6	55	18°	067888	1	SKM 0618/6 MICRO
8	20	6	60	22°	067895	1	SKM 0820/6 MICRO
10	20	6	60	28°	067901	1	SKM 1020/6 MICRO
12	25	6	65	26°	067918	1	SKM 1225/6 MICRO



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.





PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Time Saving

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut MICRO EAN 4007220		Description
Shank dia. 3 mm							
3	7	3	37	0.75	835524	1	RBF 0307/3 MICRO
	13	3	43	0.75	955352	1	RBF 0313/3 MICRO
6	13	3	43	1.5	955338	1	RBF 0613/3 MICRO
Shank dia. 6 mm							
6	18	6	55	1.5	835494	1	RBF 0618/6 MICRO
8	20	6	60	1.2	835500	1	RBF 0820/6 MICRO
10	20	6	60	2.5	835517	1	RBF 1020/6 MICRO
12	25	6	65	2.5	953143	1	RBF 1225/6 MICRO

Set 1502 MICRO

Set 1502 MICRO contains ten tungsten carbide burrs for finishing in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

Contents:
10 tungsten carbide burrs,
shank diameter of 3 mm, MICRO cut
1 piece each:

- ZYA 0210/3 MICRO
- ZYA 0313/3 MICRO
- ZYA 0613/3 MICRO
- WRC 0210/3 MICRO
- WRC 0313/3 MICRO
- WRC 0613/3 MICRO
- KUD 0302/3 MICRO
- KUD 0605/3 MICRO
- RBF 0307/3 MICRO
- RBF 0613/3 MICRO

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Time Saving



Cut MICRO EAN 4007220		Description
Shank dia. 3 mm		
896181	1	1502 MICRO



TC burrs for high-performance applications
TC burrs for work on edges

Tungsten carbide burrs for work on edges represent a separate PFERD product line. They are mainly used in steel and aluminium construction and have been specifically designed for chamfering, deburring and rounding of edges. PFERD offers tools for both flexible as well as for defined work on edges.

Materials that can be worked:

- Steel and cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron
- Plastics, other materials

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

Flexible work on edges with the 3, 3 PLUS and 5 cuts and the special cut (SP)

Tungsten carbide burrs for flexible work on edges achieve almost exact chamfers or radii due to their special shapes. They can also be used flexibly in hard-to-reach areas.

Advantages:

- Can be guided freely.
- Extremely flexible for use in hard-to-reach areas.
- Creates almost exact chamfers and radii.

Applications:

- Flexible work on edges
- Flexible chamfering
- Flexible deburring
- Rounding edges
- Countersinking
- Work on hard-to-reach, reverse-side edges

Recommendations for use:

- In exceptional cases, it is possible to work at less than 3,000 RPM. This is preferable for certain stationary applications or when countersinking with 360° use of the burr surface.
- For applications with low stock removal (deburring, chamfering, minor work on surfaces), the rotational speed can be increased by up to 100 %.
- In general, burrs are used counter-rotationally or with a swinging motion. To achieve fine finishes or to achieve very smooth chamfers, pass the tool rapidly over the workpiece in the direction of rotation.

Defined work on edges with the EDGE cut

Tungsten carbide burrs with the EDGE cut have been especially developed for defined work on edges. The special design allows the burr to run directly along the edges without damaging the workpiece. Exact edge shapes can therefore be created in a single step – with either defined chamfers of 30° or 45°, or to a defined radius of 3.0 mm. Among other things, rounding edges is a precautionary measure for anti-corrosion protection according to ISO 12944-3, ISO 8501-3, SOLAS XII/6.3 (Ref. T4/3.01 MSC.1/Circ.1198).

Advantages:

- Special design for precise guidance.
- Safe and comfortable to guide.
- Create exact edge shapes in a single step.

Applications:

- Defined work on edges
- Defined deburring
- Breaking and rounding edges in steel and aluminium construction
- Rounding edges in preparation for the application of anti-corrosion coatings in shipbuilding, on crane systems and other steel constructions which are exposed to corrosion loading
- Defined chamfering for weld seam preparation for V-shaped seams (60°, ISO 9692-1)
- Defined chamfering for edge breaking (45°)

Recommendations for use:

- Use the burrs counterrotationally. In order to produce a fine surface, finally pass them over the edges in the direction of rotation.
- If possible, use EDGE cut burrs with the PFERD compressed-air straight grinder PG 3/210 with matching guide sleeve EFH PG 3/210 (see the info box on the right).

PFERDVALUE:

PFERDEFFICIENCY recommends burrs with EDGE cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



EDGE Cutting System (ECS)



The EDGE Cutting System consists of burrs with the EDGE cut and a special guide sleeve that can be positioned on any conventional drive to ensure optimal guidance during light deburring work (see pages 83–84).

Advantages:

- Improved guidance.
- Can be used with any conventional straight grinder.
- Burr is interchangeable.

Compressed-air straight grinder PG 3/210 DH and accessories

The combination of this compressed-air straight grinder, the specially designed guide sleeve for this drive and burrs with the EDGE cut, guarantees optimal guidance for creating exact edge shapes.

Advantages:

- Improved guidance thanks to additional contact surface.
- Exhaust is discharged towards the front, so that the thermal load on the workpiece and the tool is reduced (this is a particular advantage when working with materials which do not conduct heat well, such as stainless steel (INOX)).
- Avoids the build-up of chip deposits when working on aluminium materials.
- Chips are removed in a targeted way by the drive's exhaust air.

Ordering data:
Compressed-air straight grinder:
EAN 4007220**606315**



Guide sleeve:
EAN 4007220**948897**



Guide plate:
EAN 4007220**967676**



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Select the cut.
❸ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

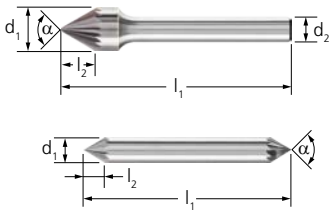
❹ Select the required burr diameter.
❺ The cutting speed range and the burr diameter determine the recommended rotational speed range.



❶ Material group			Application	❷ Cut	❸ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Work on edges	3	450–600 m/min
				3 PLUS	
				SP	
				EDGE	600–900 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Work on edges	3	250–350 m/min
				3 PLUS	
				SP	
				5	350–450 m/min
				EDGE	600–750 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Work on edges	3	250–350 m/min
				3 PLUS	
				SP	
				5	350–450 m/min
Non-ferrous metals	Soft non-ferrous metals	Soft aluminium alloys	Work on edges	EDGE ALU	900–1,100 m/min
		Brass, copper, zinc		3	600–900 m/min
				EDGE	
				3 PLUS	
				SP	
	Hard non-ferrous metals	Bronze, hard aluminium alloys (high Si content)	Work on edges	EDGE ALU	900–1,100 m/min
				3	250–450 m/min
				3 PLUS	
		Titanium/titanium alloys	Work on edges	EDGE	
				SP	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Work on edges	5	350–600 m/min
				EDGE	250–450 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Work on edges	3	450–600 m/min
				3 PLUS	
				SP	
				EDGE	600–900 m/min
Plastics, other materials	Fibre-reinforced plastics (GRP/CRP), thermoplastics		Work on edges	EDGE ALU	750–1,100 m/min

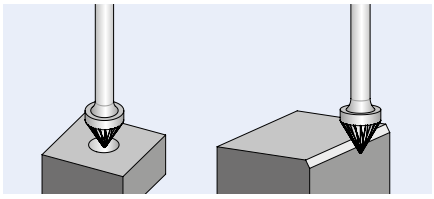
Example:
TC burr,
EDGE cut,
burr dia. of 16 mm.
Machining steels up to 1,200 N/mm².
Cutting speed: 600–900 m/min
Rotational speed range:
12,000–18,000 RPM

❹ Burr dia. [mm]	❺ Cutting speeds [m/min]						
	250	350	450	600	750	900	1,100
	Rotational speeds [RPM]						
3	27,000	37,000	48,000	64,000	80,000	95,000	117,000
6	13,000	19,000	24,000	32,000	40,000	48,000	59,000
8	10,000	14,000	18,000	24,000	30,000	36,000	44,000
10	8,000	11,000	14,000	19,000	24,000	29,000	35,000
12	7,000	9,000	12,000	16,000	20,000	24,000	30,000
13	6,000	9,000	11,000	15,000	18,000	22,000	27,000
16	5,000	7,000	9,000	12,000	15,000	18,000	22,000



Conical counterbore shape KSJ and conical counterbore shape KSJ (double-ended)

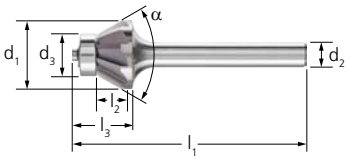
Conical counterbore burr according to DIN 8032 with cut conforming to DIN 8033, with point angle (60°). The KSJ 0605/6 (double-ended) type is cut and usable on both sides. Suitable for flexible counterboring and chamfering.



Recommendations for use:
- Information on the characteristics of the available cuts can be found on page 12.

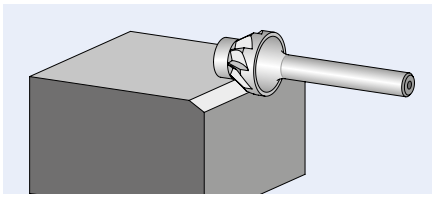
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3	Cut 5		Description
					EAN 4007220			
Shank dia. 6 mm								
6	5	6	50	60°	047552	-	1	KSJ 0605/6 Z ...
10	8	6	53	60°	047576	-	1	KSJ 1008/6 Z ...
16	13	6	56	60°	047491	047507	1	KSJ 1613/6 Z ...



Conical counterbore shape KSJ EDGE

Conical counterbore burr for the production of precisely defined chamfers. Suitable for counterboring and chamfering of defined 30° chamfer angles.



Ordering notes:
- Please complete the description with the desired cut.

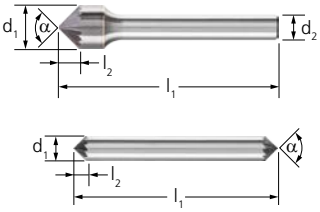
PFERDVALUE:

Time Saving | Energy Saving

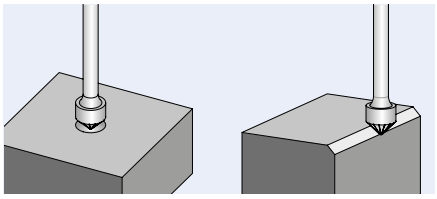
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	α	Cut EDGE	Cut EDGE ALU		Description
							EAN 4007220			
Shank dia. 6 mm										
16	5	6	54	10	14	60°	952443	098011	1	KSJ 1605/6 ... 30°



Conical counterbore shape KSK and conical counterbore shape KSK (double-ended)



Conical counterbore burr according to DIN 8032 with cut conforming to DIN 8033, with angle (90°). The KSK 0603/6 (double-ended) type is cut and usable on both sides. Suitable for flexible counterboring and chamfering.

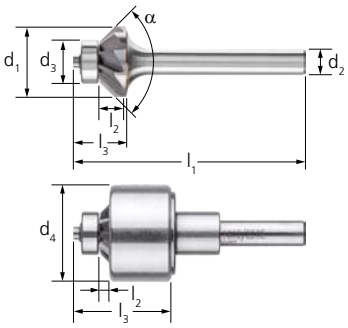


Recommendations for use:
- Information on the characteristics of the available cuts can be found on page 12.

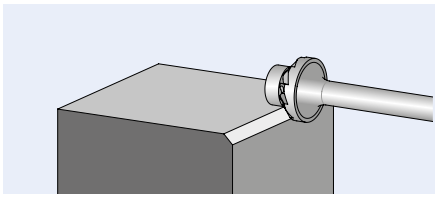
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3	Cut 5		Description
					EAN 4007220			
Shank dia. 6 mm								
6	3	6	50	90°	047569	-	1	KSK 0603/6 Z ...
10	5	6	50	90°	047583	-	1	KSK 1005/6 Z ...
16	8	6	53	90°	047521	047545	1	KSK 1608/6 Z ...

Conical counterbore shape KSK EDGE



Conical counterbore burr for the production of precisely defined chamfers. Suitable for counterboring and chamfering of defined 45° chamfer angles. The chamfers created using the EDGE Cutting System (ECS) are 1.2 mm (+/- 0.2 mm) wide.



Ordering notes:
- The EDGE Cutting System (ECS) burr can be reordered and replaced if required. Matching burr: KSK 1603/6 EDGE ALU 45°.
- Please complete the description with the desired cut.

PFERDVALUE:

TimeSaving EnergySaving

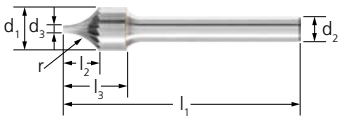
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	d_4 [mm]	α	Cut EDGE	Cut EDGE ALU		Description
								EAN 4007220			
Shank dia. 6 mm											
16	3	6	52	10	12	-	90°	952436	098004	1	KSK 1603/6 ... 45°
	1	6	52	10	24	25	90°	097984	097991	1	KSK 1603/6 ... 45° ECS





TC burrs for high-performance applications
For flexible and defined work on edges

V 1015/6



V 1215/6

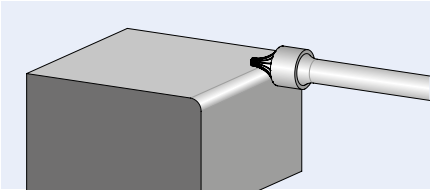


V 1315/6

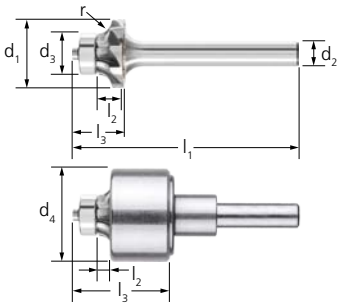


Concave radius burrs V

Concave radius burrs with concave end shape, cut conforming to DIN 8033. Cannot be re-sharpened. Suitable for the production and processing of outer radii and rounded edges.

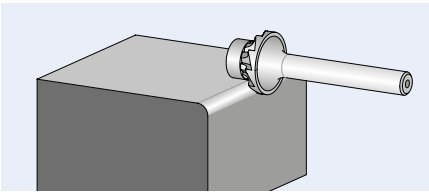


d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	r [mm]	r_1 [mm]	Cut 3		Description
								EAN 4007220		
Shank dia. 6 mm										
10	8	6	55	2	15	10.0	-	049174	1	V 1015/6 Z3
12	7	6	55	6	15	10.0	-	049204	1	V 1215/6 Z3
13	10	6	55	3	15	10.0	1.5	049198	1	V 1315/6 Z3



Concave radius burrs V EDGE

Concave radius burrs for the production of precise radii. Cannot be re-sharpened. Suitable for the production and processing of 3 mm outer radii.



Ordering notes:

- The EDGE Cutting System (ECS) burr can be reordered and replaced if required. Matching burr: V 1612/6 EDGE R3,0.

PFERDVALUE:

Time Saving | Energy Saving

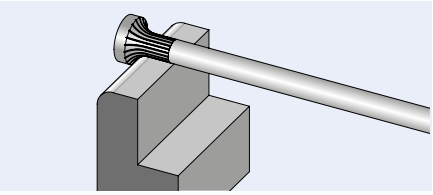
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	d_4 [mm]	r [mm]	Cut EDGE		Description
								EAN 4007220		
Shank dia. 6 mm										
16	3	6	52	10	12	-	3.0	952412	1	V 1612/6 EDGE R3,0
					24	25	3.0	098028	1	V 1612/6 EDGE R3,0 ECS





Radius burrs R

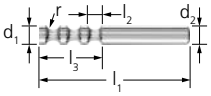
Radius burrs with a concave shape and special cut. Suitable for the production and processing of outer radii and rounded edges. Cannot be re-sharpened.



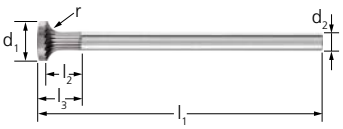
Ordering notes:

- Two types are available: Cylindrical with triple concave contour; or concave shape, tapered towards shank.

R 0625/6
R 0830/8



R 1618/8



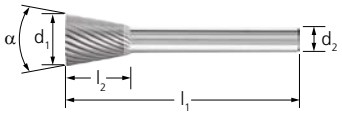
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	l_3 [mm]	r [mm]	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 6 mm								
6	5	6	65	25	3.0	952016	1	R 0625/6 SP
Shank dia. 8 mm								
8	5	8	65	27	3.0	049150	1	R 0830/8 SP
16	12	8	118	18	6.0	049167	1	R 1618/8 SP



The PFERD product range includes numerous tools which are suitable for work on edges. We have compiled these special solutions for you in our FOCUS brochure. Please contact us for further details.

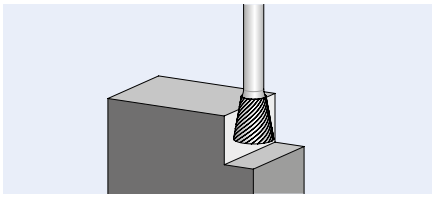


TC burrs for high-performance applications
For flexible and defined work on edges



Inverted cones WKN without end cut

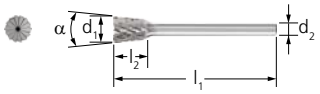
Inverted cone-shaped burr, tapered towards the shank according to DIN 8032 with cut conforming to DIN 8033. Suitable for work on hard-to-reach, reverse-side edges.



Recommendations for use:
- Information on the characteristics of the available cuts can be found on page 12.

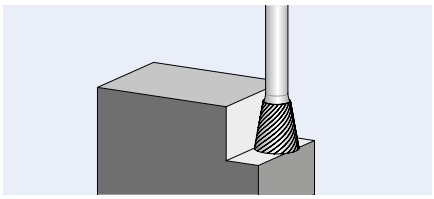
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3	Cut 3 PLUS	Cut 5		Description
					EAN 4007220				
Shank dia. 3 mm									
3	7	3	37	8°	-	233863	233870	1	WKN 0307/3 Z ...
6	7	3	37	10°	-	233887	233894	1	WKN 0607/3 Z ...
Shank dia. 6 mm									
10	13	6	53	10°	049211	-	-	1	WKN 1013/6 Z ...
12	13	6	53	20°	049235	-	-	1	WKN 1213/6 Z ...
16	13	6	53	20°	049242	-	-	1	WKN 1613/6 Z ...



Inverted cones WKNS with end cut

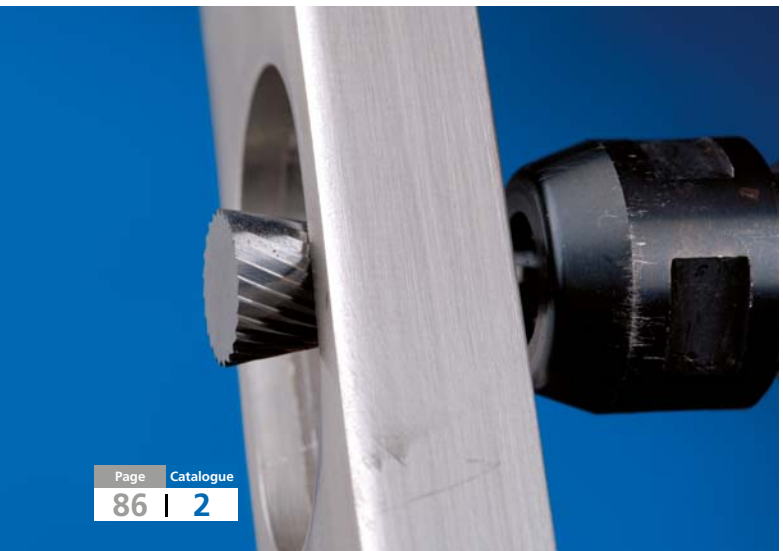
Inverted cone-shaped burr, tapered towards the shank according to DIN 8032 with cut conforming to DIN 8033. Shape WKNS with end cut. Suitable for work on hard-to-reach, reverse-side edges.

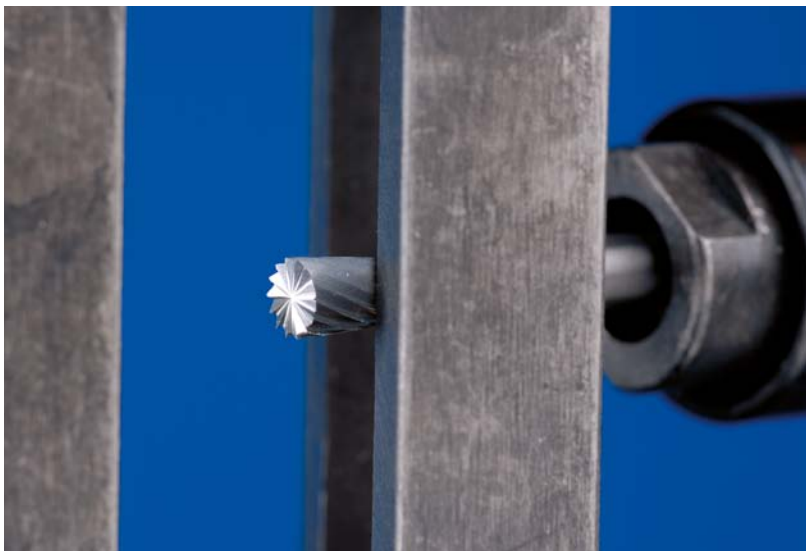


Recommendations for use:
- Information on the characteristics of the available cuts can be found on page 12.

Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3 PLUS	Cut 5		Description
					EAN 4007220			
Shank dia. 3 mm								
3	7	3	37	8°	049716	049709	1	WKNS 0307/3 Z ...
6	7	3	37	10°	049730	049723	1	WKNS 0607/3 Z ...





PFERD

HSS rotary cutters



HSS rotary cutters
For fine and coarse stock removal

HSS rotary cutters have a special tooth geometry and ensure high quality. They can also be used cost-effectively with low-power tool drives at low rotational speeds.

Advantages:

- Highly aggressive.
- Can be used at low rotational speeds.
- Very robust tooth cutting edges due to the toughness of the high-speed steel (HSS).

Materials that can be worked:

- Steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Applications:

- Deburring
- Machining contours
- Machining edges (chamfering, rounding)
- Milling out
- Work on weld seams
- Cutting out holes
- Levelling

Recommendations for use:

- Use HSS rotary cutters if your drive unit does not allow for high rotational speeds.
- When used on soft materials, HSS rotary cutters can be an economical alternative to tungsten carbide burrs.
- In contrast to tungsten carbide burrs, HSS rotary cutters need to be used with lower rotational speeds.
- The recommended rotational speeds and cutting speeds for the 3 cut can be used for HSS rotary cutters with a special cut.
- Antenna burrs and light-metal burrs are an exception to this. The specific rotational speeds and cutting speeds for these tools can be found on pages 96–97.
- If the smallest area of the burr diameter is being used, the recommended rotational speed can be increased accordingly.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot
- Machine tools

Safety notes

 = Wear eye protection!

 = Wear hearing protection!

 = Wearing protective gloves is recommended. Handle the tool drive with both hands.

 = Observe the recommended rotational speed, especially when using burrs with long shanks!

ALU cut



- Machining of soft non-ferrous metals, brass, copper, aluminium alloys, plastics, fibre-reinforced plastics and rubber.
- Rotational speed range of 4,000 to 6,000 RPM depending on the burr diameter.

1 cut



- Machining of steel, cast steel and stainless steel (INOX).
- Rotational speed range of 1,200 to 23,900 RPM depending on the burr diameter.

2 cut with chip breaker

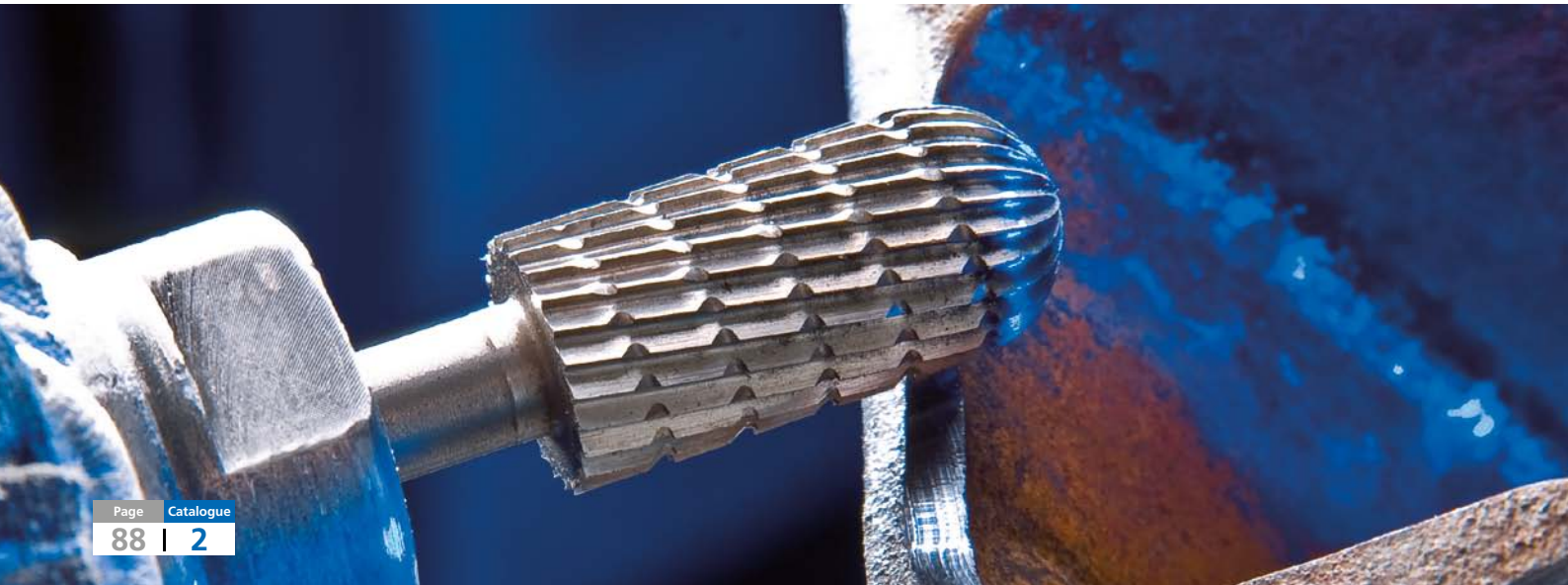


- Machining of steel, cast steel and cast iron.
- Finishing work, e.g. deburring steel, cast steel and cast iron, non-ferrous metals and plastics.
- Rotational speed range of 1,200 to 13,200 RPM depending on the burr diameter.

Z3 cut with chip breaker



- Machining of steel, cast steel and cast iron.
- Finishing work, e.g. deburring steel, cast steel and cast iron.
- Rotational speed range of 1,200 to 7,900 RPM depending on the burr diameter.



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

❶ Select the material group to be machined.
❷ Determine the type of application.
❸ Select the cut.
❹ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

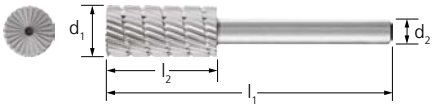
❺ Select the required burr diameter.
❻ The cutting speed range and the burr diameter determine the recommended rotational speed range.

❶ Material group			❷ Application	❸ Cut	❹ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Coarse stock removal	2	60–80 m/min
				3	
				SP	
			Fine stock removal	3	80–100 m/min
				SP	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	1	60–80 m/min
			Fine stock removal	1	80–100 m/min
				2	60–80 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys, brass, copper, zinc	Coarse stock removal	ALU	200–300 m/min
				1	
			Fine stock removal	2	200–250 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Coarse stock removal	2	60–80 m/min
				3	
				SP	
			Fine stock removal	3	80–100 m/min
				SP	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		Coarse stock removal	ALU	200–300 m/min
				1	
			Fine stock removal	1	250–300 m/min
				2	200–250 m/min

Example:
HSS rotary cutter,
2 cut,
cutter dia. of 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Cutting speed: 60–80 m/min
Rotational speed range: 1,600–2,200 RPM

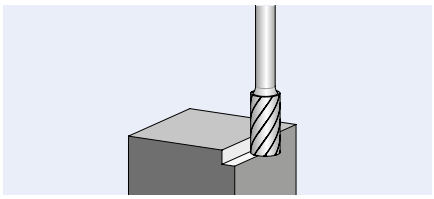
❺ Burr dia. [mm]	❻ Cutting speeds [m/min]					
	60	80	100	200	250	300
	Rotational speeds [RPM]					
1.6	12,000	16,000	19,900	39,800	49,800	59,700
2.3	8,400	11,100	13,900	27,700	34,600	41,600
3.2	6,000	8,000	10,000	19,900	24,900	29,900
4.0	4,800	6,400	8,000	16,000	19,900	23,900
5.0	3,900	5,100	6,400	12,800	16,000	19,100
6.0	3,200	4,300	5,400	10,700	13,300	16,000
7.0	2,800	3,700	4,600	9,100	11,400	13,700
8.0	2,400	3,200	4,000	8,000	10,000	12,000
10.0	2,000	2,600	3,200	6,400	8,000	9,600
12.0	1,600	2,200	2,700	5,400	6,700	8,000
14.0	1,400	1,900	2,300	4,600	5,700	6,900
16.0	1,200	1,600	2,000	4,000	5,000	6,000

HSS rotary cutters
For fine and coarse stock removal



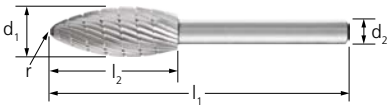
Cylindrical shape with end cut A-ST

Cylindrical rotary cutter with end cut.



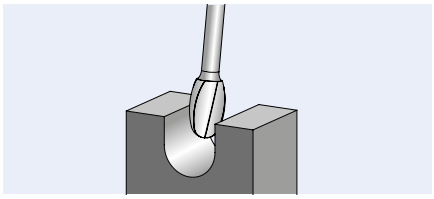
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALU	Cut 1	Cut 2	Cut 3		Description
				EAN 4007220					
Shank dia. 6 mm									
4	13	6	60	-	-	-	058596	5	HSS A 0413ST/6 Z ...
6	16	6	60	-	058602	058619	058626	5	HSS A 0616ST/6 Z ...
8	20	6	60	-	-	-	058640	5	HSS A 0820ST/6 Z ...
10	13	6	53	-	058657	058664	058671	5	HSS A 1013ST/6 Z ...
	20	6	60	-	-	-	058695	5	HSS A 1020ST/6 Z ...
12	25	6	65	-	058701	058718	058725	5	HSS A 1225ST/6 Z ...
16	25	6	65	801345	-	058756	058763	5	HSS A 1625ST/6 Z ...

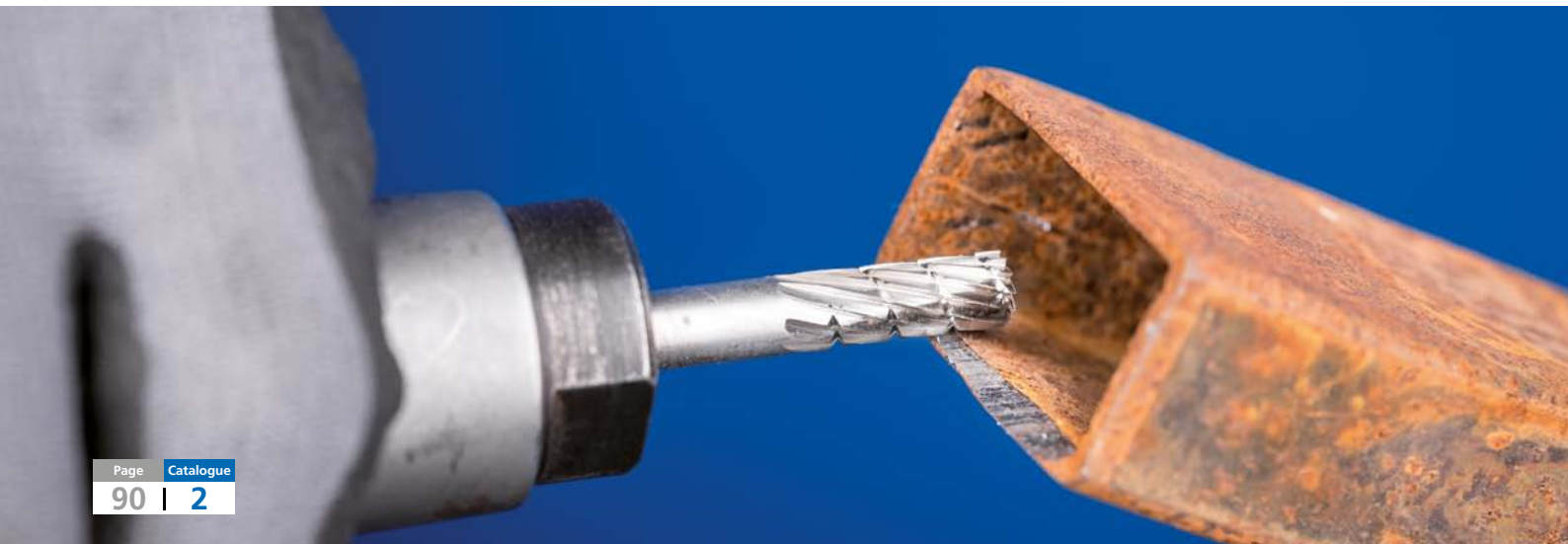


Flame shape B

Flame-shaped rotary cutter.

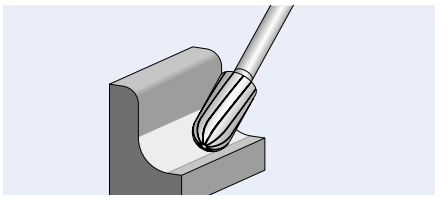


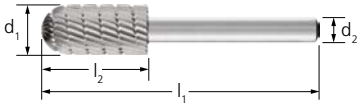
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut 3		Description
					EAN 4007220		
Shank dia. 6 mm							
8	20	6	60	1.5	058787	5	HSS B 0820/6 Z3
12	30	6	70	2.0	058794	5	HSS B 1230/6 Z3
16	35	6	75	2.6	058800	5	HSS B 1635/6 Z3



Cylindrical shape with radius end C

Cylindrical rotary cutter with radius end.





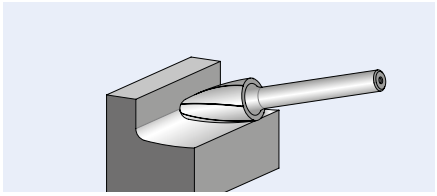
Ordering notes:

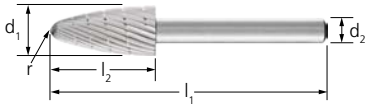
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALU	Cut 1	Cut 2	Cut 3		Description
				EAN 4007220					
Shank dia. 6 mm									
6	16	6	60	-	058824	058831	058848	5	HSS C 0616/6 Z ...
8	20	6	60	-	-	-	058879	5	HSS C 0820/6 Z ...
10	20	6	60	-	-	-	058893	5	HSS C 1020/6 Z ...
12	25	6	65	-	058909	058916	058923	5	HSS C 1225/6 Z ...
16	25	6	65	058947	-	-	058961	5	HSS C 1625/6 Z ...

Tree shape with radius end H

Tree-shaped rotary cutter with radius end.



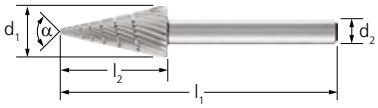


d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut 3		Description
					EAN 4007220		
Shank dia. 6 mm							
6	18	6	60	1.5	059319	5	HSS H 0618/6 Z3
8	20	6	60	1.2	059326	5	HSS H 0820/6 Z3
10	20	6	60	2.5	059333	5	HSS H 1020/6 Z3
12	25	6	65	2.5	059357	5	HSS H 1225/6 Z3
16	30	6	70	3.6	059364	5	HSS H 1630/6 Z3



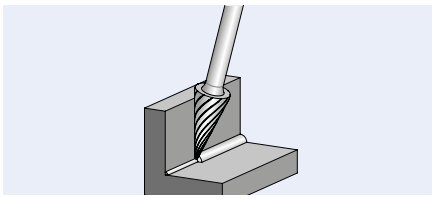


HSS rotary cutters
For fine and coarse stock removal



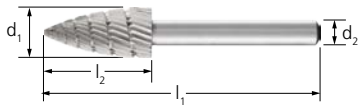
Conical pointed shape G

Conical pointed rotary cutter, flattened tip.



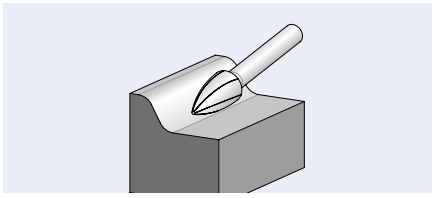
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 1	Cut 2	Cut 3		Description
					EAN 4007220				
Shank dia. 6 mm									
6	18	6	60	14°	-	-	059210	5	HSS G 0618/6 Z ...
10	20	6	60	28°	059234	059241	059258	5	HSS G 1020/6 Z ...
12	25	6	65	27°	059272	059289	059296	5	HSS G 1225/6 Z ...



Pointed tree shape K

Pointed tree-shaped rotary cutter, flattened tip.



Ordering notes:
- Please complete the description with the desired cut.

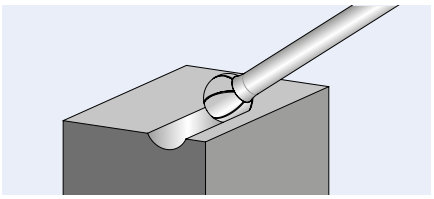
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut ALU	Cut 1	Cut 2	Cut 3		Description
					EAN 4007220				
Shank dia. 6 mm									
6	18	6	60	-	-	059388	059395	5	HSS K 0618/6 Z ...
10	20	6	60	-	-	-	059425	5	HSS K 1020/6 Z ...
12	25	6	65	-	059432	-	059456	5	HSS K 1225/6 Z ...
	30	6	70	-	059470	059487	059494	5	HSS K 1230/6 Z ...
16	30	6	70	059517	-	059524	059531	5	HSS K 1630/6 Z ...



Ball shape F

Ball-shaped rotary cutter.



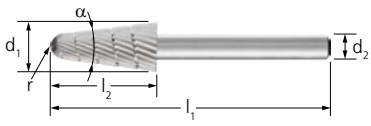


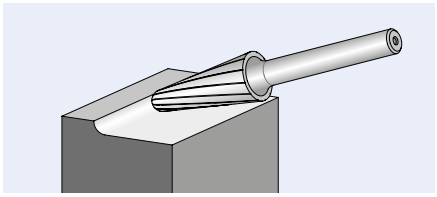
Ordering notes:
- Please complete the description with the desired cut.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut 1	Cut 2	Cut 3		Description
				EAN 4007220				
Shank dia. 6 mm								
4	3	6	55	-	-	058992	5	HSS F 0403/6 Z ...
6	5	6	55	-	-	059029	5	HSS F 0605/6 Z ...
8	7	6	55	059043	059050	059067	5	HSS F 0807/6 Z ...
10	9	6	49	-	-	059098	5	HSS F 1009/6 Z ...
12	10	6	51	059111	-	059135	5	HSS F 1210/6 Z ...
16	14	6	54	059159	059166	059173	5	HSS F 1614/6 Z ...

Conical shape with radius end L

Conical rotary cutter with radius end.





Ordering notes:
- Please complete the description with the desired cut.

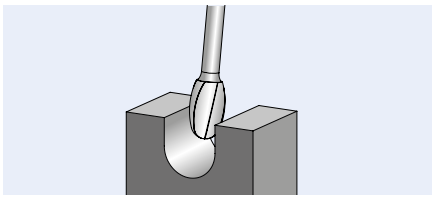
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	r [mm]	Cut ALU	Cut 3		Description
						EAN 4007220			
Shank dia. 6 mm									
10	20	6	60	14°	2.9	-	059579	5	HSS L 1020/6 Z ...
12	25	6	65	14°	3.3	-	059593	5	HSS L 1225/6 Z ...
	30	6	70	14°	2.6	-	059609	5	HSS L 1230/6 Z ...
16	30	6	70	14°	4.8	059616	059630	5	HSS L 1630/6 Z ...





Oval shape O

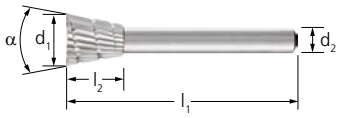
Oval rotary cutter.



Ordering notes:
- Please complete the description with the desired cut.

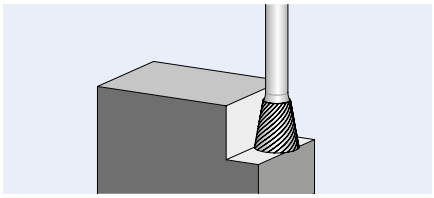
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut ALU	Cut 1	Cut 3		Description
							EAN 4007220		
Shank dia. 6 mm									
6	10	6	55	2.8	-	-	059678	5	HSS O 0610/6 Z ...
10	16	6	56	4.0	-	-	059692	5	HSS O 1016/6 Z ...
12	20	6	60	5.0	-	059708	059722	5	HSS O 1220/6 Z ...
16	25	6	65	6.5	059746	-	059760	5	HSS O 1625/6 Z ...





Inverted cone with end cut W-ST

Inverted cone-shaped rotary cutter, tapered towards the shank, with end cut.



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3		Description
						EAN 4007220	
Shank dia. 6 mm							
12	13	6	53	20°	059784	5	HSS W 1213ST/6 Z3



Set 81 HSS



Set 81 HSS contains 10 HSS rotary cutters in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.

Contents:
10 HSS rotary cutters, shank diameter of 6 mm, cut 3, 1 piece each:

- HSS A 0616ST/6 Z3
- HSS A 1013ST/6 Z3
- HSS A 1225ST/6 Z3
- HSS C 0616/6 Z3
- HSS C 1225/6 Z3
- HSS K 0618/6 Z3
- HSS K 1230/6 Z3
- HSS K 1630/6 Z3
- HSS F 1210/6 Z3
- HSS L 1630/6 Z3

Cut		Description
3 		
EAN 4007220		
Shank dia. 6 mm		
060957	1	81 HSS

Set 82 HSS



Set 82 HSS contains 10 HSS rotary cutters in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.
The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.

Contents:
10 HSS rotary cutters, shank diameter of 6 mm, cut 3, 1 piece each:

- HSS A 1013ST/6 Z3
- HSS A 1625ST/6 Z3
- HSS K 1630/6 Z3
- HSS F 1614/6 Z3
- HSS G 1020/6 Z3
- HSS L 1020/6 Z3
- HSS L 1630/6 Z3
- HSS O 1625/6 Z3
- HSS W 1213ST/6 Z3
- HSS 45/6 Z3

Cut		Description
3 		
EAN 4007220		
Shank dia. 6 mm		
060988	1	82 HSS

Set 83 HSS



Set 83 HSS contains 18 HSS rotary cutters in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

Contents:
18 HSS rotary cutters, shank diameter of 6 mm, cut 3, 1 piece each:

- HSS A 0616ST/6 Z3
- HSS A 1225ST/6 Z3
- HSS C 0616/6 Z3
- HSS C 1225/6 Z3
- HSS K 0618/6 Z3
- HSS K 1225/6 Z3
- HSS K 1230/6 Z3
- HSS F 0403/6 Z3
- HSS F 0807/6 Z3
- HSS F 1210/6 Z3
- HSS F 1614/6 Z3
- HSS G 0618/6 Z3
- HSS G 1225/6 Z3
- HSS O 0610/6 Z3
- HSS O 1220/6 Z3
- HSS 55/6 Z3
- HSS 63/6 Z3
- HSS 64/6 Z3

Cut		Description
3 		
EAN 4007220		
Shank dia. 6 mm		
060995	1	83 HSS

HSS 45/6



HSS 55/6



HSS 63ST/6



HSS 64/6



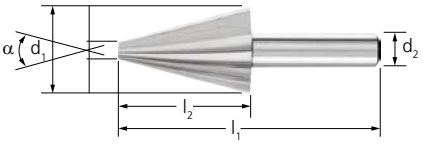
Special shapes shank dia. 6 mm

Rotary cutters in 4 special shapes with a shank diameter of 6 mm. Perfectly suited to diverse milling work due to their different shapes.

Explanation of the code system:

d_1 = rotary cutter diameter
l_2 = cut length
d_2 = shank diameter
l_1 = total length
α = angle

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut 3  EAN 4007220		Description
Shank dia. 6 mm							
12	18	6	58	-	056035	5	HSS 45/6 Z3
6	20	6	60	-	056424	5	HSS 55/6 Z3
12	30	6	70	7°	056738	5	HSS 63ST/6 Z3
				-	056776	5	HSS 64/6 Z3



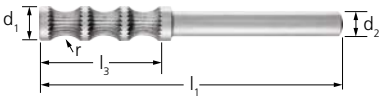
HSS antenna cutter

Conical cutter with special cut and a shank diameter of 8 mm. For stepless milling and enlarging bores and holes, e.g. antenna mounting holes in a car body.

Recommendations for use:

- Rotational speed range for drilling: 200–500 RPM.
- Max. 9,000 RPM when using the smallest burr diameter, e.g. for sheet edge work.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_1 min [mm]	α	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 6 mm								
20	30	8	60	4	31°	057902	1	HSS 104/8 SP



HSS edge trimming cutter

Due to their 3 identical cutting areas, this HSS edge trimming cutter provides three milling areas. Cylindrical rotary cutter with triple, concave contour and special cut, with a shank diameter of 6 mm. Suitable for edge breaking to a defined radius.

Recommendations for use:

- Cutting speed range of 60–80 m/min, rotational speed range of 3,100–4,200 RPM
- Max. 9,000 RPM when using the smallest burr diameter, e.g. for sheet edge work.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 6 mm							
8	30	6	70	5.0	057964	1	HSS 156/6 SP

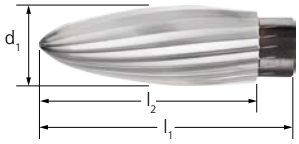
HSS aluminium cutters with female thread

Multi-purpose rotary cutters for use on light metals, similar to the tree shape.
Available in two different special cuts, with female thread M10.

Recommendations for use:
- For work on soft non-ferrous metals: Cutting speed range of 200–300 m/min, rotational speed range of 3,100–4,700 RPM.
- For work on aluminium, up to max. 9,000 RPM.

Ordering notes:
- HSS 120 is supplied with chip breaker.

HSS 119



HSS 120

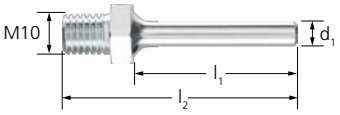


d_1 [mm]	l_1 [mm]	l_2 [mm]	Female thread DIN	Suitable arbors	Cut / Special cut (SP) / EAN 4007220		Description
20	62	53	M10	BO 6/10, BO 8/10	057919	1	HSS 119 M10 SP
	54	45	M10	BO 6/10, BO 8/10	057926	1	HSS 120 M10 SP

Arbors

Arbor for tools with female thread

Suitable for tools with female thread M10.



d_1 [mm]	l_1 [mm]	l_2 [mm]	Thread	Suitable for	EAN 4007220		Description
6	40	57	M10	HSS 119, HSS 120	062111	1	BO 6/10 M10
8	40	57	M10	HSS 119, HSS 120	062128	1	BO 8/10 M10

HSS engraving cutters

HSS engraving cutters

Suitable for fine stock removal in small and hard-to-reach places.
Available with special cut and in various shapes and dimensions.

Explanation of the code system:
d_1 = rotary cutter diameter
l_2 = cut length
d_2 = shank diameter
l_1 = total length
α = angle

301/6



305/6



306/6



311/6



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut / Special cut (SP) / EAN 4007220		Description
Shank dia. 6 mm							
3	2.7	6	60	-	057971	5	301/6 SP
	4.5	6	60	-	058015	5	305/6 SP
	4.5	6	60	34°	058022	5	306/6 SP
6	5.6	6	60	-	058077	5	311/6 SP





906 908 911 922 923 924 925 926 928

906–928

Tools designed specifically for fine stock removal.

Available with special cut, 9 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.

Explanation of the code system:

d_1 = rotary cutter diameter
l_2 = cut length
d_2 = shank diameter
l_1 = total length
α = angle

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 3 mm							
6	4.2	3	34.2	71°	058190	5	906/3 SP
8	5.6	3	35.6	71°	058213	5	908/3 SP
1.6	2.8	3	32.8	28°	058244	5	911/3 SP
2.3	4	3	34	29°	058251	5	922/3 SP
3.2	5.6	3	35.6	30°	058268	5	923/3 SP
4.2	7	3	37	32°	058275	5	924/3 SP
5.2	8.7	3	38.7	32°	058282	5	925/3 SP
6.2	10.5	3	40.5	32°	058299	5	926/3 SP
8.2	14	3	44	32°	058312	5	928/3 SP



941 942 943 944 945 946 947 948



951 952 953 954

941–954

Tools designed specifically for fine stock removal.

Available with special cut, 12 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.

Explanation of the code system:

d_1 = rotary cutter diameter
l_2 = cut length
d_2 = shank diameter
l_1 = total length
r = radius

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 3 mm							
1.6	1.4	3	31.4	-	058329	5	941/3 SP
2.3	1.7	3	31.7	-	058336	5	942/3 SP
3.2	2.2	3	32.2	-	058343	5	943/3 SP
4	2.9	3	32.9	-	058350	5	944/3 SP
5	4.4	3	34.4	-	058367	5	945/3 SP
6	5	3	35	-	058374	5	946/3 SP
7	6	3	36	-	058381	5	947/3 SP
8	7	3	37	-	058398	5	948/3 SP
	2	3	32	9.5	058404	5	951/3 SP
10	2.5	3	32.5	11.5	058411	5	952/3 SP
12	3	3	33	14.0	058428	5	953/3 SP
14	3.5	3	33.5	15.5	058435	5	954/3 SP

961–987

Tools designed specifically for fine stock removal.

Available with special cut, 10 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.

Explanation of the code system:

d_1 = rotary cutter diameter
l_2 = cut length
d_2 = shank diameter
l_1 = total length
α = angle
r = radius

Ordering notes:

- HSS finishing cutters 987 are supplied with a chip breaker.



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	α	Cut Special cut (SP) EAN 4007220		Description
Shank dia. 3 mm								
8	2	3	32	1.1	-	058442	5	961/3 SP
10	2.3	3	32.3	1.15	-	058459	5	962/3 SP
12	2.6	3	32.6	1.3	-	058466	5	963/3 SP
14	3	3	33	1.5	-	058473	5	964/3 SP
6	1	3	31	-	-	058480	5	971/3 SP
8	1	3	31	-	-	058497	5	972/3 SP
10	1	3	31	-	-	058503	5	973/3 SP
7	10	3	40	1.9	22°	058534	5	979/3 SP
6	10	3	40	-	-	058572	5	986/3 SP
7	12	3	42	-	-	058589	5	987/3 SP

Set 84 HSS

Set 84 HSS contains 15 HSS finishing cutters for fine stock removal in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage. The tools are suitable for fine stock removal in small and hard-to-reach places.

Contents:

15 HSS finishing cutters,
shank diameter of 3 mm, special cut
1 piece each:

- 923
- 928
- 943
- 946
- 952
- 924
- 941
- 944
- 947
- 954
- 926
- 942
- 945
- 951
- 973



Cut Special cut (SP) EAN 4007220		Description
Shank dia. 3 mm		
061008	1	84 HSS

Products made to order
Customer-specific tool solution

As a tool manufacturer with over 200 years of experience, PFERD can call on comprehensive expertise in the manufacture of tool solutions. The findings from our internal research and development, as well as from day-to-day practice on site with our customers, contribute to the development of each individual PFERD tool. Our production plant in Marienheide, Germany, works with state-of-the-art technology and there are many ways in which we can respond to individual needs.

Our range of custom-made PFERD tools comprises also solid carbide milling cutters.



1. Process analysis and tool development

Make an appointment with our experienced sales representatives and technical advisers.
You can find our worldwide sales addresses at www.pferd.com.

Our employees will **analyse your application with you on-site** and develop the most economic individual tool solution for you! You will then receive a quote.

2. Production

Our production teams subsequently create a technical drawing with which your made-to-order product will be produced.

Each burr is supplied **in premium PFERD quality**. We always work to the highest standards, from the inspection of raw materials, through inspections during the course of production by our staff, up to the final visual inspection of each individual burr.

The quality of PFERD tools is certified according to ISO 9001.

3. Use

Our flexible production and global logistics network ensure that you receive your new tool on time.

Our sales representatives will be happy to help if you have any further questions relating to the optimization of your applications or to the improvement of the working environment.

See the quality, performance and economic value of PFERD tools for yourself!



Milling tools with cutting inserts

2



Milling tools with cutting inserts
ALUMASTER High Speed Disc

The innovative **ALU**MASTER High Speed Disc is a unique tool with an extremely high stock removal rate which has been developed especially for use on angle grinders. It is ideal for processing aluminium as it does not generate hazardous or explosive dust. It consists of ten specially developed tungsten carbide cutting inserts, which are fixed to the very light, but extremely robust GRP disc.

Advantages:

- Can be used on angle grinders (diameter of 115/125 mm).
- Does not generate hazardous or explosive dust.
- An extraction system is not required.
- Cost-effective and eco-friendly alternative to reinforced grinding wheels and flap discs of comparable weight.
- Innovative, light yet robust cut geometry with integrated depth gauge for:
  - The highest degree of safety
  - Extreme durability
  - Comfortable work.
- Specially developed, turnable and replaceable tungsten carbide cutting inserts.
- Exceptionally high stock removal rate.

Materials that can be worked:

- Aluminium alloys
- Brass, copper, zinc
- Plastics
- Fibre-reinforced duroplastics (GRP, CRP)

Applications:

- Milling out
- Work on weld seams
- Work on fillet welds
- Work on edges/chamfering
- Surface work

Recommendations for use:

- The tool has primarily been designed for use on aluminium, wrought aluminium alloys and cast aluminium. Non-ferrous metals with a relatively low strength and fibre-reinforced plastics can also be machined. This must be checked for the specific application on a case-by-case basis.
- To maximize cost-effectiveness, preferably use the tool on compressed-air angle grinders with a power output of 1,000 watts or more, or electric angle grinders with a rated output of 1,400 watts or more.
- Do not exert unnecessarily high forces on the angle grinder. The **ALU**MASTER High Speed Disc already works with low forces. The weight of the angle grinder is enough.
- Use the **ALU**MASTER HSD-F at an angle of 5–30°, or up to 60° in special cases.
- Do not push the tool deep into the workpiece. The milling disc is not a cutting tool.
- When machining workpiece edges, cut along the edge, never across the edge.
- Do not decelerate the tool on the workpiece. The cutting inserts may break.

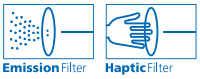
Industries:

- Shipbuilding and yacht construction
- Wagon construction
- Silo and container construction
- Vehicle construction



PFERDVALUE:

PFERDERGONOMICS recommends **ALU**MASTER and **ALU**MASTER HICOAT High Speed Discs as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



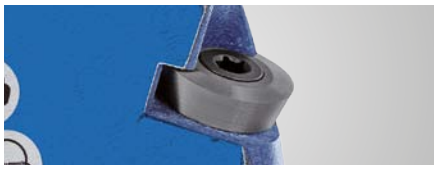
PFERDEFFICIENCY recommends **ALU**MASTER and **ALU**MASTER HICOAT High Speed Discs for long fatigue-free and resource-saving work with perfect results in a very short period of time.





ALUMASTER with HICOAT coating

PFERD also offers the cutting inserts with a premium-quality HICOAT coating for lubricating aluminium casting alloys with a silicon content of 5–10 %, abrasive aluminium casting alloys with a silicon content of over 15 % and for other abrasive materials or non-ferrous metals. This prevents tool clogging and abrasive wear, even in use on these particularly demanding materials.



Advantages:

- Extremely hard.
- Very low friction coefficient.
- Very low tendency towards adhesion.
- Improved surface quality.
- Reduced burr formation.

Materials that can be worked:

- Lubricating aluminium casting alloys with silicon contents of 5–10 %
- Sticky, greasy materials
- Abrasive aluminium casting alloys with silicon contents of > 15 %
- Abrasive materials such as fibre-reinforced plastics (FRP)
- Non-ferrous alloys of higher strength than aluminium (bronze, brass, etc.)

Selecting suitable cutting inserts:

To determine the most suitable cutting insert, please proceed as follows:

❶ Select the material group to be machined.
❷ Select the cutting inserts.

❶ Material group			❷ Cutting inserts	
			High-performance application	Universal application
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	HICOAT	uncoated
		Brass, copper, zinc	HICOAT	uncoated
	Hard non-ferrous metals	Hard aluminium alloys (high Si content)	HICOAT	-
		Bronze	HICOAT	-
Plastics	Fibre-reinforced plastics (GRP/CRP), thermoplastics		HICOAT	-

Safety notes:

- It is essential to tighten the flange nut using the appropriate tool, such as a face pin wrench. Clamping systems which are designed to be tightened without the use of an additional tool, i.e. which are tightened by hand, are not permissible. Suitable clamping nuts can be found in catalogue section 9.
- Tighten the mounting bolts of the cutting inserts using the Torx key provided. If used properly, it is designed to provide a tightening torque of around 4 Nm. Alternatively, use a torque spanner with a tightening torque of 4 Nm.
- Loose cutting inserts may break during use. Therefore, **check regularly whether they are attached securely**.
- Do not use damaged cutting inserts! They may break!
- Only use original accessories from PFERD.

CE = CE-marked

= Do not use if damaged!

= Do not use for cutting!

= Wear eye protection!

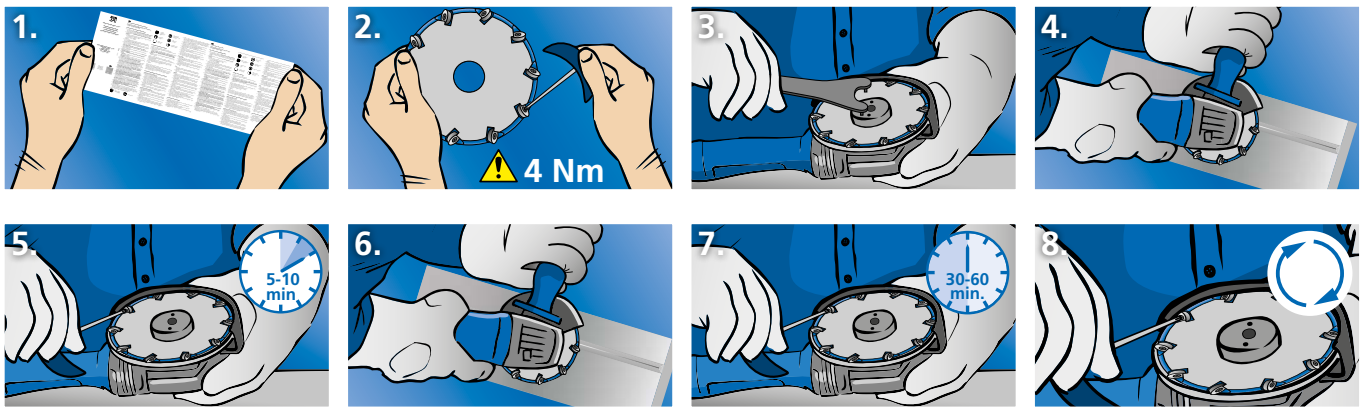
= Wear gloves!

= Wear hearing protection!

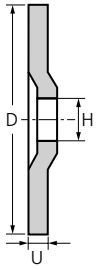
= Follow the safety instructions!

5-60° = Observe the contact angle of 5–60° (**ALU**MASTER HSD-F)!

4 Nm **Tighten the bolts!**





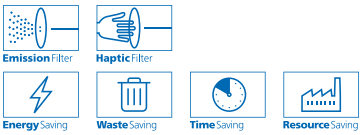


ALUMASTER **HSD-F High Speed Disc**

Special tool for processing aluminium alloys using an angle grinder.

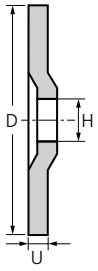
Contents:
- **ALU**MASTER High Speed Disc HSD-F 115/125 incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220		Description
115	22.23	13.0	13,300	026106	1	HSD-F 115/125 ALUMASTER



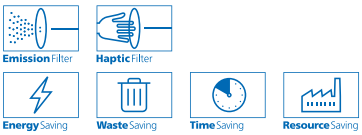


ALUMASTER **HSD-F HICOAT High Speed Disc**

Special tool for processing particularly challenging aluminium alloys using an angle grinder. The cutting inserts come with a HICOAT coating.

Contents:
- **ALU**MASTER High Speed Disc HSD-F 115/125 HICOAT incl. mounted tungsten carbide cutting inserts
- Torx key, plastic box

PFERDVALUE:



D [mm]	H [mm]	U [mm]	Max. RPM	EAN 4007220		Description
115	22.23	13.0	13,300	061213	1	HSD-F 115/125 ALUMASTER HICOAT



Cutting insert sets, HICOAT cutting insert sets



Cutting insert set for **ALU**MASTER High Speed Disc.

Ordering notes:
- The set is available with or without HICOAT coating.

D [mm]	Contents [pcs.]	Suitable for	EAN 4007220		Description
12	10	ALUMASTER HSD-F	018583	1	WSP-A-12R 115/125 ALUMASTER
			061220	1	WSP-A-12R 115/125 ALUMASTER HICOAT

Screw set for cutting inserts



Screw set for PFERD cutting inserts.

Suitable for cutting inserts	Contents [pcs.]	EAN 4007220		Description
WSP-A-12R 115/125 ALUMASTER, WSP-A-12R 115/125 ALUMASTER HICOAT	5	005392	1	WSP-S-M4S

ALUMASTER service set, ALUMASTER HICOAT service set



For exchanging individual cutting inserts on the **ALU**MASTER High Speed Disc.

Set contains:
- 2 cutting inserts
- 2 bolts
- 1 Torx key

Ordering notes:
- The set is available with or without HICOAT coating.

Suitable for	EAN 4007220		Description
ALUMASTER HSD-F	061237	1	ASS-R12 115/125 ALUMASTER
	061244	1	ASS-R12 115/125 ALUMASTER HICOAT

Torque spanner and spare blade



WIHA torque spanner with a tightening torque of 4 Nm for optimally and securely mounting cutting inserts on the **ALU**MASTER High Speed Disc.

Suitable for	EAN 4007220		Description
Torque spanner			
ALUMASTER	104620	1	DSWK WIHA Torque 4,0
Spare blade			
DSWK WIHA 4.0	104637	1	TWK WIHA Torque T15

Milling tools with cutting inserts

EDGE FINISH system for work on edges

Alongside a drive which has been especially designed for work on edges, the EDGE FINISH system comprises cutting tools for defined chamfering and rounding/breaking of edges on medium to large workpieces.

Exact edge shapes can be created by selecting the relevant tungsten carbide cutting inserts and matching tool mounting. The special tungsten carbide cutting inserts come with a high-quality coating and achieve the very best results. They are available in the **STEEL, INOX and ALU versions** for creating chamfers of 30° and 45° on components made from steel, stainless steel (INOX) and aluminium. For steel applications, there is also a radius version which has been specifically designed to prepare for corrosion protection, producing a defined radius of 3 mm.

Among other things, rounding edges is a precautionary measure for anti-corrosion protection according to:

- ISO 12944-3
- ISO 8501-3
- SOLAS XII/6.3 (Ref. T4/3.01 MSC.1/Circ. 1198)

Advantages:

- Highest possible comfort and optimal guidance thanks to ergonomically optimized design and very good haptic properties.
- The best possible stock removal rate and a long service life thanks to specially coated cutting inserts.
- Chamfer height can be individually adjusted up to 6 mm.
- Enables work with low levels of fatigue thanks to SENSOHANDLE anti-vibration handle.

Applications:

- Rounding edges in preparation for the application of anti-corrosion coatings in shipbuilding, on crane systems and other medium to large steel constructions which are exposed to corrosion loading.
- Chamfering for weld seam preparation on medium to large components (60° V-shaped seam in accordance with ISO 9692-1).
- Chamfering for edge breaking (45° visible edge).

Materials that can be worked:

- Steel
- Stainless steel (INOX)
- Aluminium

Recommendations for use:

- Move the EDGE FINISH system over the workpiece counterrotationally in order to prevent damage to the tool and chatter marks on the workpiece.
- Process very uneven burn burrs beforehand using reinforced grinding wheels or POLIFAN flap discs to prevent damage to the cutting inserts and improve guidance.
- Proper servicing and correct storage will increase the service life of your drive and tool.

Safety notes:

- Do not use damaged cutting inserts! They may break!

 = Wear eye protection!

 = Wear gloves!

 = Wear hearing protection!

 = Observe the applicable safety regulations!

 = Observe the recommended rotational speed!

PFERDVALUE:

PFERDERGONOMICS recommends the EDGE FINISH system as an innovative tool solution for comfortable working with reduced vibration, good haptics and optimized tool guidance.



PFERDEFFICIENCY recommends the EDGE FINISH system for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time.

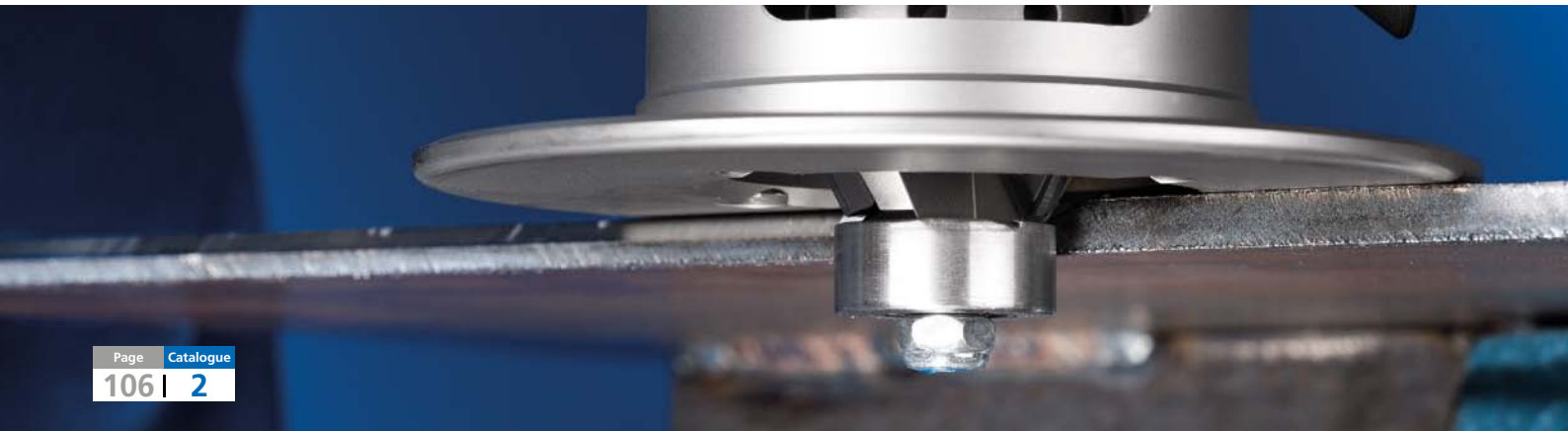


Selecting suitable cutting inserts:

To determine the most suitable cutting insert, please proceed as follows:

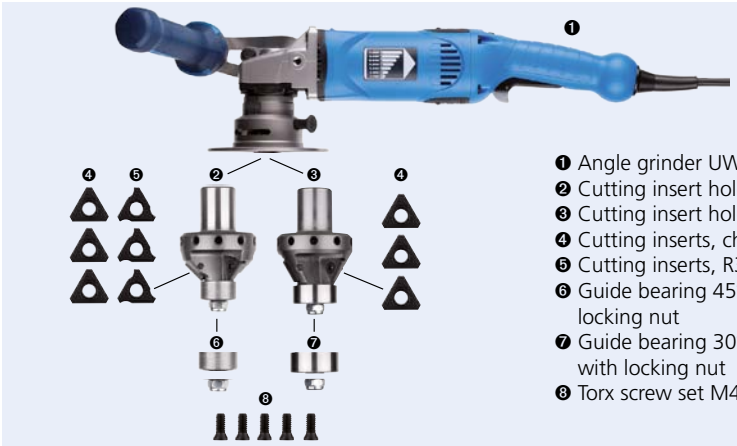
❶ Select the material group to be machined.
❷ Select the cutting inserts.

Material group	Matching cutting inserts	Recommended rotational speed range [RPM]	Max. depth of cut per process step [mm]	Max. chamfer width/radius to be created [mm]
Steel	EF-WSP-F STEEL	7,100–8,700	3	6
	EF-WSP-R3 STEEL	7,100–8,700	-	3
Stainless steel (INOX)	EF-WSP-F INOX	7,500–8,000	2	3
Aluminium	EF-WSP-F ALU	11,000	6	6



EDGE FINISH system for work on edges

A powerful angle grinder with a rotational speed of 2,750–11,000 RPM forms the basis of this impressive system. Two different cutting insert holders are available and can be exchanged at any time if required. They specify the required angle of 30° or 45°, and each comes with three tungsten carbide cutting inserts. In combination with a high-quality coating, they enable an outstanding stock removal rate and produce defined chamfers or radii depending on the version being used. The guide bearing ensures the tool is optimally guided along the edges to be machined. All parts described are available both individually and as a complete system. A sturdy transport case is also available and provides ideal protection for the parts and plenty of space for accessories.



❶ Angle grinder UWER 18/110 EF
❷ Cutting insert holder 45°/R3
❸ Cutting insert holder 30°
❹ Cutting inserts, chamfer
❺ Cutting inserts, R3
❻ Guide bearing 45°/R3 with locking nut
❼ Guide bearing 30° with locking nut
❽ Torx screw set M4

EDGE FINISH system for work on edges in transport case (TK)



Special features:
- Max. chamfer height of 6 mm.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Restart protection in case of power failure.
- Anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

Included in delivery:
4 m power cable, 3 keys, anti-vibration handle

UWER 18/110 EF-R3/45° TK and UWER 18/110 EF-30° TK

The drive and tools are supplied in a sturdy plastic case for optimal storage. Included in delivery:
- UWER 18/110 EF with 4 m power cable, three keys and anti-vibration handle
- Cutting insert holder with guide bearing
- Screw set for cutting inserts

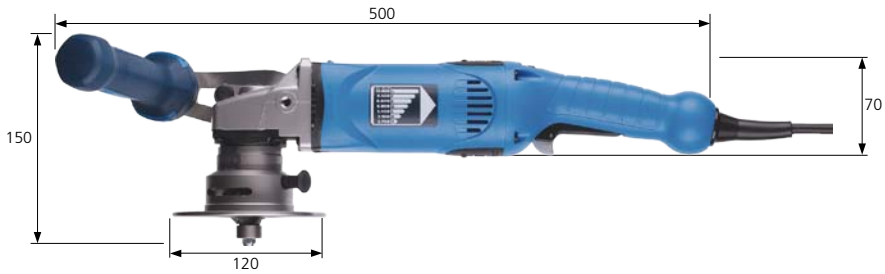
The ordering data can be found in the table below.



Detailed information and the matching assembly accessories for angle grinder UWER 18/110 EF can be found in catalogue section 9 Tool drives.

UWER 18/110 EF

11,000–2,750 RPM / 1,750 watts



PFERDVALUE

Vibration Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Designation	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Incl. cutting insert holder	Matching cutting insert holder	Net weight [kg]
EDGE FINISH UWER 18/110 EF-R3/45° TK 230V[1)]	004272	11,000–2,750	230	1,750	1,150	M14	EF-WSP-A R3/45°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF-30° TK 230V[1)]	004364	11,000–2,750	230	1,750	1,150	M14	EF-WSP-A 30°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF TK 230V[2)]	973172	11,000–2,750	230	1,750	1,150	M14	-	EF-WSP-A R3/45°, EF-WSP-A 30°	3.640

[1)] The cutting inserts are not included in delivery. Please order these separately (see page 108).
[2)] The cutting insert holder with guide bearing, cutting inserts and bolt set are not included in delivery. Please order these separately (see page 108).


EF-WSP-R3


EF-WSP-F

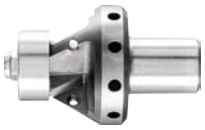
Cutting insert set with 3 mm radius, cutting insert set with chamfer

Cutting insert sets for the EDGE FINISH system for work on edges.

Ordering notes:
- Please complete the description with the desired type.

Suitable for cutting insert holder	α	r [mm]	Contents [pcs.]	Type				Description
				STEEL	INOX	ALU		
				EAN 4007220				
Cutting insert set with 3 mm radius								
EF-WSP-A R3/45°	-	3.0	3	005101	-	-	1	EF-WSP-R3
Cutting insert set chamfer								
EF-WSP-A 30°, EF-WSP-A R3/45°	45°–30°	-	3	005118	071182	039533	1	EF-WSP-F


EF-WSP-A R3/45°


EF-WSP-A 30°

Cutting insert holder with 3 mm radius/45° chamfer, cutting insert holder with 30° chamfer

Cutting insert holders for the EDGE FINISH system for work on edges.

Ordering notes:
- The cutting inserts and matching screw sets are not included in the delivery. Please order separately.

Suitable for cutting inserts	Suitable for machine types	α	r [mm]	EAN 4007220		Description
Cutting insert holder with 3 mm radius/45° chamfer						
EF-WSP-R3, EF-WSP-F	UWER 18/110 EF	45°	3.0	005200	1	EF-WSP-A R3/45°
Cutting insert holder with 30° chamfer						
EF-WSP-F	UWER 18/110 EF	30°	-	005170	1	EF-WSP-A 30°


EF-FL-R3/45°


EF-FL-30°

Guide bearing with 3 mm radius/45° chamfer, guide bearing with 30° chamfer

Guide bearings for the EDGE FINISH system for work on edges.

Ordering notes:
- Delivery includes locking nut MG INOX.

Suitable for cutting insert holder	EAN 4007220		Description
Guide bearing with 3 mm radius/45° chamfer			
EF-WSP-A R3/45°	005163	1	EF-FL-R3/45°
Guide bearing with 30° chamfer			
EF-WSP-A 30°	005132	1	EF-FL-30°



Screw set for cutting inserts

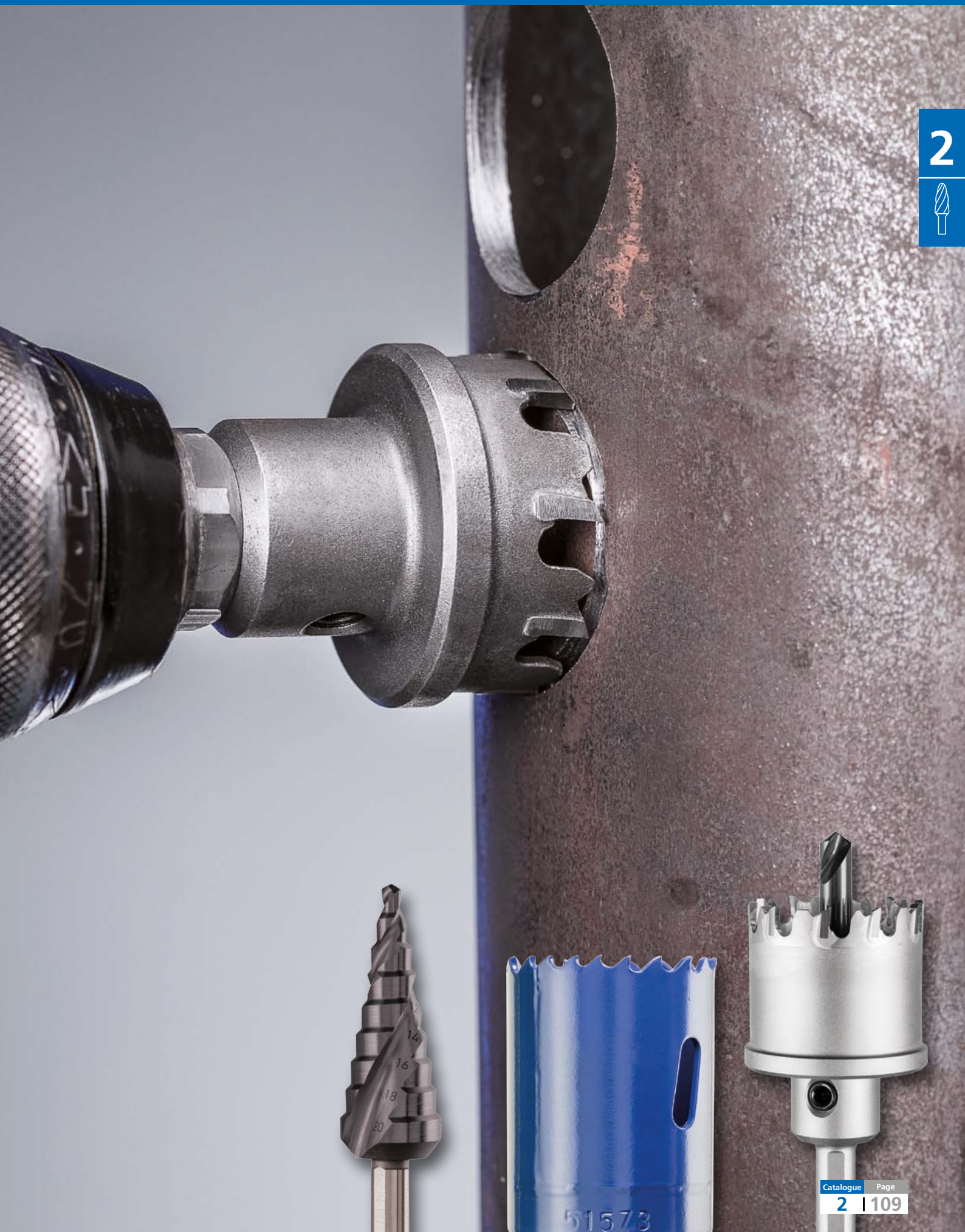
Screw set for PFERD cutting inserts.

Suitable for cutting inserts	Contents [pcs.]	EAN 4007220		Description
EF-WSP-R3, EF-WSP-F	5	005392	1	WSP-S-M4S

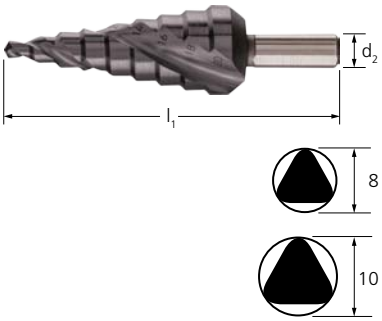
PFERD

HSS step drills, HSS hole saws, sets and accessories

2



HSS step drills with HICOAT coating
HSS step drills with HICOAT coating



HSS step drills with HICOAT coating

Sturdy high-performance tool for burr-free drilling and deburring of sheet metal, pipes and profiles. Materials up to 4 mm thick can be drilled and deburred easily in a single step. The premium HICOAT coating is wear-resistant and versatile as it can be used to process steel, stainless steel (INOX), non-ferrous metals, thermoplastics and duroplastics.

Advantages:
- Drilling and deburring in a single step.
- Completely smooth running and a high cutting performance.
- The high-quality drill tip ensures effortless centring and drilling.
- The tool taper makes it easier to pull back from drilled plates.
- Chips which do not break are neatly removed as with a spiral drill.
- Built-up edges and cold welding on the blades are prevented.

Materials that can be worked:
steel, stainless steel (INOX), other non-ferrous metals, plastics

Applications:
drilling, deburring

Recommendations for use:
- Use HSS step drills with HICOAT coating on sheets, pipes and profiles with a maximum thickness of 4 mm.
- Use cutting oil or compressed air as a coolant and lubricant.
- Please refer to the table for the recommended rotational speeds.

Matching tool drives:
Power drill

Drill bit dia. range [mm]	No. of drill steps	d_2 [mm]	l_1 [mm]	EAN 4007220		Description
4–20	9	8	75	802755	1	STB HSS 04-20/8 HC-FEP
4–30	14	10	100	802762	1	STB HSS 04-30/10 HC-FEP

Recommended rotational speed range [RPM] for HSS step drills

Step dia. [mm]	Steel	Stainless steel (INOX)	Non-ferrous metals	Plastics
	Rec. rotational speed [RPM]			
4	2,390	1,590	2,390	1,590
6	1,590	1,060	1,590	1,060
8	1,190	800	1,190	800
10	950	640	950	640
12	800	530	800	530
14	680	450	680	450
16	600	400	600	400
18	530	350	530	350
20	480	320	480	320
22	430	290	430	290
24	400	270	400	270
26	370	240	370	240
28	340	230	340	230
30	320	210	320	210



Hole saws are made from tough, shatter-proof, sturdy HSS bimetal. The saw teeth are made from high-quality M42 material. A selection of the most common HSS hole saws is available as sets for tradespeople, fitters, electricians and mechanics.

Advantages:

- Cost-effective sawing of round cut-outs.
- Chattering during sawing is prevented by the alternating tooth pitch.
- High concentricity.
- Good chip removal.
- The hole saw is conveniently centred and guided via the replaceable HSS pilot drill.
- Hole saw arbor is supplied with an ejection spring for improved ejection of the sawn material.

Materials that can be worked:

- Steel
- Stainless steel (INOX)
- Aluminium
- Copper, bronze, brass
- Plastics
- Wood

Applications:

- Cutting out holes

Recommendations for use:

- Observe the recommended rotational speed.
- Clamp the pilot drill in the hole saw arbor and make sure that it projects at least 3 mm (1/8") over the teeth of the hole saw.
- When cutting metals, use a high-quality cutting oil, if possible. This facilitates smooth running and lengthens the hole saw service life.
  Exception: When working on aluminium, use kerosene instead of cutting oil.
- HSS hole saws are suitable for work on stainless steel (INOX). In order to avoid corrosion, remove any particles which develop during work from the workpiece. Clean the workpiece chemically or mechanically (etching/polishing, etc.).
- Make sure that all the teeth are applied evenly. To prevent tooth breakage, avoid swinging movements during sawing.
- Avoid overheating the saw.

Matching tool drives:

- Power drill



Safety notes:

- When using shank extensions, the recommended hole saw rotational speed must not be exceeded. Risk of accidents!

= Wear eye protection!

= Follow the safety instructions!

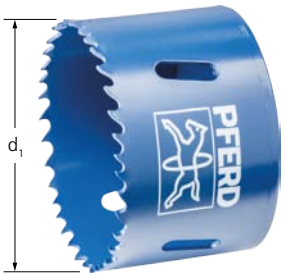
Example applications for HSS hole saws and TC hole cutters

Dia. [mm]	Applications
25.0	Plumbing and heating pipes
30.0	Plumbing and heating pipes
32.0	Sink fittings with dia. 32 mm
35.0	Plumbing and heating pipes, hollow wall junction boxes, halogen spots
40.0	Plumbing and waste pipes
45.0	Water and heating pipes

Dia. [mm]	Applications
50.0	Water and heating pipes with insulation
55.0	Built-in lights with dia. 55 mm
60.0	Built-in lights with dia. 60 mm
68.0	Pattress boxes with dia. 68 mm
70.0	Hollow wall junction boxes with dia. 70 mm

Dia. [mm]	Applications
74.0	Hollow wall junction boxes with dia. 74 mm
80.0	Distribution boxes, built-in lights, cable opening covers with dia. 80 mm
90.0	Built-in lights with dia. 90 mm
105.0	Waste air pipes





HSS hole saws

Hole saws made from tough, shatter-proof, sturdy HSS bimetal for cutting out holes.

Thread:
LS 14–LS 30 = 1/2–20
LS 32–LS 152 = 5/8-18

Matching arbors:
LS 14–LS 30 = LSS 1, LSS 4
LS 32–LS 152 = LSS 2

Ordering notes:
- Please refer to the table below for the maximum cutting depth.
- Please order hole saw arbors separately. Detailed information and ordering data on hole saw arbors can be found on page 115.

d_1 [mm]	d_1 [inch]	EAN 4007220	Max. cutting depth [mm]	Max. cutting depth [inch]	Rec. RPM Steel	Rec. RPM Stainless steel (INOX)	Rec. RPM Non-ferrous metals	Rec. RPM Plastics		Description
14	9/16	319086	34	1 5/16	620	310	800	1,000	1	LS 14
16	5/8	062319	34	1 5/16	550	275	730	880	1	LS 16
17	11/16	319093	36	1 7/16	520	260	680	820	1	LS 17
19	3/4	062326	36	1 7/16	460	230	600	740	1	LS 19
20	-	062333	36	1 7/16	425	210	560	700	1	LS 20
21	13/16	319109	36	1 7/16	410	205	540	670	1	LS 21
22	7/8	062340	36	1 7/16	390	195	520	640	1	LS 22
24	15/16	319116	36	1 7/16	360	180	470	580	1	LS 24
25	1	062357	36	1 7/16	350	175	470	560	1	LS 25
27	1 1/16	062364	36	1 7/16	325	160	435	520	1	LS 27
29	1 1/8	062371	36	1 7/16	300	150	400	480	1	LS 29
30	1 3/16	062388	36	1 7/16	285	145	380	470	1	LS 30
32	1 1/4	062395	36	1 7/16	275	140	360	440	1	LS 32
33	1 5/16	062401	36	1 7/16	260	135	345	420	1	LS 33
35	1 3/8	062418	36	1 7/16	250	125	330	400	1	LS 35
37	1 7/16	319123	36	1 7/16	235	115	310	370	1	LS 37
38	1 1/2	062425	36	1 7/16	230	115	300	370	1	LS 38
40	1 9/16	319130	36	1 7/16	215	110	280	350	1	LS 40
41	1 5/8	062432	36	1 7/16	210	105	280	340	1	LS 41
43	1 11/16	319147	31	1 1/4	200	100	260	330	1	LS 43
44	1 3/4	062449	31	1 1/4	195	95	260	320	1	LS 44
46	1 13/16	319154	31	1 1/4	185	90	250	300	1	LS 46
48	1 7/8	062456	31	1 1/4	180	90	240	290	1	LS 48
51	2	062463	31	1 1/4	170	85	230	270	1	LS 51
52	2 1/16	319161	31	1 1/4	165	80	220	270	1	LS 52
54	2 1/8	062470	31	1 1/4	160	80	210	260	1	LS 54
57	2 1/4	062487	31	1 1/4	150	75	200	250	1	LS 57
59	2 5/16	319178	31	1 1/4	145	70	190	240	1	LS 59
60	2 3/8	062494	31	1 1/4	140	70	190	230	1	LS 60
64	2 1/2	062500	31	1 1/4	135	65	180	220	1	LS 64
65	2 9/16	319185	31	1 1/4	135	60	180	220	1	LS 65
67	2 5/8	062517	31	1 1/4	130	65	170	210	1	LS 67
68	2 11/16	500811	31	1 1/4	130	65	170	210	1	LS 68
70	2 3/4	062524	31	1 1/4	125	60	160	200	1	LS 70
73	2 7/8	062531	31	1 1/4	120	60	160	190	1	LS 73
76	3	062548	31	1 1/4	115	55	150	180	1	LS 76
79	3 1/8	062555	31	1 1/4	110	55	140	180	1	LS 79
83	3 1/4	062562	31	1 1/4	105	50	140	170	1	LS 83
86	3 3/8	319192	31	1 1/4	100	50	130	160	1	LS 86
89	3 1/2	062579	31	1 1/4	95	45	130	160	1	LS 89
92	3 5/8	062586	31	1 1/4	95	45	120	150	1	LS 92
95	3 3/4	062593	31	1 1/4	90	45	120	150	1	LS 95
98	3 7/8	319208	31	1 1/4	90	45	120	140	1	LS 98
102	4	062609	31	1 1/4	85	40	110	140	1	LS 102
105	4 1/8	062616	31	1 1/4	80	40	110	130	1	LS 105

Continued on next page

d_1 [mm]	d_1 [inch]	EAN 4007220	Max. cutting depth [mm]	Max. cutting depth [inch]	Rec. RPM Steel	Rec. RPM Stainless steel (INOX)	Rec. RPM Non-ferrous metals	Rec. RPM Plastics		Description
111	4 3/8	319222	31	1 1/4	75	35	100	130	1	LS 111
114	4 1/2	062623	31	1 1/4	75	35	100	120	1	LS 114
121	4 3/4	319239	31	1 1/4	70	35	90	120	1	LS 121
127	5	319246	31	1 1/4	65	30	80	110	1	LS 127
140	5 1/2	319253	31	1 1/4	60	30	75	100	1	LS 140
152	6	319260	31	1 1/4	55	25	70	90	1	LS 152

HSS hole saw sets

Set for craftsmen



The set contains five HSS hole saws in the most common diameters, including accessories, for use in crafts. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included.
It is possible to use hole saws LS 32 and LS 38 with the LSA adapter and washer.

Contents:
- 5 HSS hole saws: LS 22, LS 25, LS 29, LS 32 and LS 38
- 1 hole saw arbor: LSS 4
- 1 LSA adapter for hole saw arbor LSS 4
- 1 Allen key, 4 mm
- 1 ejection spring

Dimensions [mm]	EAN 4007220		Description
168 x 116 x 57	319314	1	LS-SO 7 H

Set for plumbers



The set contains six HSS hole saws in the most common diameters, including accessories, for plumbers and sanitary engineers. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included.
It is possible to use hole saw LS 38 with the LSA adapter and washer.

Contents:
- 6 HSS hole saws: LS 19, LS 22, LS 29, LS 38, LS 44 and LS 57
- 2 hole saw arbors: LSS 2 and LSS 4
- 1 LSA adapter for hole saw arbor LSS 4
- 1 Allen key, 4 mm
- 1 ejection spring

Dimensions [mm]	EAN 4007220		Description
219 x 156 x 60	319338	1	LS-SO 9 I



Set for electricians (International standard sizes)

The set contains six HSS hole saws in the most common international diameters, including accessories, for electricians. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included.
It is possible to use hole saw LS 35 with the LSA adapter and washer.

Contents:
- 6 HSS hole saws: LS 22, LS 29, LS 35, LS 44, LS 51 and LS 64
- 2 hole saw arbors: LSS 2 and LSS 4
- 1 LSA adapter for hole saw arbor LSS 4
- 1 Allen key, 4 mm
- 1 ejection spring

Dimensions [mm]	EAN 4007220		Description
219 x 156 x 60	319321	1	LS-SO 9 E-1



Set for electricians (German standard sizes)

The set contains nine HSS hole saws in the most common diameters, including accessories, for electricians in Germany. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included.
It is possible to use hole saws LS 32 and LS 38 with the LSA adapter and washer.

Contents:
- 9 HSS hole saws: LS 19, LS 22, LS 25, LS 32, LS 38, LS 44, LS 51, LS 60 and LS 68
- 2 hole saw arbors: LSS 2 and LSS 4
- 1 LSA adapter for hole saw arbor LSS 4
- 1 pilot drill: LSB 6/90
- 1 Allen key, 4 mm
- 1 ejection spring

Dimensions [mm]	EAN 4007220		Description
219 x 156 x 60	319369	1	LS-SO 13 E-2



Set for engineers

The set contains nine HSS hole saws in the most common diameters, including accessories, for engineers in the construction, container and pipeline industries. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included.
It is possible to use hole saws LS 35 and LS 38 with the LSA adapter and washer.

Contents:
- 9 HSS hole saws: LS 19, LS 22, LS 29, LS 35, LS 38, LS 44, LS 51, LS 57 and LS 64
- 2 hole saw arbors: LSS 2 and LSS 4
- 1 pilot drill: LSB 6/90
- 1 LSA adapter for hole saw arbor LSS 4
- 1 Allen key, 4 mm
- 1 ejection spring

Dimensions [mm]	EAN 4007220		Description
219 x 180 x 66	319352	1	LS-SO 13 M

Hole saw arbors LSS

Hole saw arbors are designed for mounting the hole saw and the pilot drill.

Purpose of the ejection spring
It prevents the sawn-out material from becoming jammed between the inner walls of the hole saw and the drill. The spring force ejects the material. Should this effect not be required for a particular application, e.g. pipes that are already installed, the spring can easily be removed manually without the help of tools.

LSS 1



LSS 2



LSS 4



Ordering notes:
- Available in three sizes.
- Select the appropriate arbor, taking into account the hole saw diameter and available tool drive.
- Hole saw arbors LSS 1 and LSS 2 are supplied with the HSS pilot drill LSB 6/60 and an ejection spring.
- Hole saw arbors LSS 4 are supplied with the HSS pilot drill LSB 6/90 and an ejection spring.

Suitable for hole saws	d_2 [mm]	d_2 [inch]	Shank type	EAN 4007220	Thread		Description
LS 14–30	9.53	3/8	hexagonal	062630	1/2–20 UNF	1	LSS 1
LS 32–152	9.53	3/8	hexagonal	062647	5/8–18 UNF	1	LSS 2
LS 14–30	6.35	1/4	round	062661	1/2–20 UNF	1	LSS 4

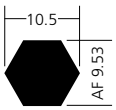
Shank shapes

The adjacent tables provide information on the arbor shapes and dimensions for the LSS hole saw arbors and LSB pilot drills. The matching hole saws and hole saw arbors are indicated.

PFERD hole saw arbor	Shank dia. [mm]	Shank dia. [inch]	Shank shape	For PFERD hole saws
LSS 1	9.53	3/8	⬢	LS 14 to LS 30
LSS 2	9.53	3/8	⬢	LS 32 to LS 152
LSS 4	6.35	1/4	▲	LS 14 to LS 30

Shank dimensions [mm]

Hexagonal



Round

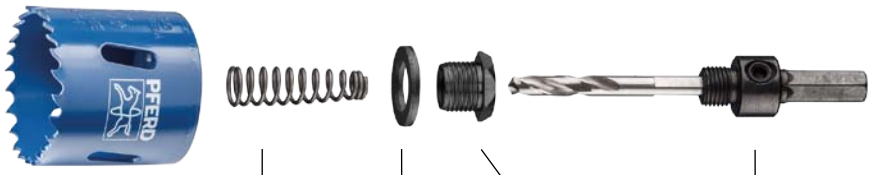


PFERD pilot drill	Shank dia. [mm]	Shank dia. [inch]	Shank shape	For PFERD hole saw arbor
LSB 6/60	6.35	1/4	▲	LSS 1, LSS 2
LSB 6/90	6.35	1/4	▲	LSS 4

Ejection spring

All hole saw arbors are delivered with an ejection spring for better ejection of the sawn material.

Before using the tool, this ejection spring can be installed/removed without additional tools if required. Screw the ejection spring onto the drill from the side with the smaller diameter up to its limit. It is also possible to use the ejection spring with the LSA adapter and washer (see diagram).





PSL 11



AS-PSL 14-30



AS-PSL 32-152



Quick-mounting system for hole saws, adapter sets

PFERD offers a clamping system for easily and quickly using HSS hole saws. The quick-mounting system and the two three-part adapter sets, which have been tailored to the hole saw diameter, enable PFERD HSS hole saws to be used easily and conveniently on all conventional power drills.

Advantages:
- Easily and quickly swap different hole saws.
- After the application is completed, the hole saw and quick-mounting system can be separated without the use of additional tools by simply pressing a button.
- Interchangeable HSS pilot drill.

Recommendations for use:
- Screw the adapters quickly and easily into the desired hole saw and clamp them in the quick-mounting system.

Ordering notes:
- Adapter set AS-PSL 14-30 is available for a hole saw diameter of 14–30 mm, and adapter set AS-PSL 32-152 is available for a hole saw diameter of 32–152 mm. Both adapter sets contain three adapters with the same dimensions.

Suitable for hole saws	Shank type	EAN 4007220	d_2 [mm]	d_2 [inch]		Description
LS 14–152	hexagonal	900185	11	7 1/16	1	PSL 11
LS 14–30	-	900215	-	-	1	AS-PSL 14-30
LS 32–152	-	900192	-	-	1	AS-PSL 32-152

Example combination



HSS hole saw LS 44 | Adapter from adapter set AS-PSL 32-152 | Quick-mounting system PSL 11 | LS 44 with adapter AS-PSL 32-152 and quick-mounting system PSL 11

LSB 6/60



LSB 6/90



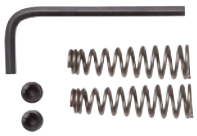
HSS pilot drill LSB

HSS pilot drills for HSS hole saw arbors and quick-mounting systems for hole saws.

Ordering notes:
- Hole saw arbors LSS 1 and LSS 2 are supplied with the HSS pilot drill LSB 6/60.
- Hole saw arbors LSS 4 are supplied with the HSS pilot drill LSB 6/90.
- The HSS pilot drill LSB 6/90 can be used for the quick-mounting system PSL 11.

Suitable for hole saws	Suitable arbors	d_2 [mm]	d_2 [inch]	Shank type	EAN 4007220		Description
LS 14–152	LSS 1, LSS 2	6.35	1/4	round	319284	1	LSB 6/60
	LSS 4	6.35	1/4	round	062708	1	LSB 6/90

Repair set for hole saw arbors



With the repair set for hole saw arbors, the most common parts can be replaced in case of loss or damage.

Contents:
- 2 ejection springs
- 2 hexagon socket head screws
- 1 hexagon socket wrench AF 4

EAN 4007220		Description
758953	1	RSL-5

LSA adapter



Hole saws LS 32 to LS 38 can be used with the LSA adapter, a washer and the hole saw arbors LSS 1 and LSS 4.

Suitable for hole saws	Suitable arbors	EAN 4007220		Description
LS 32–38	LSS 1, LSS 4	319291	1	LSA

Arbor extension for hole saws



The HSS hole saw arbors LSS 1 and LSS 2 can be extended using the arbor extension SVL-300.

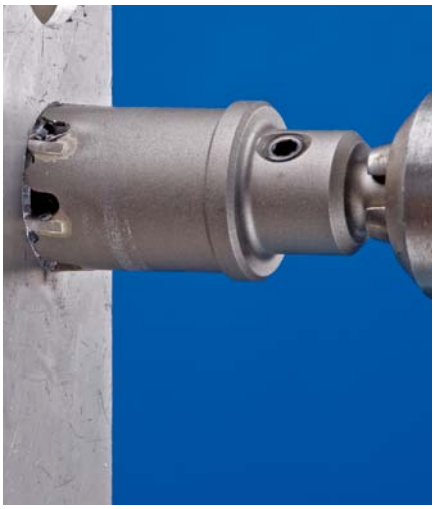
Advantages:
- Suitable for work on hard-to-reach components.
- Particularly suitable for work on hollow walls.
- Deep holes can be sawn easily.
- Achieves the required distance between the tool drive and the work area.
- Avoids damage to the workpiece and machine.
- Dust is not drawn into the tool drive during sawing.

Suitable arbors	Shank type	EAN 4007220	Hexagon socket d_1 [mm]	Hexagon socket d_1 [inch]	l_1 [mm]	l_1 [inch]	Width across flats (AF) d_2 [mm]		Description
LSS 1, LSS 2	hexagonal	798447	9.53	3/8	300	12	11	1	SVL-300



TC hole cutters and accessories
General information

Tungsten carbide hole cutters are professional tools for quick, precise hole-cutting (cut-outs) with a diameter of 16 to 105 mm. They are suitable for working on alloyed and non-alloyed steels, stainless steel (INOX), non-ferrous metals and plastics (including GRP). Tungsten carbide hole cutters are used on hand drills or on stationary machines.



Advantages:

- High concentricity, as the cutting head and shank are produced in one piece.
- Optimum cutting performance due to sharp teeth made of high-quality tungsten carbide.
- Interchangeable HSS pilot drill.

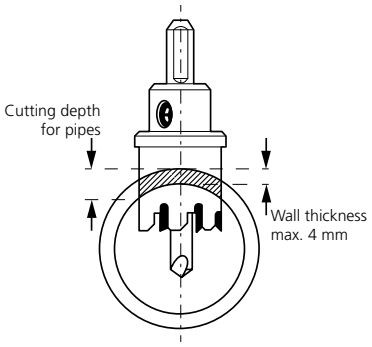
Ordering notes:

- 8 mm tool height (flat type) for work on sheets and flat materials, available in different diameters from 16 to 105 mm.
- 35 mm tool height (long type) for work on pipes and curved surfaces, available in different diameters from 16 to 60 mm.
- PFERD tungsten carbide hole cutters can be resharpened. Timely and professional resharpening substantially lengthens the tool life. Please contact your local sharpening service.
- Tungsten carbide hole cutters are supplied together with the pilot drill.

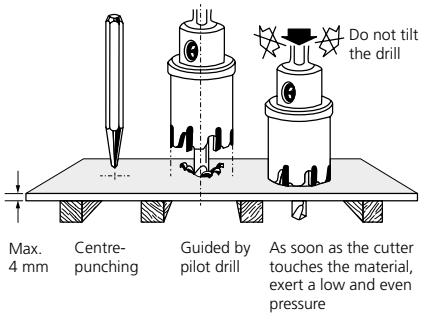
Recommendations for use:

- The stated reference rotational speed (see "Opt. RPM") apply to machines capable of providing roughly constant rotational speed under load. For low-power machines where speeds drop sharply under load, the rotational speed can be increased by about 30 %. If the teeth of the cutter are not continuously engaged (e.g. on pipes or curved surfaces), the recommended rotational speed levels may be increased by up to 100 %. This will help to prevent chatter and tooth breakage when using the cutter in manual applications.
- TC hole cutters are suitable for work on stainless steel (INOX).
- In order to avoid corrosion, remove any particles which develop during work from the workpiece. Clean the workpiece chemically or mechanically (etching/ polishing, etc.).

Pipes

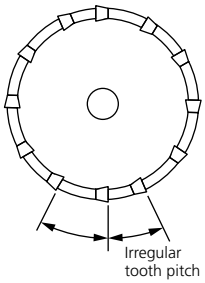


Flat materials
When working on sheets, leave an **unobstructed exit** for the hole cutter. Place supports **outside** the cutting area.



Tooth pitch:

PFERD hole cutters have an irregular tooth pitch (distance between teeth) to prevent tool chatter.



Shank shape and dimensions:

The table below shows information about the shank shape and the dimensions of the PFERD LOS hole cutter.

PFERD hole cutter	Hole cutter diameter	Shank diameter [mm]	Shank shape
LOS HM 1608 to LOS HM 2208	16 to 22 mm diameter	7	
LOS HM 2308 to LOS HM 5508	23 to 55 mm diameter	10	
LOS HM 6008 to LOS HM 10508	60 to 105 mm diameter	12	

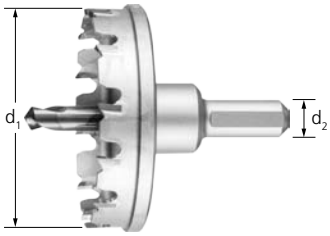
Safety notes:

 = Wear eye protection!

 = Observe the recommended rotational speed!

Flat type, tool height of 8 mm

The flat type (tool height 8 mm) is suitable for work on flat materials up to 4 mm in thickness.



d_1 [mm]	d_2 [mm]	EAN 4007220	Rec. RPM Steel	Rec. RPM Stainless steel (INOX)	Rec. RPM Non-ferrous metals	Rec. RPM Plastics	Matching drill		Description
16	7	062913	790–1,200	400–1,000	880–1,310	880–1,310	LOSB 6/48	1	LOS HM 1608
18	7	062937	710–1,060	350–880	780–1,170	780–1,170	LOSB 6/48	1	LOS HM 1808
19	7	062944	670–1,000	330–840	740–1,110	740–1,110	LOSB 6/48	1	LOS HM 1908
20	7	062951	630–950	320–800	700–1,050	700–1,050	LOSB 6/48	1	LOS HM 2008
21	7	062968	600–910	300–760	670–1,000	670–1,000	LOSB 6/48	1	LOS HM 2108
22	7	062975	580–870	290–720	640–950	640–950	LOSB 6/48	1	LOS HM 2208
23	10	062982	550–830	280–690	610–910	610–910	LOSB 6/48	1	LOS HM 2308
24	10	062999	530–800	270–660	580–880	580–880	LOSB 6/48	1	LOS HM 2408
25	10	063002	510–760	260–640	560–840	560–840	LOSB 6/48	1	LOS HM 2508
27	10	063026	470–710	240–590	520–780	520–780	LOSB 6/48	1	LOS HM 2708
28	10	063033	455–680	230–570	500–750	500–750	LOSB 6/48	1	LOS HM 2808
30	10	063057	425–635	210–530	470–700	470–700	LOSB 6/48	1	LOS HM 3008
32	10	063071	400–600	200–500	440–660	440–660	LOSB 6/48	1	LOS HM 3208
34	10	063095	375–560	185–470	410–620	410–620	LOSB 6/48	1	LOS HM 3408
35	10	063101	365–545	180–450	400–600	400–600	LOSB 6/48	1	LOS HM 3508
38	10	063132	335–505	170–420	370–550	370–550	LOSB 6/48	1	LOS HM 3808
40	10	063156	320–480	160–400	350–530	350–530	LOSB 6/48	1	LOS HM 4008
42	10	063170	305–455	150–380	330–500	330–500	LOSB 6/48	1	LOS HM 4208
43	10	063187	295–445	150–370	330–490	330–490	LOSB 6/48	1	LOS HM 4308
45	10	063200	285–425	140–355	310–470	310–470	LOSB 6/48	1	LOS HM 4508
48	10	063231	265–400	135–330	290–440	290–440	LOSB 6/48	1	LOS HM 4808
50	10	063255	255–380	125–320	280–420	280–420	LOSB 6/48	1	LOS HM 5008
52	10	063279	245–370	120–305	270–400	270–400	LOSB 6/48	1	LOS HM 5208
54	10	063293	235–355	120–295	260–390	260–390	LOSB 6/48	1	LOS HM 5408
55	10	063309	230–350	115–290	250–380	250–380	LOSB 6/48	1	LOS HM 5508
60	12	063354	210–320	105–265	230–350	230–350	LOSB 8/48	1	LOS HM 6008
65	12	063361	195–295	100–245	220–320	220–320	LOSB 8/48	1	LOS HM 6508
68	12	063378	190–280	95–235	210–310	210–310	LOSB 8/48	1	LOS HM 6808
70	12	063385	180–270	90–230	200–300	200–300	LOSB 8/48	1	LOS HM 7008
75	12	063392	170–255	85–215	190–280	190–280	LOSB 8/48	1	LOS HM 7508
80	12	063408	160–240	80–200	180–260	180–260	LOSB 8/48	1	LOS HM 8008
90	12	063422	140–210	70–180	160–230	160–230	LOSB 8/48	1	LOS HM 9008
100	12	063446	125–190	65–160	140–210	140–210	LOSB 8/48	1	LOS HM 10008
105	12	063453	120–180	60–150	130–200	130–200	LOSB 8/48	1	LOS HM 10508







Deep type, tool height of 35 mm

The long type (tool height 35 mm) is suitable for use on curved surfaces and pipe materials. The maximum cut depth is 32 mm.
Exception: LOS HM 6060:
maximum cut depth 57 mm

Ordering notes:
- LOS HM 6060: Tool height 60 mm.

d_1 [mm]	d_2 [mm]	EAN 4007220	Rec. RPM Steel	Rec. RPM Stainless steel (INOX)	Rec. RPM Non-ferrous metals	Rec. RPM Plastics	Matching drill		Description
16	7	063491	790–1,200	400–1,000	880–1,310	880–1,310	LOSB 6/69	1	LOS HM 1635
17	7	063507	750–1,130	370–930	820–1,240	820–1,240	LOSB 6/69	1	LOS HM 1735
18	7	063514	710–1,060	350–880	780–1,170	780–1,170	LOSB 6/69	1	LOS HM 1835
19	7	063521	670–1,000	330–840	740–1,110	740–1,110	LOSB 6/69	1	LOS HM 1935
20	7	063538	630–950	320–800	700–1,050	700–1,050	LOSB 6/69	1	LOS HM 2035
21	7	063545	600–910	300–760	670–1,000	670–1,000	LOSB 6/69	1	LOS HM 2135
22	7	063552	580–870	290–720	640–950	640–950	LOSB 6/69	1	LOS HM 2235
24	10	063576	530–800	270–660	580–880	580–880	LOSB 8/69	1	LOS HM 2435
25	10	063583	510–760	260–640	560–840	560–840	LOSB 8/69	1	LOS HM 2535
26	10	063590	490–740	250–610	540–810	540–810	LOSB 8/69	1	LOS HM 2635
27	10	063606	470–710	240–590	520–780	520–780	LOSB 8/69	1	LOS HM 2735
28	10	063613	455–680	230–570	500–750	500–750	LOSB 8/69	1	LOS HM 2835
30	10	063637	425–635	210–530	470–700	470–700	LOSB 8/69	1	LOS HM 3035
32	10	063651	400–600	200–500	440–660	440–660	LOSB 8/69	1	LOS HM 3235
35	10	063682	365–545	180–450	400–600	400–600	LOSB 8/69	1	LOS HM 3535
38	10	063712	335–505	170–420	370–550	370–550	LOSB 8/69	1	LOS HM 3835
40	10	063736	320–480	160–400	350–530	350–530	LOSB 8/69	1	LOS HM 4035
42	10	063750	305–455	150–380	330–500	330–500	LOSB 8/69	1	LOS HM 4235
43	10	063767	295–445	150–370	330–490	330–490	LOSB 8/69	1	LOS HM 4335
45	10	063781	285–425	140–355	310–470	310–470	LOSB 8/69	1	LOS HM 4535
48	10	063811	265–400	135–330	290–440	290–440	LOSB 8/69	1	LOS HM 4835
50	10	063835	255–380	125–320	280–420	280–420	LOSB 8/69	1	LOS HM 5035
52	10	063842	245–370	120–305	270–400	270–400	LOSB 8/69	1	LOS HM 5235
55	10	063859	230–350	115–290	250–380	250–380	LOSB 8/69	1	LOS HM 5535
60	12	063866	210–320	105–265	230–350	230–350	LOSB 8/94	1	LOS HM 6060

HSS pilot drills for TC hole cutters



HSS pilot drill LOSB

The HSS pilot drill is replaceable.

Suitable for tungsten carbide hole cutter diameter [mm]	Tool height [mm]	EAN 4007220		Description
16–55	8	063873	1	LOSB 6/48
16–22	35	063880	1	LOSB 6/69
24–55	35	063903	1	LOSB 8/69
60	60	063910	1	LOSB 8/94
60–105	8	063897	1	LOSB 8/48

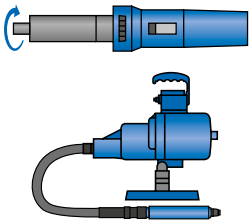

PFERD
Germany
www.pferd.com
200x32x51mm
8x1 1/4x2"
Grit 80
BW 20032-51 CN 80
CARBIDE

Mounted points
Table of contents

General information 3
The fast way to the best tool 4
General information on mounted points 6
Explanation of the description 7
Drive spindle extensions 8

Mounted points





For steel and cast steel
- STEEL 9
- STEEL EDGE 13

For materials that are difficult to machine
- TOUGH 22

For stainless steel (INOX)
- INOX 26
- INOX EDGE 28

For soft non-ferrous metals
- ALU 31

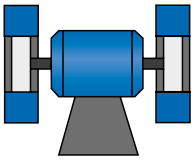
For grey and nodular cast iron
- CAST 32
- CAST EDGE 34

For foundries
- CAST EDGE 36
- CAST STEEL 38

For plastics
- RUBBER 40

Bench grinding wheels

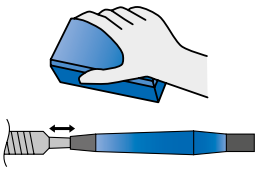




- UNIVERSAL type 42
- HSS type 42
- CARBIDE type 43

Finishing stones





- UNIVERSAL type 45
- CARBIDE type 45
- Arbors 45

Hand dressers





- Dressing stones 46
- Abrasive segments 46
- Diamond dressers 46

PFERD customer support

If you have any questions regarding the optimization of your grinding work or solutions to specific application problems, our sales representatives and technical advisers are happy to help.

Just get in touch! Our worldwide sales addresses can be found at: **www.pferd.com**



PFERDTOOL-CENTER

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool.

Your local retailer or PFERD sales representative will be glad to answer any questions you might have.



PFERD packaging

Mounted points from PFERD are delivered in protective plastic pouches. The transparent front of the packaging enables you to immediately identify the shape, colour and grain of the tools. The European standard holes mean that all packs can be displayed on the **PFERD**TOOL-CENTER. CAST STEEL and CAST EDGE mounted points for foundries are delivered separately in robust industrial packaging (IP).

The packaging units (PU) for the individual tools are listed in the product tables. The packaging labels contain technical information, the description, the EAN code and the item number.



PFERD quality

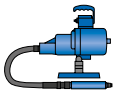
Mounted points, bench grinding wheels, hand dressers and finishing stones from PFERD are developed, manufactured and tested in accordance with stringent quality requirements.

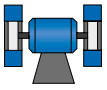
Research and development, our own machine and plant construction, and the continuous testing and further development of the quality and safety standards in our own laboratories all guarantee high PFERD quality.

PFERD quality management is certified according to ISO 9001.



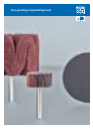
 Straight grinder

 Flexible shaft

 Bench grinder

 Manual filing tool

 Manual application



Detailed information and ordering data for Poliflex fine grinding points can be found in catalogue section 4.



Detailed information and ordering data for diamond grinding points can be found in catalogue section 5.

All tools and more information:
www.pferd.com

Mounted points
The fast way to the best tool

PFERD offers a very extensive range of ceramic-bonded and resinoid-bonded mounted points. Designed to meet individual grinding tool application needs, these products come in a broad range of grain types, grit sizes, hardness grades and shapes. The mounted points are manufactured on modern production lines to high standards of dimensional accuracy and stability, consistent quality and close tolerances. To select the correct mounted point, the material, main fields of application and specific operating requirements have to be taken into consideration.
This overview shows which types (abrasives and bonds) are suitable for the various materials and the tasks at hand.

❶ Material group
The various material groups are colour-coded and form the starting point for choosing the most appropriate mounted point.

❷ Application
After the material, the application must be selected. This differentiation is necessary in order to find the optimum mounted point and correct bond type. The mounted point bond, hardness and grain mixture have a decisive impact on the abrasive performance, tool life and aggressiveness of the tools:

❶ Material group			**Bond** ▶ **❸ Mounted point type** ▶ **Abrasive** ▶ **Recommended cutting speed** ▶ **❷ Application** ▼
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	**General use** on edge and surface **Surface grinding** with high stock removal rate **Edge grinding** with high dimensional stability
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	**General use** on edge and surface **Surface grinding** with high stock removal rate **Edge grinding** with high dimensional stability
	Cast steel	Non-alloyed cast steel, low-alloyed cast steel	**General use** on edge and surface **Surface grinding** with high stock removal rate **Edge grinding** with high dimensional stability
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	**Surface grinding** with high stock removal rate **Edge grinding** with high dimensional stability
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	**General use** on edge and surface
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	**Surface grinding** with high stock removal rate **Edge grinding and grinding out of metal contamination** with high dimensional stability
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, rubber, wood	**General use** on edge and surface
			❹ Catalogue page ▶

- **General use:** For general use on surfaces and edges, the emphasis is on the balance between abrasive performance and tool life.
- **Surface grinding:** In surface grinding, the mounted points are subject to lower loads. The mounted point bond is therefore comparatively soft and has been designed to give high stock removal rates.
- **Edge grinding:** In edge grinding, the mounted points must be dimensionally stable. The mounted point bond is therefore comparatively hard and designed for a long tool life.

❸ Mounted point type
After determining the application (see column ❷), the type is selected in the horizontal row. The "highly suitable" types are indicated by a black dot (●). Further "suitable" types are indicated by an open dot (❍).

❹ Reference to catalogue page
Further information about the hardness grades, mounted point shapes and dimensions, as well as grit sizes, can be found on the corresponding catalogue pages stated in the table.

Resinoid bond		Vitrified bond							
INOX	INOX EDGE	RUBBER	ALU	TOUGH	CAST	CAST STEEL	STEEL	STEEL EDGE	CAST EDGE
ADW	AN	AH	CN	AWCO	ARN	ADR	ADW	AR	CU
									
35–50 m/s	35–50 m/s	5–20 m/s	20–40 m/s	30–50 m/s	30–50 m/s	25–40 m/s	30–50 m/s	25–40 m/s	30–50 m/s
							●		
❍							●	❍	
	❍						❍	●	
							●		
				●			❍		
				●				❍	
						●			
❍					❍	❍	●	❍	
	❍					❍	❍	●	
●	❍						❍		
❍	●							❍	
❍			●						
●			❍	●			❍		
❍				●					
❍	❍				●	❍		❍	❍
❍	❍				❍	❍		❍	●
		●	❍						
26	28	40	31	22	32	38	9	13	36

● = highly suitable ❍ = suitable

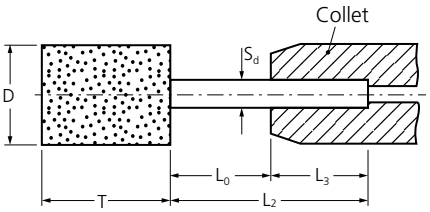
Mounted point dia. [mm]	Cutting speeds [m/s]						
	10	15	20	25	30	40	50
	Rotational speeds [RPM]						
2	95,500	143,200	191,000	238,700	286,500	382,000	477,500
3	63,700	95,500	127,300	159,200	191,000	254,600	318,300
4	47,700	71,600	95,500	119,400	143,200	191,000	238,700
5	38,200	57,300	76,400	95,500	114,600	152,800	191,000
6	31,800	47,700	63,700	79,600	95,500	127,300	159,200
7	27,300	40,900	54,600	68,200	81,900	109,100	136,400
8	23,900	35,800	47,700	59,700	71,600	95,500	119,400
10	19,100	28,600	38,200	47,700	57,300	76,400	95,500
12	15,900	23,900	31,800	39,800	47,700	63,700	79,600
14	13,600	20,500	27,300	34,100	40,900	54,600	68,200
16	11,900	17,900	23,900	29,800	35,800	47,700	59,700
20	9,500	14,300	19,100	23,900	28,600	38,200	47,700
25	7,600	11,500	15,300	19,100	22,900	30,600	38,200
32	6,000	9,000	11,900	14,900	17,900	23,900	29,800
40	4,800	7,200	9,500	11,900	14,300	19,100	23,900
50	3,800	5,700	7,600	9,500	11,500	15,300	19,100

Recommended rotational speed range

Refer to the table for the recommended rotational speed based on the diameter and cutting speed of your tool.
The recommended cutting speeds can be found in the introductory descriptions of the various hardness grades in this catalogue.

Note:
The optimum rotational speeds can be found in the product tables. These have been limited to 150,000 RPM, as conventional drives do not permit a higher rotational speed.

Example:
Mounted point dia. 20 mm
STEEL
Cutting speed: 30–50 m/s
Rotational speed: 28,600–47,700 RPM



Explanation of the code system according to EN 12413

D = Mounted point outer dia.
T = Mounted point width
S_d = Shank dia.

L_0 = Unsupported shank length
L_2 = Shank length
L_3 = Clamping length of shank

Safety notes

All PFERD mounted points are approved for a maximum operating speed of 50 m/s. The maximum permitted rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the shank length, the clamping length (L_3) of the shank must be at least 10 mm.

The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:
- Shape and dimensions of the mounted point
- Diameter of the steel shank S_d
- Unsupported shank length L_0

Each packaging unit of PFERD mounted points comes with rotational speed specifications for the unsupported shank length (L_0) of that mounted point. Proper concentric accuracy and correct clamping of the tool drive must also be ensured.

Tables with the maximum permitted rotational speeds for the entire PFERD mounted point product range are available on request.

= Wear eye protection!
= Wear hearing protection!
= Wear a dust mask!
= Wear gloves!
= Read the safety notes!



Applications of mounted points

- Work on edges (chamfering, rounding)
- Deburring
- Grinding out
- Levelling
- Surface work
- Work on weld seams
- Finishing
- Grouting
- Roughening (RUBBER type)

ZY 2025 6 ADW 30 M 5 V STEEL
❶ ❷ ❸ ❹ ❺ ❻❼❽ ❾

❶ Shapes according to DIN 69170

ZY = Cylindrical
SP = Pointed tree
WR = Cylindrical with radius end
KU = Ball
KE = Conical with radius end
TO = Cup

US shapes according to ANSI B74.2
Series W (cylindrical mounted points in inch dimensions), series A and B (other shapes)

❷ Dimensions

The first digits of the description indicate the mounted point outer diameter D and mounted point width T in mm:
3 mm x 6 mm = 0306 **20 mm x 25 mm = 2025** 50 mm x 13 mm = 5013

US dimensions
Series W cylindrical mounted points and series A and B shaped mounted points are specified by a number (e.g. W 143).

❸ Shanks

Only the shank diameter is given in the description. The shank length is determined as follows:
Shank dia. 3 mm = 30 mm shank length
Shank dia. 6 mm = 40 mm shank length
Shank dia. 8 mm = 40 mm shank length
Shank dia. 1/8" = 1 1/4" shank length
Shank dia. 1/4" = 1 1/2" shank length

❹ Abrasives

In general, two grain types are used, with internationally defined descriptions according to ISO 525:
A = Aluminium oxide (Al_2O_3)
C = Silicon carbide (SiC)

The following abbreviations are used in order to specify the grain mixtures more precisely, beyond ISO 525:
AD = Aluminium oxide, dark red
AW = Aluminium oxide, white
AR = Aluminium oxide, pink
AN = Aluminium oxide, regular
AH = Bubble grain aluminium oxide
CN = Silicon carbide, green
CU = Silicon carbide, grey
CO = Ceramic oxide grain
ADW = Aluminium oxide mixture AD + AW
ARN = Aluminium oxide mixture AR + AN
ADR = Aluminium oxide mixture AD + AR
AWCO = Aluminium oxide mixture AW + CO



❺ Grit sizes according to ISO 525 and ISO 8486

The grit sizes used in PFERD mounted points are determined by the shape and diameter of the mounted point.
In this example, **grit size 30** is used.

❻ Hardness grades according to ISO 525

Hardness grades are classified using letters in alphabetical order to specify the hardness from soft to hard.
This example concerns a mounted point with **hardness M**.

Hardness grade coding				Property
A	B	C	D	Extremely soft
E	F	G	–	Very soft
H	I	J	K	Soft
L	**M**	N	O	**Medium**
P	Q	R	S	Hard
T	U	V	W	Very hard
X	Y	Z	–	Extremely hard

❼ Structure according to ISO 525

The internationally valid scale for structural density ranges from 1 = dense to 14 = open (porous) structure.
In this example, the structural density is specified by the number **5**.

❽ Bond according to ISO 525

Bond types are indicated with the following internationally standardized letters:
V = Vitrified bond
B = Resinoid bond

❾ Material-specific description

The material-specific description indicates the material to be processed.
STEEL = Universal for steel and cast steel
STEEL EDGE = Specialist for use on edges for steel and cast steel



Mounted points with a shank diameter of 3, 6 and 8 mm can be extended with drive spindle extensions. They allow access to hard-to-reach areas. The drive spindle extension is mounted in the collet of the tool drive (air grinder or electric grinder), or in the handpiece of the flexible shaft. In some applications, spindle extensions are an economical alternative to customized mounted points with long shanks.

Safety notes:

- For safety reasons, it is not possible to use drive spindle extensions in combination with mounted points that have long shanks.
- For additional safety notes, please refer to catalogue section 9.



More detailed information and ordering data for drive spindle extensions can be found in catalogue section 9.

= Read the safety notes!

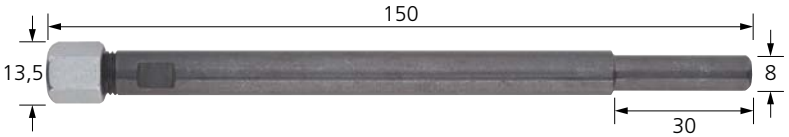
Extension SPV 150-3 S6 for shank diameter of 3 mm

EAN 4007220**185308**



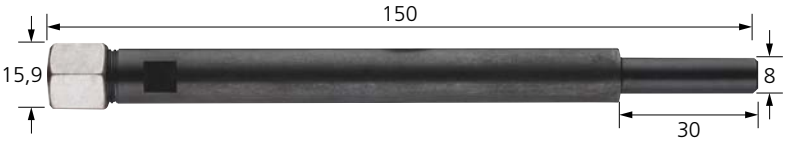
Extension SPV 150-6 S8 for shank diameter of 6 mm

EAN 4007220**185315**



Extension SPV 150-8 S8 for shank diameter of 8 mm

EAN 4007220**184400**



Extension SPV 100-6 S8 for shank diameter of 6 mm

EAN 4007220**185261**



Extension SPV 100-6 SPG 6 for shank diameter of 6 mm

EAN 4007220**656051**



Extension SPV 75-6 S8 for shank diameter of 6 mm

EAN 4007220**185278**



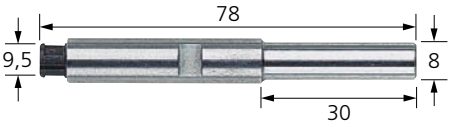
Extension SPV 75-6 SPG 6 for shank diameter of 6 mm

EAN 4007220**333143**



Extension SPV 50-3 S8 for shank diameter of 3 mm

EAN 4007220**185254**



STEEL mounted points

The STEEL type is the most universal bond for machining steel and cast steel. It is extremely well suited to grinding high-speed steel (HSS) moulded parts and weld dressing on steel constructions.



Advantages:

- Good grinding performance and stock removal rate in universal use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces and edges.

Materials that can be worked:

- Steel
- Cast steel

Type:

- Vitrified bond
- Aluminium oxide mixture of dark-red and white aluminium oxide

Recommendations for use:

- STEEL mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

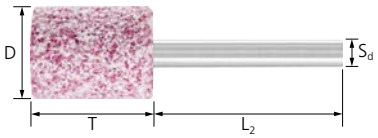
- Please complete the description with the desired grit size.

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.

STEEL, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.



D x T [mm]	Grit size 24	30	46	60	80	100	US shape	Opt. RPM	Max. RPM		Description
	EAN 4007220										
Shank dia. 3 x 30 mm [S_d x L_2]											
2 x 5	-	-	-	-	-	094365	W 141	150,000	201,800	10	ZY 0205 3 ADW ... M5V STEEL
3 x 6	-	-	-	-	-	094518	W 144	150,000	206,100	10	ZY 0306 3 ADW ... M5V STEEL
4 x 8	-	-	-	094679	-	094662	-	150,000	175,100	10	ZY 0408 3 ADW ... M5V STEEL
5 x 10	-	-	-	094877	-	094860	W 153	130,000	130,700	10	ZY 0510 3 ADW ... M5V STEEL
6 x 13	-	-	-	095140	-	095133	W 163	93,600	93,600	10	ZY 0613 3 ADW ... M5V STEEL
8 x 10	-	-	095331	-	095348	-	W 169	87,600	87,600	10	ZY 0810 3 ADW ... M5V STEEL
8 x 16	-	-	095522	-	659878	-	-	61,000	61,000	10	ZY 0816 3 ADW ... M5V STEEL
10 x 2	-	-	-	-	-	098653	W 172	85,000	95,400	10	ZY 1002 3 ADW ... M5V STEEL
10 x 13	-	-	095706	-	-	-	W 176	58,400	58,400	10	ZY 1013 3 ADW ... M5V STEEL
13 x 3	-	-	-	098783	-	098776	W 122	65,000	73,400	10	ZY 1303 3 ADW ... M5V STEEL
Shank dia. 6 x 40 mm [S_d x L_2]											
3 x 6	-	-	-	-	-	094457	W 144	150,000	206,100	10	ZY 0306 6 ADW ... M5V STEEL
4 x 8	-	-	-	094570	-	-	-	150,000	177,400	10	ZY 0408 6 ADW ... M5V STEEL
5 x 10	-	-	-	094754	-	-	W 153	130,000	157,800	10	ZY 0510 6 ADW ... M5V STEEL
6 x 13	-	-	-	095034	-	095027	W 163	131,500	131,500	10	ZY 0613 6 ADW ... M5V STEEL
8 x 10	-	-	-	-	095263	-	W 169	110,000	119,300	10	ZY 0810 6 ADW ... M5V STEEL
8 x 16	-	-	095416	-	095423	-	-	110,000	119,300	10	ZY 0816 6 ADW ... M5V STEEL
10 x 13	-	-	095614	-	095621	-	W 176	85,000	95,400	10	ZY 1013 6 ADW ... M5V STEEL
10 x 20	-	-	095850	-	095867	-	W 177	85,000	95,400	10	ZY 1020 6 ADW ... M5V STEEL
10 x 25	-	-	095959	-	659892	-	W 178	83,200	83,200	10	ZY 1025 6 ADW ... M5V STEEL
10 x 32	-	-	096017	-	659908	-	W 179	62,800	62,800	10	ZY 1032 6 ADW ... M5V STEEL
13 x 13	-	-	096093	-	-	-	W 185	65,000	73,400	10	ZY 1313 6 ADW ... M5V STEEL
13 x 20	-	-	096260	-	659915	-	W 186	65,000	73,400	10	ZY 1320 6 ADW ... M5V STEEL
13 x 25	-	-	096345	-	096352	-	W 187	65,000	66,000	10	ZY 1325 6 ADW ... M5V STEEL
13 x 40	-	-	098035	-	-	-	W 188	42,400	42,400	10	ZY 1340 6 ADW ... M5V STEEL
16 x 4	-	-	098912	-	660003	-	-	55,000	59,600	10	ZY 1604 6 ADW ... M5V STEEL

Continued on next page

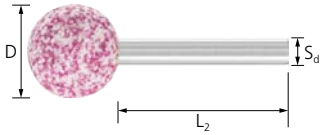
Mounted points
For universal use on steel and cast steel

D x T [mm]	Grit size						US shape	Opt. RPM	Max. RPM		Description
	24	30	46	60	80	100					
	EAN 4007220										
16 x 20	-	096451	-	096468	-	-	W 195	55,000	59,600	10	ZY 1620 6 ADW ... M5V STEEL
16 x 32	-	096598	-	096604	-	-	-	51,200	51,200	10	ZY 1632 6 ADW ... M5V STEEL
16 x 40	-	096727	-	-	-	-	-	40,500	40,500	10	ZY 1640 6 ADW ... M5V STEEL
16 x 50	-	659922	-	-	-	-	W 197	31,300	31,300	10	ZY 1650 6 ADW ... M5V STEEL
20 x 6	-	-	099117	-	660010	-	W 201	43,000	47,700	10	ZY 2006 6 ADW ... M5V STEEL
20 x 20	-	096895	-	659946	-	-	W 204	43,000	47,700	10	ZY 2020 6 ADW ... M5V STEEL
20 x 25	-	096994	-	097007	-	-	W 205	43,000	47,700	10	ZY 2025 6 ADW ... M5V STEEL
20 x 32	-	097106	-	659953	-	-	W 206	41,100	41,100	10	ZY 2032 6 ADW ... M5V STEEL
20 x 40	-	097212	-	097229	-	-	W 207	32,400	32,400	10	ZY 2040 6 ADW ... M5V STEEL
25 x 6	-	-	099322	-	-	-	W 216	35,000	38,100	10	ZY 2506 6 ADW ... M5V STEEL
25 x 25	-	097335	-	659977	-	-	W 220	35,000	38,100	10	ZY 2525 6 ADW ... M5V STEEL
25 x 32	-	097434	-	-	-	-	-	32,900	32,900	10	ZY 2532 6 ADW ... M5V STEEL
32 x 8	-	099575	-	660034	-	-	W 226	27,000	29,800	5	ZY 3208 6 ADW ... M5V STEEL
32 x 16	099667	-	-	-	-	-	-	27,000	29,800	5	ZY 3216 6 ADW ... M5V STEEL
32 x 20	099773	-	660065	-	-	-	W 228	27,000	29,800	5	ZY 3220 6 ADW ... M5V STEEL
32 x 32	097595	-	097601	-	-	-	W 230	25,700	25,700	5	ZY 3232 6 ADW ... M5V STEEL
32 x 40	097717	-	659984	-	-	-	W 231	20,300	20,300	5	ZY 3240 6 ADW ... M5V STEEL
40 x 6	-	-	100455	-	-	-	W 235	22,000	23,800	5	ZY 4006 6 ADW ... M5V STEEL
40 x 10	-	099889	-	-	-	-	W 236	22,000	23,800	5	ZY 4010 6 ADW ... M5V STEEL
40 x 20	100028	-	100035	-	-	-	-	22,000	23,800	5	ZY 4020 6 ADW ... M5V STEEL
40 x 40	097809	-	659991	-	-	-	W 238	16,200	16,200	5	ZY 4040 6 ADW ... M5V STEEL
50 x 8	-	100509	-	-	-	-	-	17,000	19,000	5	ZY 5008 6 ADW ... M5V STEEL
50 x 13	-	100189	-	-	-	-	-	17,000	19,000	5	ZY 5013 6 ADW ... M5V STEEL
50 x 25	-	-	100325	-	-	-	W 242	17,000	19,000	5	ZY 5025 6 ADW ... M5V STEEL
Shank dia. 8 x 40 mm [S_d x L_2]											
50 x 25	100554	-	-	-	-	-	W 242	17,000	19,000	5	ZY 5025 8 ADW ... M5V STEEL



STEEL, ball type

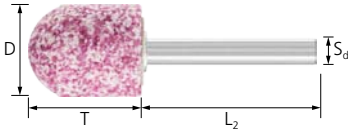
The ball shape KU is often used for contour grinding and backside deburring.



D [mm]	Grit size 24	30	46	60	Opt. RPM	Max. RPM		Description
	EAN 4007220							
Shank dia. 6 x 40 mm [S_d x L_2]								
13	-	-	101209	-	65,000	73,400	10	KU 13 6 ADW ... M5V STEEL
16	-	101261	-	660140	55,000	59,600	10	KU 16 6 ADW ... M5V STEEL
20	-	101339	-	101346	43,000	47,700	10	KU 20 6 ADW ... M5V STEEL
25	-	-	-	660164	35,000	38,100	10	KU 25 6 ADW ... M5V STEEL
32	660171	-	660188	-	27,000	29,800	5	KU 32 6 ADW ... M5V STEEL

STEEL, cylindrical with radius end type

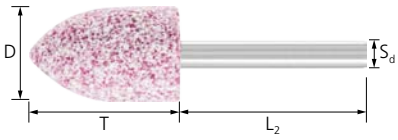
The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.



D x T [mm]	Grit size 30	46	60	Opt. RPM	Max. RPM		Description
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
13 x 20	-	660096	-	65,000	73,400	10	WR 1320 6 ADW ... M5V STEEL
20 x 25	660119	-	660126	43,000	47,700	10	WR 2025 6 ADW ... M5V STEEL

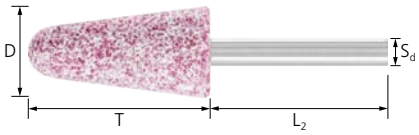
STEEL, pointed tree type

The pointed tree shape SP is suitable for machining small holes and bores.



D x T [mm]	Grit size 30	46	60	Opt. RPM	Max. RPM		Description
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
8 x 16	-	102008	-	110,000	119,300	10	SP 0816 6 ADW ... M5V STEEL
13 x 20	-	102138	-	65,000	73,400	10	SP 1320 6 ADW ... M5V STEEL
20 x 32	102237	-	660256	43,000	47,700	10	SP 2032 6 ADW ... M5V STEEL
20 x 50	102312	-	-	30,500	30,500	10	SP 2050 6 ADW ... M5V STEEL
25 x 40	660270	-	-	35,000	35,000	10	SP 2540 6 ADW ... M5V STEEL

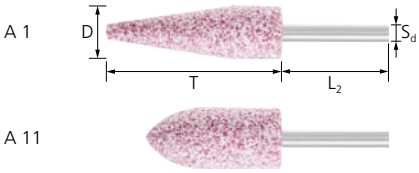
Mounted points
For universal use on steel and cast steel



STEEL, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

D x T [mm]	Grit size 24	30	46	60	80	Opt. RPM	Max. RPM		Description
	EAN 4007220								
Shank dia. 6 x 40 mm [S_d x L_2]									
10 x 25	-	-	102763	-	102770	85,000	95,400	10	KE 1025 6 ADW ... M5V STEEL
16 x 45	-	-	102862	-	660300	52,000	52,000	10	KE 1645 6 ADW ... M5V STEEL
20 x 32	-	102671	-	660294	-	43,000	47,700	10	KE 2032 6 ADW ... M5V STEEL
20 x 40	-	102961	-	660348	-	43,000	47,700	10	KE 2040 6 ADW ... M5V STEEL
25 x 25	-	102534	-	-	-	35,000	38,100	10	KE 2525 6 ADW ... M5V STEEL
25 x 45	-	534687	-	660317	-	34,000	34,000	10	KE 2545 6 ADW ... M5V STEEL
25 x 70	-	103043	-	-	-	20,400	20,400	10	KE 2570 6 ADW ... M5V STEEL
32 x 32	660287	-	102596	-	-	27,000	29,800	5	KE 3232 6 ADW ... M5V STEEL



Series A STEEL

The shape A 1 is excellent for machining small holes and bores.

The shape A 11 is ideal for a variety of deburring and grinding jobs.

US shape	D x T [mm]	Grit size 30	Opt. RPM	Max. RPM		Description
		EAN 4007220				
Shank dia. 6.35 x 40 mm [S_d x L_2]						
A 1	19 x 64	114582	33,500	33,500	10	A 1 6,3 ADW 30 M5V STEEL
A 11	22 x 50	114681	30,400	30,400	10	A 11 6,3 ADW 30 M5V STEEL



Mounted point set SSO 5300 STEEL

Contains 100 STEEL type mounted points with shank diameter 6 mm in the most common shapes and dimensions for the most common applications.

Delivered in sales-promoting display box for the point of sale in shops.

Contents:
10 pieces each of:

- ZY 1620
- ZY 2025
- ZY 2506
- ZY 2532
- ZY 3216
- ZY 3232
- ZY 4020
- SP 2032
- KE 2032
- KE 2570

S_d [mm]	Grit size coarse		Description
	EAN 4007220		
6	114513	1	SSO 5300 STEEL

STEEL EDGE mounted points

The STEEL EDGE type is particularly well suited to edge grinding and deburring work on steel and cast steel components. Its applications also include grinding of chamfers in preparation for weld seams and grinding of contours.

Advantages:

- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

Materials that can be worked:

- Steel
- Cast steel

Type:

- Vitrified bond
- Pink aluminium oxide

Recommendations for use:

- STEEL EDGE mounted points perform best at a cutting speed of 25 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

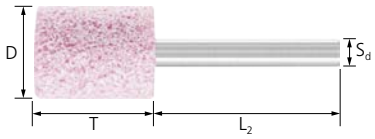
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.





Mounted points
For edge grinding on steel and cast steel



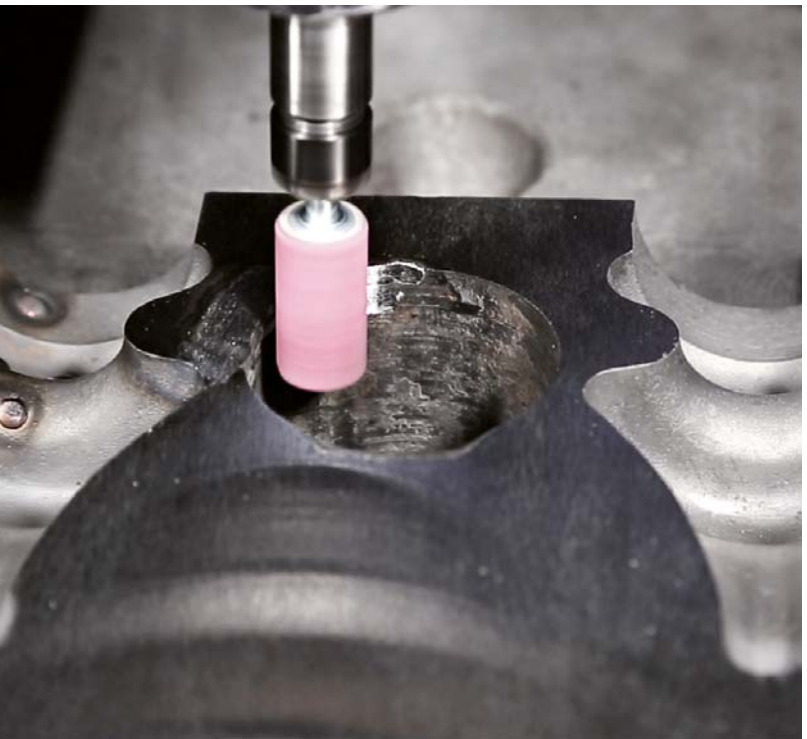
STEEL EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size						US shape	Opt. RPM	Max. RPM		Description
	24	30	46	60	80	100					
	EAN 4007220										
Shank dia. 3 x 30 mm [S_d x L_2]											
2 x 5	-	-	-	-	-	094372	W 141	150,000	201,800	10	ZY 0205 3 AR ... O5V STEEL EDGE
3 x 6	-	-	-	-	-	094525	W 144	150,000	206,100	10	ZY 0306 3 AR ... O5V STEEL EDGE
3 x 10	-	-	-	-	-	118139	W 145	131,400	131,400	10	ZY 0310 3 AR ... O5V STEEL EDGE
3 x 13	-	-	-	-	-	118146	W 146	95,400	95,400	10	ZY 0313 3 AR ... O5V STEEL EDGE
4 x 8	-	-	-	094693	-	094686	-	150,000	175,100	10	ZY 0408 3 AR ... O5V STEEL EDGE
5 x 10	-	-	-	094891	-	094884	W 153	130,000	130,700	10	ZY 0510 3 AR ... O5V STEEL EDGE
5 x 13	-	-	-	-	-	118238	W 154	114,800	114,800	10	ZY 0513 3 AR ... O5V STEEL EDGE
5 x 15	-	-	-	534670	-	-	-	98,100	98,100	10	ZY 0515 3 AR ... O5V STEEL EDGE
6 x 10	-	-	-	118320	-	118313	W 162	100,000	110,500	10	ZY 0610 3 AR ... O5V STEEL EDGE
6 x 13	-	-	-	095164	-	095157	W 163	93,600	93,600	10	ZY 0613 3 AR ... O5V STEEL EDGE
6 x 19	-	-	-	118368	-	118351	W 164	64,500	64,500	10	ZY 0619 3 AR ... O5V STEEL EDGE
6 x 25	-	-	-	534656	-	-	-	53,100	53,100	10	ZY 0625 3 AR ... O5V STEEL EDGE
8 x 2	-	-	-	-	-	098578	W 165	85,000	119,300	10	ZY 0802 3 AR ... O5V STEEL EDGE
8 x 10	-	-	095355	-	095362	-	W 169	85,000	87,600	10	ZY 0810 3 AR ... O5V STEEL EDGE
8 x 13	-	-	118399	-	118405	-	W 170	74,400	74,400	10	ZY 0813 3 AR ... O5V STEEL EDGE
8 x 16	-	-	095546	-	095553	-	-	61,000	61,000	10	ZY 0816 3 AR ... O5V STEEL EDGE
10 x 2	-	-	-	-	-	098660	W 172	65,000	95,400	10	ZY 1002 3 AR ... O5V STEEL EDGE
10 x 3	-	-	-	118429	-	-	W 173	65,000	100,500	10	ZY 1003 3 AR ... O5V STEEL EDGE
10 x 10	-	-	-	-	118467	-	W 175	65,000	77,500	10	ZY 1010 3 AR ... O5V STEEL EDGE
10 x 13	-	-	095720	-	095737	-	W 176	58,400	58,400	10	ZY 1013 3 AR ... O5V STEEL EDGE
13 x 3	-	-	-	098806	-	098790	W 182	50,000	73,400	10	ZY 1303 3 AR ... O5V STEEL EDGE
13 x 13	-	-	096154	-	096161	-	W 185	45,300	45,300	10	ZY 1313 3 AR ... O5V STEEL EDGE
16 x 3	-	-	-	118580	-	-	W 191	42,000	60,000	10	ZY 1603 3 AR ... O5V STEEL EDGE
16 x 4	-	-	098974	-	098981	-	-	42,000	59,600	10	ZY 1604 3 AR ... O5V STEEL EDGE
19 x 3	-	-	-	118627	-	-	W 200	35,000	49,900	10	ZY 1903 3 AR ... O5V STEEL EDGE
20 x 6	-	-	-	-	100424	-	W 201	33,000	47,700	10	ZY 2006 3 AR ... O5V STEEL EDGE
25 x 3	-	-	-	-	-	118696	W 215	26,000	37,500	10	ZY 2503 3 AR ... O5V STEEL EDGE
Shank dia. 6 x 40 mm [S_d x L_2]											
3 x 6	-	-	-	-	-	094464	W 144	150,000	206,100	10	ZY 0306 6 AR ... O5V STEEL EDGE
4 x 8	-	-	-	094594	-	094587	-	150,000	177,400	10	ZY 0408 6 AR ... O5V STEEL EDGE
5 x 10	-	-	-	094778	-	094761	W 153	130,000	157,800	10	ZY 0510 6 AR ... O5V STEEL EDGE
6 x 13	-	-	-	095058	-	095041	W 163	100,000	131,500	10	ZY 0613 6 AR ... O5V STEEL EDGE
6 x 25	-	-	-	534663	-	-	-	62,200	62,200	10	ZY 0625 6 AR ... O5V STEEL EDGE
8 x 10	-	-	095270	-	095287	-	W 169	85,000	119,300	10	ZY 0810 6 AR ... O5V STEEL EDGE
8 x 16	-	-	095430	-	095447	-	-	85,000	119,300	10	ZY 0816 6 AR ... O5V STEEL EDGE
10 x 13	-	-	095638	-	095645	-	W 176	65,000	95,400	10	ZY 1013 6 AR ... O5V STEEL EDGE
10 x 20	-	-	095874	-	095881	-	W 177	65,000	95,400	10	ZY 1020 6 AR ... O5V STEEL EDGE
10 x 25	-	-	095966	-	095973	-	W 178	65,000	83,200	10	ZY 1025 6 AR ... O5V STEEL EDGE
10 x 32	-	-	096024	-	096031	-	W 179	62,800	62,800	10	ZY 1032 6 AR ... O5V STEEL EDGE
13 x 3	-	-	-	098745	-	-	W 182	50,000	73,400	10	ZY 1303 6 AR ... O5V STEEL EDGE
13 x 13	-	-	096109	-	096116	-	W 185	50,000	73,400	10	ZY 1313 6 AR ... O5V STEEL EDGE
13 x 20	-	-	096277	-	096284	-	W 186	50,000	73,400	10	ZY 1320 6 AR ... O5V STEEL EDGE
13 x 25	-	-	096369	-	096376	-	W 187	50,000	66,000	10	ZY 1325 6 AR ... O5V STEEL EDGE
13 x 40	-	-	098059	-	-	-	W 188	42,400	42,400	10	ZY 1340 6 AR ... O5V STEEL EDGE
16 x 4	-	-	098929	-	098936	-	-	42,000	59,600	10	ZY 1604 6 AR ... O5V STEEL EDGE
16 x 10	-	099063	-	-	-	-	W 193	42,000	59,600	10	ZY 1610 6 AR ... O5V STEEL EDGE
16 x 20	-	096475	-	096482	-	-	W 195	42,000	59,600	10	ZY 1620 6 AR ... O5V STEEL EDGE
16 x 32	-	096611	-	096628	-	-	-	42,000	51,200	10	ZY 1632 6 AR ... O5V STEEL EDGE
16 x 40	-	096741	-	096758	-	-	-	40,500	40,500	10	ZY 1640 6 AR ... O5V STEEL EDGE

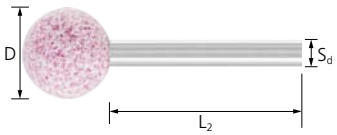
Continued on next page

D x T [mm]	Grit size						US shape	Opt. RPM	Max. RPM		Description
	24	30	46	60	80	100					
	EAN 4007220										
16 x 50	-	096840	-	-	-	-	W 197	31,300	31,300	10	ZY 1650 6 AR ... O5V STEEL EDGE
20 x 6	-	-	099124	-	099131	-	W 201	33,000	47,700	10	ZY 2006 6 AR ... O5V STEEL EDGE
20 x 10	-	099216	-	099223	-	-	W 202	33,000	47,700	10	ZY 2010 6 AR ... O5V STEEL EDGE
20 x 20	-	096901	-	096918	-	-	W 204	33,000	47,700	10	ZY 2020 6 AR ... O5V STEEL EDGE
20 x 25	-	097014	-	097021	-	-	W 205	33,000	47,700	10	ZY 2025 6 AR ... O5V STEEL EDGE
20 x 32	-	097113	-	097120	-	-	W 206	33,000	41,100	10	ZY 2032 6 AR ... O5V STEEL EDGE
20 x 40	-	097236	-	097243	-	-	W 207	32,400	32,400	10	ZY 2040 6 AR ... O5V STEEL EDGE
20 x 50	-	098080	-	-	-	-	W 208	25,100	25,100	10	ZY 2050 6 AR ... O5V STEEL EDGE
25 x 6	-	-	099339	-	099346	-	W 214	26,000	38,100	10	ZY 2506 6 AR ... O5V STEEL EDGE
25 x 10	-	099377	-	-	-	-	W 217	26,000	38,100	10	ZY 2510 6 AR ... O5V STEEL EDGE
25 x 13	-	099438	-	-	-	-	W 218	26,000	38,100	10	ZY 2513 6 AR ... O5V STEEL EDGE
25 x 16	-	-	-	099513	-	-	-	26,000	38,100	10	ZY 2516 6 AR ... O5V STEEL EDGE
25 x 25	-	097342	-	097359	-	-	W 220	26,000	38,100	10	ZY 2525 6 AR ... O5V STEEL EDGE
25 x 32	-	097458	-	097465	-	-	-	26,000	32,900	10	ZY 2532 6 AR ... O5V STEEL EDGE
25 x 40	-	098127	-	-	-	-	W 221	26,000	26,000	10	ZY 2540 6 AR ... O5V STEEL EDGE
32 x 6	-	-	119112	-	-	-	W 225	21,000	30,000	5	ZY 3206 6 AR ... O5V STEEL EDGE
32 x 8	-	099582	-	099599	-	-	-	21,000	29,800	5	ZY 3208 6 AR ... O5V STEEL EDGE
32 x 20	099780	-	099797	-	-	-	W 228	21,000	29,800	5	ZY 3220 6 AR ... O5V STEEL EDGE
32 x 32	097618	-	097625	-	-	-	W 230	21,000	25,700	5	ZY 3232 6 AR ... O5V STEEL EDGE
32 x 40	097731	-	097748	-	-	-	W 231	20,300	20,300	5	ZY 3240 6 AR ... O5V STEEL EDGE
40 x 6	-	-	100462	-	-	-	W 235	16,000	23,800	5	ZY 4006 6 AR ... O5V STEEL EDGE
40 x 10	-	099896	-	099902	-	-	W 236	16,000	23,800	5	ZY 4010 6 AR ... O5V STEEL EDGE
40 x 15	-	099957	-	099964	-	-	-	16,000	23,800	5	ZY 4015 6 AR ... O5V STEEL EDGE
40 x 20	100042	-	100059	-	-	-	-	16,000	23,800	5	ZY 4020 6 AR ... O5V STEEL EDGE
40 x 40	097816	-	097823	-	-	-	W 238	16,000	16,200	5	ZY 4040 6 AR ... O5V STEEL EDGE
50 x 8	-	100516	-	-	-	-	-	13,000	19,000	5	ZY 5008 6 AR ... O5V STEEL EDGE
50 x 13	-	100202	-	-	-	-	-	13,000	19,000	5	ZY 5013 6 AR ... O5V STEEL EDGE
50 x 25	100332	-	100349	-	-	-	W 242	13,000	19,000	5	ZY 5025 6 AR ... O5V STEEL EDGE
Shank dia. 8 x 40 mm [S_d x L_2]											
32 x 40	098196	-	-	-	-	-	W 231	21,000	29,800	5	ZY 3240 8 AR ... O5V STEEL EDGE
40 x 40	098271	-	-	-	-	-	W 238	16,000	23,800	5	ZY 4040 8 AR ... O5V STEEL EDGE





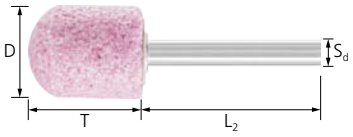
Mounted points
For edge grinding on steel and cast steel



STEEL EDGE, ball type

The ball shape KU is often used for contour grinding and backside deburring.

D [mm]	Grit size						Opt. RPM	Max. RPM		Description
	24	30	46	60	80	100				
	EAN 4007220									
Shank dia. 3 x 30 mm [S_d x L_2]										
3	-	-	-	-	-	101018	150,000	300,200	10	KU 03 3 AR ... O5V STEEL EDGE
5	-	-	-	101100	-	101094	130,000	190,900	10	KU 05 3 AR ... O5V STEEL EDGE
8	-	-	101551	-	101568	-	85,000	116,200	10	KU 08 3 AR ... O5V STEEL EDGE
10	-	-	101520	-	101537	-	65,000	83,300	10	KU 10 3 AR ... O5V STEEL EDGE
13	-	-	101605	-	101612	-	50,000	54,000	10	KU 13 3 AR ... O5V STEEL EDGE
Shank dia. 6 x 40 mm [S_d x L_2]										
3	-	-	-	-	-	100981	150,000	317,300	10	KU 03 6 AR ... O5V STEEL EDGE
5	-	-	-	101056	-	101049	130,000	190,900	10	KU 05 6 AR ... O5V STEEL EDGE
8	-	-	101148	-	101155	-	85,000	119,300	10	KU 08 6 AR ... O5V STEEL EDGE
10	-	-	101490	-	101506	-	65,000	95,400	10	KU 10 6 AR ... O5V STEEL EDGE
13	-	-	101216	-	101223	-	50,000	73,400	10	KU 13 6 AR ... O5V STEEL EDGE
16	-	101278	-	101285	-	-	42,000	59,600	10	KU 16 6 AR ... O5V STEEL EDGE
20	-	101353	-	101360	-	-	33,000	47,700	10	KU 20 6 AR ... O5V STEEL EDGE
25	-	101391	-	101407	-	-	26,000	38,100	10	KU 25 6 AR ... O5V STEEL EDGE
32	101445	-	101452	-	-	-	21,000	29,800	5	KU 32 6 AR ... O5V STEEL EDGE



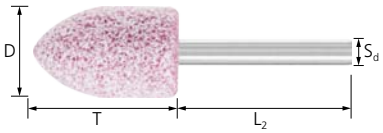
STEEL EDGE, cylindrical with radius end type

The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.

D x T [mm]	Grit size					Opt. RPM	Max. RPM		Description
	30	46	60	80	100				
	EAN 4007220								
Shank dia. 3 x 30 mm [S_d x L_2]									
3 x 6	-	-	-	-	100745	150,000	219,800	10	WR 0306 3 AR ... O5V STEEL EDGE
5 x 10	-	-	100837	-	100820	130,000	136,500	10	WR 0510 3 AR ... O5V STEEL EDGE
Shank dia. 6 x 40 mm [S_d x L_2]									
5 x 10	-	-	100783	-	-	130,000	168,400	10	WR 0510 6 AR ... O5V STEEL EDGE
8 x 16	-	100851	-	100868	-	85,000	119,300	10	WR 0816 6 AR ... O5V STEEL EDGE
13 x 20	-	100905	-	100912	-	50,000	73,400	10	WR 1320 6 AR ... O5V STEEL EDGE
20 x 25	100943	-	100950	-	-	33,000	47,700	10	WR 2025 6 AR ... O5V STEEL EDGE

STEEL EDGE, pointed tree type

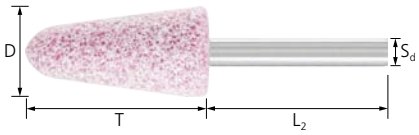
The pointed tree shape SP is excellent for machining small holes and bores.



D x T [mm]	Grit size					Opt. RPM	Max. RPM		Description
	30	46	60	80	100				
	EAN 4007220								
Shank dia. 3 x 30 mm [S_d x L_2]									
3 x 6	-	-	-	-	101810	150,000	252,000	10	SP 0306 3 AR ... O5V STEEL EDGE
5 x 10	-	-	101940	-	101933	130,000	149,500	10	SP 0510 3 AR ... O5V STEEL EDGE
8 x 16	-	102084	-	102091	-	72,800	72,800	10	SP 0816 3 AR ... O5V STEEL EDGE
Shank dia. 6 x 40 mm [S_d x L_2]									
3 x 6	-	-	-	-	101773	150,000	255,500	10	SP 0306 6 AR ... O5V STEEL EDGE
5 x 10	-	-	101872	-	101865	130,000	190,900	10	SP 0510 6 AR ... O5V STEEL EDGE
8 x 16	-	102015	-	102022	-	85,000	119,300	10	SP 0816 6 AR ... O5V STEEL EDGE
13 x 20	-	102152	-	102169	-	50,000	73,400	10	SP 1320 6 AR ... O5V STEEL EDGE
20 x 32	102244	-	102251	-	-	33,000	47,700	10	SP 2032 6 AR ... O5V STEEL EDGE
20 x 50	102329	-	-	-	-	30,500	30,500	10	SP 2050 6 AR ... O5V STEEL EDGE
25 x 40	102350	-	-	-	-	26,000	35,000	10	SP 2540 6 AR ... O5V STEEL EDGE



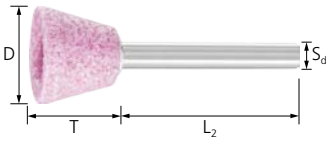
Mounted points
For edge grinding on steel and cast steel



STEEL EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position when smoothing out a ridge on a surface.

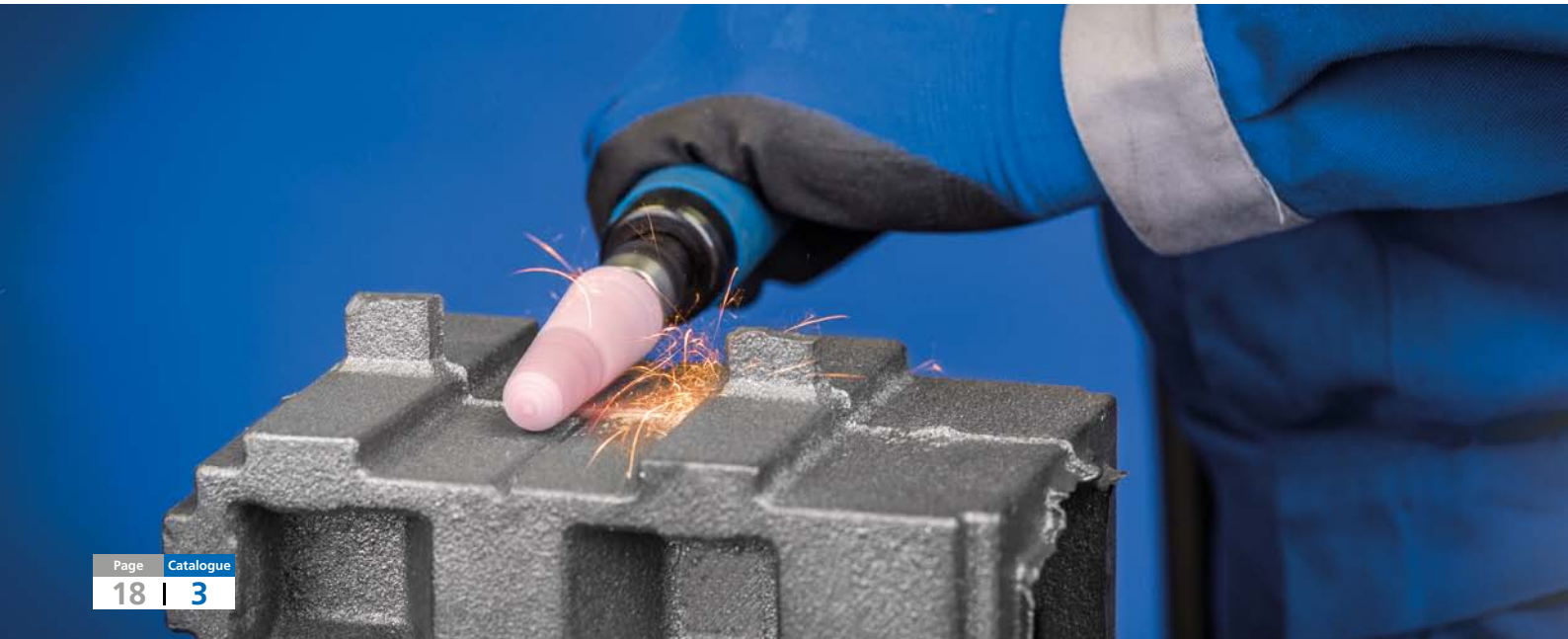
D x T [mm]	Grit size 24	30	46	60	80	Opt. RPM	Max. RPM		Description
	EAN 4007220								
Shank dia. 3 x 30 mm [S_d x L_2]									
10 x 10	-	-	102404	-	-	65,000	95,400	10	KE 1010 3 AR ... O5V STEEL EDGE
Shank dia. 6 x 40 mm [S_d x L_2]									
10 x 10	-	-	102374	-	-	65,000	95,400	10	KE 1010 6 AR ... O5V STEEL EDGE
10 x 25	-	-	102787	-	102794	65,000	95,400	10	KE 1025 6 AR ... O5V STEEL EDGE
13 x 13	-	-	102428	-	-	50,000	73,400	10	KE 1313 6 AR ... O5V STEEL EDGE
16 x 16	-	102466	-	102473	-	42,000	59,600	10	KE 1616 6 AR ... O5V STEEL EDGE
16 x 45	-	-	102879	-	102886	42,000	52,000	10	KE 1645 6 AR ... O5V STEEL EDGE
20 x 20	-	102497	-	102503	-	33,000	47,700	10	KE 2020 6 AR ... O5V STEEL EDGE
20 x 32	-	102688	-	102695	-	33,000	47,700	10	KE 2032 6 AR ... O5V STEEL EDGE
20 x 40	-	102978	-	102985	-	33,000	47,700	10	KE 2040 6 AR ... O5V STEEL EDGE
25 x 25	-	102541	-	102558	-	26,000	38,100	10	KE 2525 6 AR ... O5V STEEL EDGE
25 x 45	-	102923	-	102930	-	26,000	34,000	10	KE 2545 6 AR ... O5V STEEL EDGE
25 x 70	-	103067	-	-	-	20,400	20,400	10	KE 2570 6 AR ... O5V STEEL EDGE
32 x 32	102602	-	102619	-	-	21,000	29,800	5	KE 3232 6 AR ... O5V STEEL EDGE
Shank dia. 8 x 40 mm [S_d x L_2]									
32 x 50	103098	-	-	-	-	21,000	29,800	5	KE 3250 8 AR ... O5V STEEL EDGE



STEEL EDGE, cup type

The cup shape TO is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

D x T [mm]	Grit size 24	30	46	60	Opt. RPM	Max. RPM		Description
	EAN 4007220							
Shank dia. 6 x 40 mm [S_d x L_2]								
20 x 16	-	103128	-	103135	33,000	47,700	10	TO 2016 6 AR ... O5V STEEL EDGE
25 x 20	-	103142	-	-	26,000	38,100	10	TO 2520 6 AR ... O5V STEEL EDGE
32 x 25	103173	-	103180	-	21,000	29,800	5	TO 3225 6 AR ... O5V STEEL EDGE



Series A STEEL EDGE

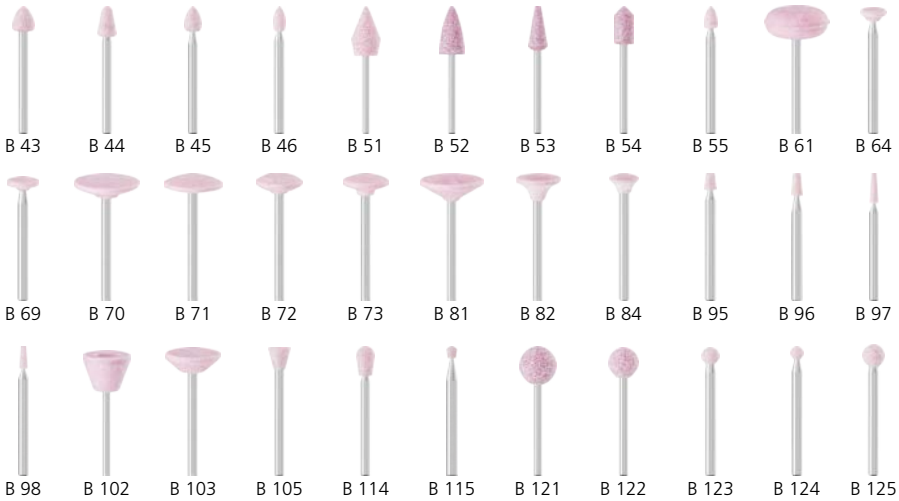
Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours.
The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Explanation of the code system:
D = Mounted point outer dia.
T = Mounted point width
S_d = Shank dia.
L_2 = Shank length



US shape	D x T [mm]	Grit size 30	Grit size 60	Grit size 100	Opt. RPM	Max. RPM		Description
		EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]								
A 1	19 x 64	117101	-	-	30,400	30,400	10	A 1 6 AR 30 O5V STEEL EDGE
A 2	25 x 32	117125	-	-	26,000	37,500	10	A 2 6 AR 30 O5V STEEL EDGE
A 3	25 x 70	117149	-	-	18,600	18,600	10	A 3 6 AR 30 O5V STEEL EDGE
A 4	32 x 32	117163	-	-	21,000	30,000	5	A 4 6 AR 30 O5V STEEL EDGE
A 5	19 x 29	117170	-	-	35,000	49,900	10	A 5 6 AR 30 O5V STEEL EDGE
A 6	19 x 29	117187	-	-	35,000	49,900	10	A 6 6 AR 30 O5V STEEL EDGE
A 11	22 x 50	117200	-	-	27,600	27,600	10	A 11 6 AR 30 O5V STEEL EDGE
A 12	17 x 32	117224	-	-	40,000	54,500	10	A 12 6 AR 30 O5V STEEL EDGE
A 14	17 x 22	117248	-	-	40,000	54,500	10	A 14 6 AR 30 O5V STEEL EDGE
A 15	6 x 27	-	117262	117255	100,000	112,900	10	A 15 6 AR ... O5V STEEL EDGE
A 21	25 x 25	117279	-	-	26,000	37,500	10	A 21 6 AR 30 O5V STEEL EDGE
A 24	6 x 19	-	117316	117309	100,000	117,400	10	A 24 6 AR ... O5V STEEL EDGE
A 25	25	117323	-	-	26,000	37,500	10	A 25 6 AR 30 O5V STEEL EDGE
A 26	16	117330	-	-	42,000	60,000	10	A 26 6 AR 30 O5V STEEL EDGE
A 34	38 x 10	117385	-	-	18,000	25,000	5	A 34 6 AR 30 O5V STEEL EDGE
A 36	41 x 10	-	117415	-	16,000	23,100	5	A 36 6 AR 60 O5V STEEL EDGE
A 37	32 x 6	-	117422	-	21,000	30,000	5	A 37 6 AR 60 O5V STEEL EDGE
Shank dia. 6.35 x 40 mm [S_d x L_2]								
A 1	19 x 64	114599	-	-	33,500	33,500	10	A 1 6,3 AR 30 O5V STEEL EDGE
A 2	25 x 32	114612	-	-	26,000	37,500	10	A 2 6,3 AR 30 O5V STEEL EDGE
A 3	25 x 70	114636	-	-	18,600	18,600	10	A 3 6,3 AR 30 O5V STEEL EDGE
A 4	32 x 32	114650	-	-	21,000	30,000	5	A 4 6,3 AR 30 O5V STEEL EDGE
A 5	19 x 29	114667	-	-	35,000	49,900	10	A 5 6,3 AR 30 O5V STEEL EDGE
A 11	22 x 50	114698	-	-	30,400	30,400	10	A 11 6,3 AR 30 O5V STEEL EDGE
A 12	17 x 32	114711	-	-	40,000	54,500	10	A 12 6,3 AR 30 O5V STEEL EDGE
A 15	6 x 27	-	114759	-	100,000	112,900	10	A 15 6,3 AR 60 O5V STEEL EDGE
A 24	6 x 19	-	114803	-	100,000	117,400	10	A 24 6,3 AR 60 O5V STEEL EDGE
A 25	25	114810	-	-	26,000	37,500	10	A 25 6,3 AR 30 O5V STEEL EDGE
A 36	41 x 10	-	114902	-	16,000	23,100	5	A 36 6,3 AR 60 O5V STEEL EDGE
A 37	32 x 6	-	114919	-	21,000	30,000	5	A 37 6,3 AR 60 O5V STEEL EDGE

Mounted points
For edge grinding on steel and cast steel



Series B STEEL EDGE

Series B mounted points are generally used on smaller or more delicate components, such as in tool and mould construction. Due to the special shapes of series B mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Explanation of the code system:

D = Mounted point outer dia.
T = Mounted point width
S_d = Shank dia.
L_2 = Shank length

US shape	D x T [mm]	Grit size				Opt. RPM	Max. RPM		Description
		46	60	80	100				
		EAN 4007220							
Shank dia. 3 x 30 mm [S_d x L_2]									
B 43	6 x 8	-	-	-	117453	100,000	149,200	10	B 43 3 AR 100 O5V STEEL EDGE
B 44	6 x 10	-	-	-	117460	100,000	141,100	10	B 44 3 AR 100 O5V STEEL EDGE
B 45	5 x 8	-	-	-	117477	130,000	181,900	10	B 45 3 AR 100 O5V STEEL EDGE
B 46	3 x 8	-	-	-	117484	150,000	267,100	10	B 46 3 AR 100 O5V STEEL EDGE
B 51	11 x 19	-	-	117507	-	60,000	63,600	10	B 51 3 AR 80 O5V STEEL EDGE
B 52	10 x 19	117514	-	117521	-	65,000	66,200	10	B 52 3 AR ... O5V STEEL EDGE
B 53	6 x 16	-	117545	-	117538	100,000	149,200	10	B 53 3 AR ... O5V STEEL EDGE
B 54	6 x 13	-	117569	-	117552	100,000	101,500	10	B 54 3 AR ... O5V STEEL EDGE
B 55	3 x 6	-	-	-	117576	150,000	257,000	10	B 55 3 AR 100 O5V STEEL EDGE
B 61	19 x 8	-	-	117590	-	35,000	45,000	10	B 61 3 AR 80 O5V STEEL EDGE
B 64	6 x 2	-	-	-	117637	100,000	149,200	10	B 64 3 AR 100 O5V STEEL EDGE
B 69	8 x 2	-	-	-	117668	85,000	120,800	10	B 69 3 AR 100 O5V STEEL EDGE
B 70	19 x 3	-	-	-	117675	35,000	49,900	10	B 70 3 AR 100 O5V STEEL EDGE
B 71	16 x 2	-	-	-	117682	42,000	60,000	10	B 71 3 AR 100 O5V STEEL EDGE
B 72	13 x 3	-	-	-	117699	50,000	75,100	10	B 72 3 AR 100 O5V STEEL EDGE
B 73	13 x 3	-	-	-	117705	50,000	75,100	10	B 73 3 AR 100 O5V STEEL EDGE
B 81	19 x 8	-	-	-	117712	35,000	49,900	10	B 81 3 AR 100 O5V STEEL EDGE
B 82	13 x 6	-	-	-	117736	50,000	75,100	10	B 82 3 AR 100 O5V STEEL EDGE
B 84	8 x 5	-	-	-	117750	85,000	120,800	10	B 84 3 AR 100 O5V STEEL EDGE
B 95	3 x 5	-	-	-	117798	150,000	260,300	10	B 95 3 AR 100 O5V STEEL EDGE
B 96	3 x 6	-	-	-	117804	150,000	236,100	10	B 96 3 AR 100 O5V STEEL EDGE
B 97	2 x 10	-	-	-	117811	107,300	107,300	10	B 97 3 AR 100 O5V STEEL EDGE
B 98	2 x 6	-	-	-	117828	150,000	168,300	10	B 98 3 AR 100 O5V STEEL EDGE
B 102	16 x 13	-	-	117842	-	42,000	46,400	10	B 102 3 AR 80 O5V STEEL EDGE
B 103	16 x 5	-	-	117866	-	42,000	60,000	10	B 103 3 AR 80 O5V STEEL EDGE
B 105	6 x 6	-	-	-	117880	100,000	149,200	10	B 105 3 AR 100 O5V STEEL EDGE
B 114	6 x 10	-	-	-	117958	100,000	136,900	10	B 114 3 AR 100 O5V STEEL EDGE
B 115	2 x 3	-	-	-	117965	150,000	299,400	10	B 115 3 AR 100 O5V STEEL EDGE
B 121	13	117972	-	-	-	50,000	56,200	10	B 121 3 AR 46 O5V STEEL EDGE
B 122	10	117996	-	118009	-	65,000	90,200	10	B 122 3 AR ... O5V STEEL EDGE
B 123	5	-	-	-	118016	130,000	198,900	10	B 123 3 AR 100 O5V STEEL EDGE
B 124	3	-	-	-	118023	150,000	291,800	10	B 124 3 AR 100 O5V STEEL EDGE
B 125	6	-	-	-	118030	100,000	149,200	10	B 125 3 AR 100 O5V STEEL EDGE
Shank dia. 3.17 x 30 mm [S_d x L_2]									
B 123	5	-	-	-	115701	130,000	198,900	10	B 123 3,1 AR 100 O5V STEEL EDGE
B 125	6	-	-	-	115732	100,000	149,200	10	B 125 3,1 AR 100 O5V STEEL EDGE

Mounted point set 2002 STEEL EDGE



Contains 15 small mounted points with shank diameter 3 mm in the most common shapes and dimensions for fine work.

Contents:

2 pieces each:
- ZY 0510
- ZY 0810
- ZY 1604

1 piece each:
- ZY 0408
- ZY 0613
- ZY 0802
- ZY 1013
- ZY 1303
- WR 0510
- KU 05
- SP 0306
- SP 0816

S_d [mm]	Grit size fine EAN 4007220		Description
3	114476	1	2002 O F STEEL EDGE

Mounted point set 2001 STEEL EDGE



Contains 10 mounted points with shank diameter 6 mm in the most common shapes and dimensions.

Contents:

1 piece each:
- ZY 1013
- ZY 1320
- ZY 2006
- ZY 2013
- ZY 2025
- KU 16
- WR 2025
- KE 2032
- SP 1320
- KE 2020

S_d [mm]	Grit size coarse EAN 4007220		Description
6	114469	1	2001 O G STEEL EDGE

Mounted points

For universal use on materials that are difficult to machine



TOUGH mounted points

The TOUGH type is specifically designed for use on titanium materials, nickel-based and cobalt-based alloys, hardened steel components and built-up weld deposits. Its applications include weld dressing on repair welds and reworking on turbine blades during aircraft maintenance and regrinding of repair welds in tool and mould-making.

Advantages:

- Cool grinding as the grain mixture is easy to break down.
- High stock removal rates and very long tool life.
- Constant stock removal rates through self-sharpening qualities of the ceramic oxide grain.

Materials that can be worked:

- Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)
- Titanium alloys
- Titanium
- High-temperature-resistant materials
- Nickel-based and cobalt-based alloys

Type:

- Vitrified bond
- Aluminium oxide mixture of ceramic oxide grain and white aluminium oxide

Recommendations for use:

- TOUGH mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

Safety notes:

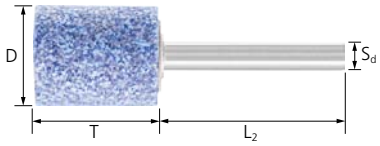
- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.





TOUGH, cylindrical type

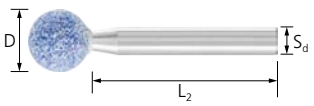
The cylindrical shape ZY is ideal for grinding bores, radii and contours.



D x T [mm]	Grit size							US shape	Opt. RPM	Max. RPM		Description
	24	30	46	60	80	100	320					
	EAN 4007220											
Shank dia. 3 x 30 mm [S_d x L_2]												
1 x 5	-	-	-	-	-	-	898383	-	104,200	104,200	10	ZY 0105 3 AWCO ... J5V TOUGH
1.5 x 8	-	-	-	-	-	-	898390	-	104,700	104,700	10	ZY 1,508 3 AWCO ... J5V TOUGH
1.7 x 8	-	-	-	-	-	-	898406	-	112,300	112,300	10	ZY 1,708 3 AWCO ... J5V TOUGH
2 x 5	-	-	-	-	898413	898420	-	W 141	150,000	201,800	10	ZY 0205 3 AWCO ... J5V TOUGH
3 x 6	-	-	-	898437	802106	802120	-	W 144	150,000	206,100	10	ZY 0306 3 AWCO ... J5V TOUGH
4 x 8	-	-	-	898444	802137	802144	-	-	150,000	175,100	10	ZY 0408 3 AWCO ... J5V TOUGH
5 x 10	-	-	-	898451	802151	802168	-	W 153	130,700	130,700	10	ZY 0510 3 AWCO ... J5V TOUGH
6 x 13	-	-	898468	802175	802182	802199	-	W 163	93,600	93,600	10	ZY 0613 3 AWCO ... J5V TOUGH
8 x 10	-	-	947852	-	-	-	-	W 169	87,600	87,600	10	ZY 0810 3 AWCO ... J5V TOUGH
8 x 16	-	-	898475	898499	898505	-	-	-	61,000	61,000	10	ZY 0816 3 AWCO ... J5V TOUGH
10 x 13	-	-	-	-	947869	-	-	W 176	58,400	58,400	10	ZY 1013 3 AWCO ... J5V TOUGH
13 x 3	-	-	-	898574	-	-	-	W 182	65,000	73,400	10	ZY 1303 3 AWCO ... J5V TOUGH
20 x 6	-	-	898581	898598	-	-	-	W 201	45,000	47,700	10	ZY 2006 3 AWCO ... J5V TOUGH
Shank dia. 6 x 40 mm [S_d x L_2]												
5 x 10	-	-	-	-	-	947876	-	W 153	150,000	157,800	10	ZY 0510 6 AWCO ... J5V TOUGH
8 x 16	-	-	802205	-	802212	-	-	-	100,000	119,300	10	ZY 0816 6 AWCO ... J5V TOUGH
10 x 13	-	-	802229	-	802274	-	-	W 176	85,000	95,400	10	ZY 1013 6 AWCO ... J5V TOUGH
10 x 20	-	-	898512	-	898550	-	-	-	85,000	95,400	10	ZY 1020 6 AWCO ... J5V TOUGH
13 x 25	-	-	802304	-	802311	-	-	W 187	65,000	66,000	10	ZY 1325 6 AWCO ... J5V TOUGH
16 x 20	-	947883	802328	802335	-	-	-	W 195	55,000	59,600	10	ZY 1620 6 AWCO ... J5V TOUGH
16 x 32	-	947890	802342	802366	-	-	-	-	51,200	51,200	10	ZY 1632 6 AWCO ... J5V TOUGH
20 x 25	-	947906	802373	802397	-	-	-	W 205	45,000	47,700	10	ZY 2025 6 AWCO ... J5V TOUGH
20 x 40	-	947913	898604	898628	-	-	-	W 207	32,400	32,400	10	ZY 2040 6 AWCO ... J5V TOUGH
25 x 25	-	947920	-	-	-	-	-	W 220	35,000	38,100	10	ZY 2525 6 AWCO ... J5V TOUGH
32 x 16	-	-	947937	-	-	-	-	-	27,000	29,800	5	ZY 3216 6 AWCO ... J5V TOUGH
32 x 32	947944	-	802427	-	-	-	-	W 230	25,700	25,700	5	ZY 3232 6 AWCO ... J5V TOUGH
40 x 10	-	-	898635	898642	-	-	-	W 236	22,000	23,800	5	ZY 4010 6 AWCO ... J5V TOUGH
40 x 20	-	-	802434	-	-	-	-	-	22,000	23,800	5	ZY 4020 6 AWCO ... J5V TOUGH

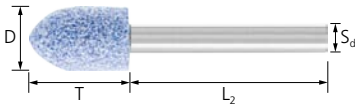
TOUGH, ball type

The ball shape KU is often used for contour grinding and backside deburring.



D [mm]	Grit size				Opt. RPM	Max. RPM		Description
	46	60	80	100				
	EAN 4007220							
Shank dia. 3 x 30 mm [S_d x L_2]								
3	-	898659	898666	-	150,000	300,200	10	KU 03 3 AWCO ... J5V TOUGH
6	-	898673	802465	802472	140,000	159,100	10	KU 06 3 AWCO ... J5V TOUGH
8	898680	-	802489	802519	100,000	116,200	10	KU 08 3 AWCO ... J5V TOUGH
Shank dia. 6 x 40 mm [S_d x L_2]								
13	802533	802557	802595	-	65,000	73,400	10	KU 13 6 AWCO ... J5V TOUGH

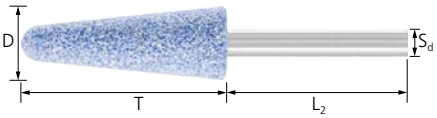
Mounted points
For universal use on materials that are difficult to machine



TOUGH, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

D x T [mm]	Grit size				Opt. RPM	Max. RPM		Description
	46	60	80	100				
	EAN 4007220							
Shank dia. 3 x 30 mm [S_d x L_2]								
3 x 6	-	898697	898703	898734	150,000	252,000	10	SP 0306 3 AWCO ... J5V TOUGH
4 x 8	-	-	898758	898765	150,000	195,400	10	SP 0408 3 AWCO ... J5V TOUGH
5 x 10	-	-	-	948071	149,500	149,500	10	SP 0510 3 AWCO ... J5V TOUGH
6 x 10	-	898789	-	-	134,100	134,100	10	SP 0610 3 AWCO ... J5V TOUGH
6 x 13	898772	-	802663	802670	108,100	108,100	10	SP 0613 3 AWCO ... J5V TOUGH
8 x 16	898796	802687	802694	802700	72,800	72,800	10	SP 0816 3 AWCO ... J5V TOUGH
Shank dia. 6 x 40 mm [S_d x L_2]								
13 x 20	802717	802724	802731	-	65,000	73,400	10	SP 1320 6 AWCO ... J5V TOUGH



TOUGH, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

D x T [mm]	Grit size		Opt. RPM	Max. RPM		Description
	46	60				
	EAN 4007220					
Shank dia. 6 x 40 mm [S_d x L_2]						
10 x 25	802601	802618	85,000	95,400	10	KE 1025 6 AWCO ... J5V TOUGH
16 x 45	802625	802656	52,000	52,000	10	KE 1645 6 AWCO ... J5V TOUGH



Mounted point set 2002 TOUGH



Contains 15 small mounted points with shank diameter 3 mm in the most common shapes and dimensions for fine work.

Contents:
1 piece each:
- ZY 0205
- ZY 0306
- ZY 0408
- ZY 0510
- ZY 0613
- ZY 0816
- ZY 1303
- ZY 2006
- KU 03
- KU 06
- KU 08
- SP 0306
- SP 0408
- SP 0613
- SP 0816

S_d [mm]	Grit size fine EAN 4007220		Description
3	947616	1	2002 J F TOUGH

Mounted point set 2001 TOUGH



Contains 10 mounted points with shank diameter 6 mm in the most common shapes and dimensions.

Contents:
1 piece each:
- ZY 1013
- ZY 1325
- ZY 1620
- ZY 2025
- ZY 2040
- ZY 4010
- KU 13
- SP 1320
- KE 1025
- KE 1645

S_d [mm]	Grit size coarse EAN 4007220		Description
6	947609	1	2001 J G TOUGH

Mounted points
For universal use on stainless steel (INOX)



INOX mounted points

The INOX type is particularly well suited to surface work on stainless steel (INOX) and for universal use on non-ferrous metals and bronze. These tools are used for rough grinding of stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys.

Advantages:

- Due to cool grinding, very suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

Materials that can be worked:

- Stainless steel (INOX)
- Bronze
- Hard non-ferrous metals

Type:

- Resinoid bond
- Aluminium oxide mixture of dark-red and white aluminium oxide

Recommendations for use:

- INOX mounted points perform best at a cutting speed of 35 to 50 m/s.

Matching tool drives:

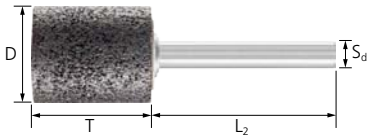
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



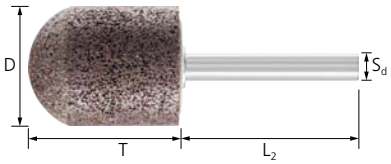
INOX, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size				US shape	Opt. RPM	Max. RPM		Description
	24	30	46	60					
	EAN 4007220								
Shank dia. 6 x 40 mm [S_d x L_2]									
8 x 16	-	-	346877	-	-	100,000	119,300	10	ZY 0816 6 ADW ... L6B INOX
10 x 20	-	-	346891	-	W 177	90,000	95,400	10	ZY 1020 6 ADW ... L6B INOX
10 x 32	-	-	346907	-	W 179	62,800	62,800	10	ZY 1032 6 ADW ... L6B INOX
16 x 32	-	096697	-	-	-	51,200	51,200	10	ZY 1632 6 ADW ... L6B INOX
20 x 25	-	097083	-	346914	W 205	45,000	47,700	10	ZY 2025 6 ADW ... L6B INOX
20 x 40	-	097304	-	-	W 207	32,400	32,400	10	ZY 2040 6 ADW ... L6B INOX
25 x 13	-	099483	-	-	W 218	37,000	38,100	10	ZY 2513 6 ADW ... L6B INOX
25 x 25	-	346938	-	-	W 220	37,000	38,100	10	ZY 2525 6 ADW ... L6B INOX
25 x 32	-	097533	-	-	-	32,900	32,900	10	ZY 2532 6 ADW ... L6B INOX
32 x 16	099742	-	-	-	-	29,000	29,800	5	ZY 3216 6 ADW ... L6B INOX
32 x 40	097793	-	-	-	W 231	20,300	20,300	5	ZY 3240 6 ADW ... L6B INOX
40 x 6	-	-	-	346976	W 235	23,000	23,800	5	ZY 4006 6 ADW ... L6B INOX
40 x 10	-	099940	-	-	W 236	23,000	23,800	5	ZY 4010 6 ADW ... L6B INOX
40 x 20	100127	-	-	-	-	23,000	23,800	5	ZY 4020 6 ADW ... L6B INOX
50 x 13	-	100271	-	-	-	19,000	19,000	5	ZY 5013 6 ADW ... L6B INOX
50 x 25	100394	-	-	-	W 242	19,000	19,000	5	ZY 5025 6 ADW ... L6B INOX
Shank dia. 8 x 40 mm [S_d x L_2]									
32 x 40	098257	-	-	-	W 231	28,500	29,800	5	ZY 3240 8 ADW ... L6B INOX
50 x 40	100653	-	-	-	W 243	19,000	19,000	5	ZY 5040 8 ADW ... L6B INOX

INOX, cylindrical with radius end type

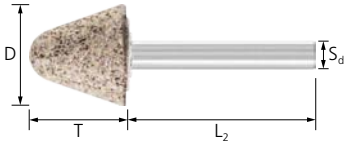
The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.



D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]					
25 x 32	353813	37,000	37,300	10	WR 2532 6 ADW 30 L6B INOX

INOX, conical with radius end type

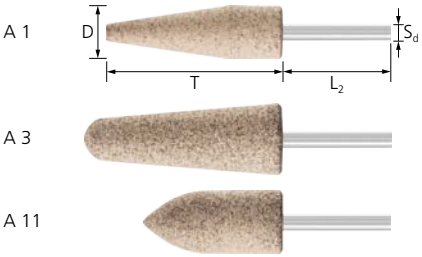
The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]					
20 x 20	347034	45,000	47,700	10	KE 2020 6 ADW 30 L6B INOX
25 x 45	660331	34,000	34,000	10	KE 2545 6 ADW 30 L6B INOX

Series A INOX

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.



US shape	D x T [mm]	Grit size 60 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]						
A 1	19 x 64	347096	30,400	30,400	10	A 1 6 ADW 60 L6B INOX
A 3	25 x 70	347119	18,600	18,600	10	A 3 6 ADW 60 L6B INOX
A 11	22 x 50	347133	27,600	27,600	10	A 11 6 ADW 60 L6B INOX

Mounted points
For edge grinding on stainless steel (INOX)



INOX EDGE mounted points

The INOX EDGE type is particularly well suited to edge grinding on stainless steel (INOX).
Its applications include weld dressing on fillet welds on stainless steel components, removing burrs on moulded parts made of high-temperature-resistant alloys, removing burrs on stainless steel castings and grinding chamfers in preparation for welding stainless steel profiles.

Advantages:

- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.
- Economical to use due to the high edge stability even on low-speed tool drives.
- High dimensional stability on edges.

Materials that can be worked:

- Stainless steel (INOX)

Type:

- Resinoid bond
- Regular aluminium oxide

Recommendations for use:

- INOX EDGE mounted points perform best at a cutting speed of 35 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

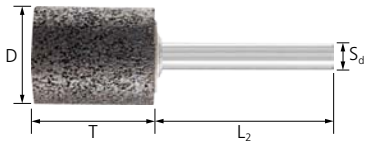
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



INOX EDGE, cylindrical type

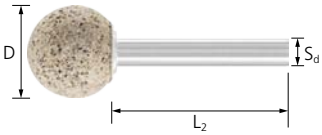
The cylindrical shape ZY is ideal for grinding bores, radii and contours.



D x T [mm]	Grit size 24	30	46	60	US shape	Opt. RPM	Max. RPM		Description
	EAN 4007220								
Shank dia. 6 x 40 mm [S_d x L_2]									
8 x 16	-	-	346860	-	-	100,000	119,300	10	ZY 0816 6 AN ... N5B INOX EDGE
10 x 20	-	-	346884	-	W 177	92,000	95,400	10	ZY 1020 6 AN ... N5B INOX EDGE
10 x 32	-	-	096062	-	W 179	62,800	62,800	10	ZY 1032 6 AN ... N5B INOX EDGE
13 x 25	-	-	096420	-	W 187	66,000	66,000	10	ZY 1325 6 AN ... N5B INOX EDGE
16 x 32	-	096673	-	096680	-	51,200	51,200	10	ZY 1632 6 AN ... N5B INOX EDGE
16 x 50	-	096871	-	-	W 197	31,300	31,300	10	ZY 1650 6 AN ... N5B INOX EDGE
20 x 8	-	346952	-	-	-	46,000	47,700	10	ZY 2008 6 AN ... N5B INOX EDGE
20 x 25	-	097076	-	-	W 205	46,000	47,700	10	ZY 2025 6 AN ... N5B INOX EDGE
20 x 40	-	097298	-	-	W 207	32,400	32,400	10	ZY 2040 6 AN ... N5B INOX EDGE
25 x 6	-	-	346969	-	W 216	37,000	38,100	10	ZY 2506 6 AN ... N5B INOX EDGE
25 x 13	-	099476	-	-	W 218	37,000	38,100	10	ZY 2513 6 AN ... N5B INOX EDGE
25 x 32	-	097526	-	-	-	32,900	32,900	10	ZY 2532 6 AN ... N5B INOX EDGE
25 x 40	-	098141	-	-	W 221	26,000	26,000	10	ZY 2540 6 AN ... N5B INOX EDGE
32 x 8	-	099629	-	-	W 226	29,000	29,800	5	ZY 3208 6 AN ... N5B INOX EDGE
32 x 16	099735	-	-	-	-	29,000	29,800	5	ZY 3216 6 AN ... N5B INOX EDGE
32 x 20	099834	-	-	-	W 228	29,000	29,800	5	ZY 3220 6 AN ... N5B INOX EDGE
32 x 32	097670	-	-	-	W 230	25,700	25,700	5	ZY 3232 6 AN ... N5B INOX EDGE
32 x 40	097786	-	-	-	W 231	20,300	20,300	5	ZY 3240 6 AN ... N5B INOX EDGE
40 x 6	-	-	100479	-	W 235	23,000	23,800	5	ZY 4006 6 AN ... N5B INOX EDGE
40 x 10	-	099933	-	-	-	23,000	23,800	5	ZY 4010 6 AN ... N5B INOX EDGE
40 x 20	100110	-	-	-	-	23,000	23,800	5	ZY 4020 6 AN ... N5B INOX EDGE
40 x 40	346945	-	-	-	W 238	16,200	16,200	5	ZY 4040 6 AN ... N5B INOX EDGE
50 x 8	-	100523	-	-	-	19,000	19,000	5	ZY 5008 6 AN ... N5B INOX EDGE
50 x 13	-	100264	-	-	-	19,000	19,000	5	ZY 5013 6 AN ... N5B INOX EDGE
50 x 25	100387	-	-	-	W 242	19,000	19,000	5	ZY 5025 6 AN ... N5B INOX EDGE
Shank dia. 8 x 40 mm [S_d x L_2]									
32 x 40	098240	-	-	-	W 231	28,500	29,800	5	ZY 3240 8 AN ... N5B INOX EDGE

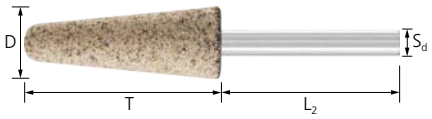
INOX EDGE, ball type

The ball shape KU is often used for contour grinding and backside deburring.



D [mm]	Grit size 30	Opt. RPM	Max. RPM		Description
	EAN 4007220				
Shank dia. 6 x 40 mm [S_d x L_2]					
16	347003	58,000	59,600	10	KU 16 6 AN 30 N5B INOX EDGE
20	347010	46,000	47,700	10	KU 20 6 AN 30 N5B INOX EDGE
25	347027	37,000	38,100	10	KU 25 6 AN 30 N5B INOX EDGE

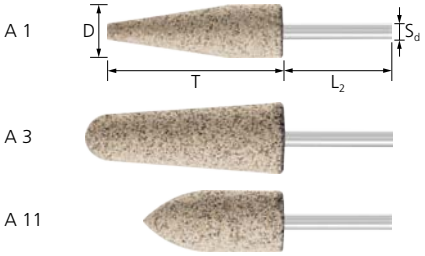
Mounted points
For edge grinding on stainless steel (INOX)



INOX EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

D x T [mm]	Grit size 24	Grit size 30	Grit size 46	Opt. RPM	Max. RPM		Description
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
10 x 25	-	-	347041	92,000	95,400	10	KE 1025 6 AN ... N5B INOX EDGE
16 x 45	-	-	347065	52,000	52,000	10	KE 1645 6 AN ... N5B INOX EDGE
25 x 45	-	660324	-	34,000	34,000	10	KE 2545 6 AN ... N5B INOX EDGE
32 x 32	347072	-	-	29,000	29,800	5	KE 3232 6 AN ... N5B INOX EDGE



Series A INOX EDGE

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.

US shape	D x T [mm]	Grit size 30	Opt. RPM	Max. RPM		Description
		EAN 4007220				
Shank dia. 6 x 40 mm [S_d x L_2]						
A 1	19 x 64	347089	30,400	30,400	10	A 1 6 AN 30 N5B INOX EDGE
A 3	25 x 70	347102	18,600	18,600	10	A 3 6 AN 30 N5B INOX EDGE
A 11	22 x 50	347126	27,600	27,600	10	A 11 6 AN 30 N5B INOX EDGE
Shank dia. 6.35 x 40 mm [S_d x L_2]						
A 11	22 x 50	347157	30,400	30,400	10	A 11 6,3 AN 30 N5B INOX EDGE



ALU mounted points

The ALU type is particularly well suited to universal use on aluminium and non-ferrous metals. It is used to remove burrs on cast aluminium parts and for chamfering on aluminium profiles for weld-seam preparation.

Advantages:

- The special impregnation means there is no clogging when working on soft, lubricating or tough materials.
- Good grinding performance and stock removal rate.

Materials that can be worked:

- Aluminium
- Copper
- Brass
- Zinc

Type:

- Vitrified bond
- Green silicon carbide

Recommendations for use:

- ALU mounted points perform best at a cutting speed of 20 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

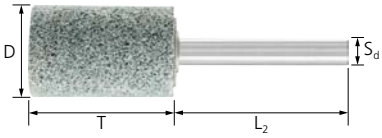
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



ALU, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours. It can be made into any desired shape with the aid of a dressing stone.



D x T [mm]	Grit size 80 EAN 4007220	US shape	Opt. RPM	Max. RPM		Description
Shank dia. 3 x 30 mm [S_d x L_2]						
3 x 6	948101	W 144	150,000	206,100	10	ZY 0306 3 CN 80 F10V ALU
6 x 13	948118	W 163	93,600	93,600	10	ZY 0613 3 CN 80 F10V ALU
Shank dia. 6 x 40 mm [S_d x L_2]						
10 x 13	802908	W 176	45,000	95,400	10	ZY 1013 6 CN 80 F10V ALU
13 x 20	802915	W 186	35,000	73,400	10	ZY 1320 6 CN 80 F10V ALU
16 x 20	096512	W 195	30,000	59,600	10	ZY 1620 6 CN 80 F10V ALU
16 x 32	802939	-	30,000	51,200	10	ZY 1632 6 CN 80 F10V ALU
20 x 32	097151	W 206	24,000	41,100	10	ZY 2032 6 CN 80 F10V ALU
32 x 32	802946	W 230	15,000	25,700	5	ZY 3232 6 CN 80 F10V ALU
40 x 20	100080	-	12,000	23,800	5	ZY 4020 6 CN 80 F10V ALU

Mounted points
For surface grinding on grey and nodular cast iron



CAST mounted points

The CAST type is particularly well suited to surface work on grey and nodular cast iron in combination with high peripheral speeds. Its applications include cleaning of workpieces and grinding out of shrinkage holes.

Advantages:

- Suitable for use on surfaces and edges.
- Good grinding performance and long tool life.
- High stock removal rates thanks to coarse grit size.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron

Type:

- Vitrified bond
- Aluminium oxide mixture of pink aluminium oxide and regular aluminium oxide

Recommendations for use:

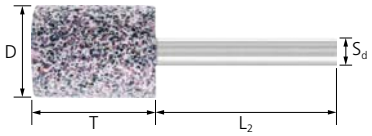
- CAST mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

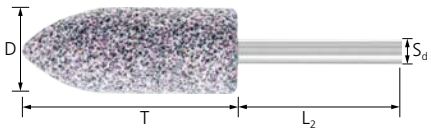
- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size 24	Grit size 30	US shape	Opt. RPM	Max. RPM		Description
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
16 x 32	-	096567	-	51,200	51,200	10	ZY 1632 6 ARN 30 K5V CAST
16 x 50	-	096819	W 197	31,300	31,300	10	ZY 1650 6 ARN 30 K5V CAST
20 x 25	-	096963	W 205	43,000	47,700	10	ZY 2025 6 ARN 30 K5V CAST
20 x 40	-	097199	W 207	32,400	32,400	10	ZY 2040 6 ARN 30 K5V CAST
25 x 32	-	097410	-	32,900	32,900	10	ZY 2532 6 ARN 30 K5V CAST
32 x 32	097564	-	W 230	25,700	25,700	5	ZY 3232 6 ARN 24 K5V CAST
32 x 40	097694	-	W 231	20,300	20,300	5	ZY 3240 6 ARN 24 K5V CAST
40 x 10	-	099865	W 236	22,000	23,800	5	ZY 4010 6 ARN 30 K5V CAST
40 x 20	100004	-	-	22,000	23,800	5	ZY 4020 6 ARN 24 K5V CAST
50 x 8	-	100493	-	18,000	19,000	5	ZY 5008 6 ARN 30 K5V CAST
50 x 13	-	100165	-	18,000	19,000	5	ZY 5013 6 ARN 30 K5V CAST
Shank dia. 8 x 40 mm [S_d x L_2]							
32 x 40	098158	-	W 231	27,000	29,800	5	ZY 3240 8 ARN 24 K5V CAST
50 x 25	100530	-	W 242	18,000	19,000	5	ZY 5025 8 ARN 24 K5V CAST



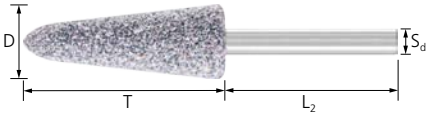
CAST, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

D x T [mm]	Grit size 30	Opt. RPM	Max. RPM		Description
	EAN 4007220				
Shank dia. 6 x 40 mm [S_d x L_2]					
20 x 50	102305	30,500	30,500	10	SP 2050 6 ARN 30 K5V CAST

CAST, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

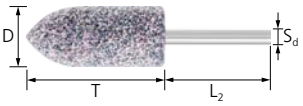


D x T [mm]	Grit size 24	Grit size 46	Opt. RPM	Max. RPM		Description
	EAN 4007220					
Shank dia. 6 x 40 mm [S_d x L_2]						
10 x 25	-	534649	85,000	95,400	10	KE 1025 6 ARN 46 K5V CAST
16 x 45	-	102848	52,000	52,000	10	KE 1645 6 ARN 46 K5V CAST
20 x 40	534694	-	43,000	47,700	10	KE 2040 6 ARN 24 K5V CAST
Shank dia. 8 x 40 mm [S_d x L_2]						
32 x 50	103081	-	27,000	29,800	5	KE 3250 8 ARN 24 K5V CAST

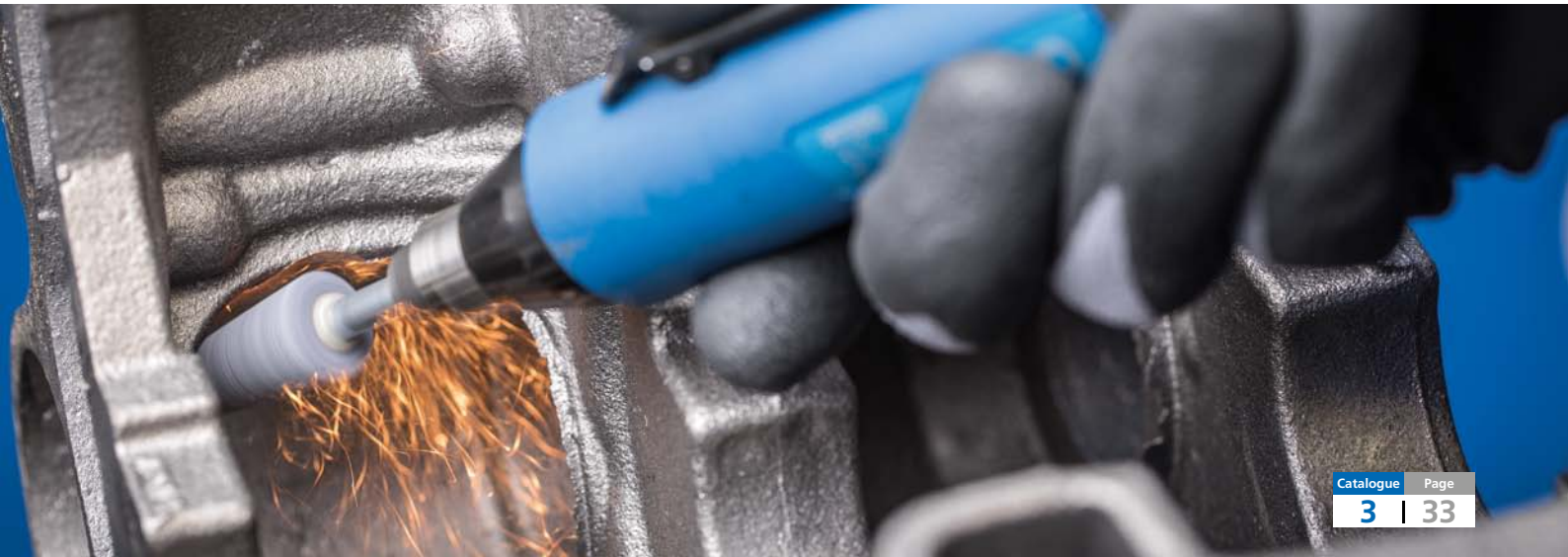
Series A CAST

The shape A 11 is excellent for machining small holes and bores.

A 11



US shape	D x T [mm]	Grit size 30	Opt. RPM	Max. RPM		Description
		EAN 4007220				
Shank dia. 6 x 40 mm [S_d x L_2]						
A 11	22 x 50	534700	27,600	27,600	10	A 11 6 ARN 30 K5V CAST



Mounted points
For edge grinding on grey and nodular cast iron



CAST EDGE mounted points

The CAST EDGE type is particularly well suited to edge grinding and grinding out sand contamination and metal contamination on grey and nodular cast iron in combination with high cutting speeds. Its main applications include removal of sharp burrs and grinding of sand contamination and metal contamination on cast parts.

Advantages:

- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron
- Casting scale with sand contamination and metal contamination

Type:

- Vitrified bond
- Grey silicon carbide

Recommendations for use:

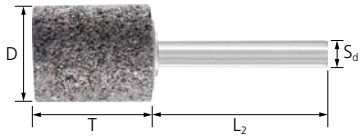
- CAST EDGE mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST EDGE, cylindrical type

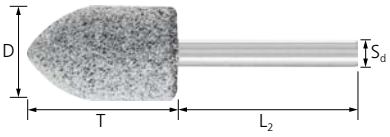
The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size 24	Grit size 30	US shape	Opt. RPM	Max. RPM		Description
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
16 x 32	-	096666	-	47,000	51,200	10	ZY 1632 6 CU 30 R5V CAST EDGE
20 x 25	-	097069	W 205	38,000	47,700	10	ZY 2025 6 CU 30 R5V CAST EDGE
20 x 40	-	097281	-	32,400	32,400	10	ZY 2040 6 CU 30 R5V CAST EDGE
20 x 50	-	098097	W 208	25,100	25,100	10	ZY 2050 6 CU 30 R5V CAST EDGE
32 x 32	097663	-	W 230	23,000	25,700	5	ZY 3232 6 CU 24 R5V CAST EDGE
40 x 20	100103	-	-	19,000	23,800	5	ZY 4020 6 CU 24 R5V CAST EDGE
Shank dia. 8 x 40 mm [S_d x L_2]							
32 x 40	098233	-	W 231	24,000	29,800	5	ZY 3240 8 CU 24 R5V CAST EDGE
40 x 40	098301	-	W 238	19,000	23,800	5	ZY 4040 8 CU 24 R5V CAST EDGE



CAST EDGE, pointed tree type

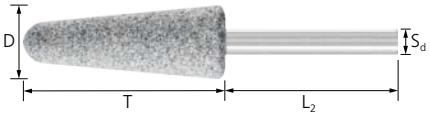
The pointed tree shape SP is excellent for machining small holes and bores.



D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]					
20 x 32	102282	38,000	47,700	10	SP 2032 6 CU 30 R5V CAST EDGE
20 x 50	102336	30,500	30,500	10	SP 2050 6 CU 30 R5V CAST EDGE

CAST EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

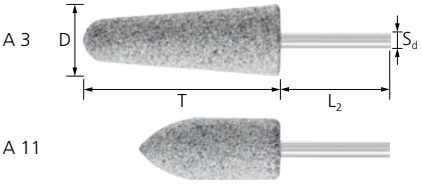


D x T [mm]	Grit size 30	46 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]						
16 x 45	-	102916	47,000	52,000	10	KE 1645 6 CU 46 R5V CAST EDGE
20 x 32	102725	-	38,000	47,700	10	KE 2032 6 CU 30 R5V CAST EDGE
25 x 45	102947	-	30,000	34,000	10	KE 2545 6 CU 30 R5V CAST EDGE

Series A CAST EDGE

The shape A 3 is designed for a comfortable working position during surface grinding and grinding of chamfers.

The shape A 11 is excellent for machining small holes and bores.



US shape	D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 x 40 mm [S_d x L_2]						
A 3	25 x 70	117156	18,600	18,600	10	A 3 6 CU 30 R5V CAST EDGE
A 11	22 x 50	117217	27,600	27,600	10	A 11 6 CU 30 R5V CAST EDGE

Mounted points
For edge grinding on grey and nodular cast iron



CAST EDGE mounted points for foundries

The CAST EDGE type for foundries is particularly well suited to universal use and for grinding out metal contamination and grinding of sand contamination and sand deposits on grey and nodular cast iron workpieces in conjunction with high cutting speeds.

Advantages:

- Excellent grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron
- Casting scale with sand contamination and metal contamination

Type:

- Vitrified bond
- Grey silicon carbide

Recommendations for use:

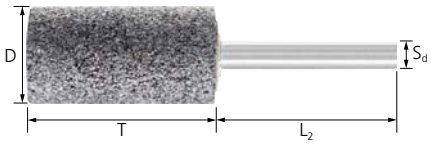
- CAST EDGE mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

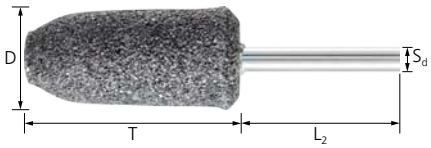
- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size 30 EAN 4007220	US shape	Opt. RPM	Max. RPM	IP	Description
Shank dia. 6 x 40 mm [S_d x L_2]						
20 x 40	803028	W 205	32,400	32,400	50	ZY 2040 6 CU 30 R5V CAST EDGE N
25 x 32	803035	-	30,000	32,900	50	ZY 2532 6 CU 30 R5V CAST EDGE N



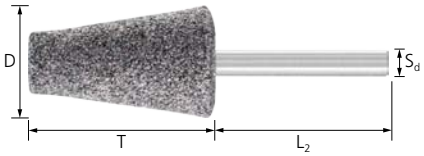
CAST EDGE, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM	IP	Description
Shank dia. 6 x 40 mm [S_d x L_2]					
20 x 50	803042	14,100	14,100	50	SP 2050 6 CU 30 R5V CAST EDGE N

CAST EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



D x T [mm]	Grit size			Opt. RPM	Max. RPM	IP	Description
	24	30	46				
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
16 x 45	-	-	803059	24,000	24,000	50	KE 1645 6 CU 46 R5V CAST EDGE N
20 x 40	-	803066	-	20,900	20,900	50	KE 2040 6 CU 30 R5V CAST EDGE N
Shank dia. 8 x 40 mm [S_d x L_2]							
35 x 50	642665	-	-	15,600	15,600	50	KE 3550 8 CU 24 R5V CAST EDGE N



Mounted points
For universal use on cast steel



CAST STEEL mounted points for foundries

The CAST STEEL type is particularly well suited to tough universal work on cast steel. It is ideal for removing burrs on cast steel parts and for grinding of intersections after separating risers.

Advantages:

- Excellent grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

Materials that can be worked:

- Cast steel

Type:

- Vitrified bond
- Aluminium oxide mixture of pink and dark-red aluminium oxide

Recommendations for use:

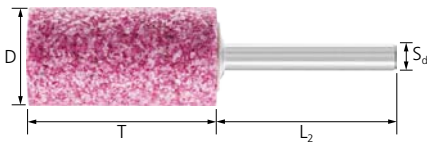
- CAST STEEL mounted points perform best at a cutting speed of 25 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

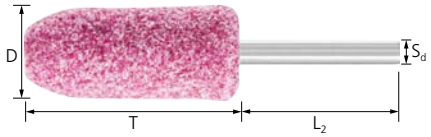
- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST STEEL, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

D x T [mm]	Grit size 30 EAN 4007220	US shape	Opt. RPM	Max. RPM	IP	Description
Shank dia. 6 x 40 mm [S_d x L_2]						
20 x 40	802953	W 207	32,400	32,400	50	ZY 2040 6 ADR 30 O5V CAST STEEL
25 x 32	802960	-	25,000	32,900	50	ZY 2532 6 ADR 30 O5V CAST STEEL



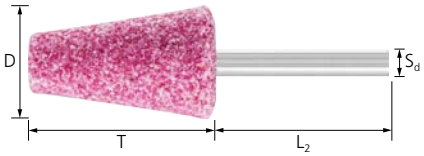
CAST STEEL, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

D x T [mm]	Grit size 30 EAN 4007220	Opt. RPM	Max. RPM	IP	Description
Shank dia. 6 x 40 mm [S_d x L_2]					
20 x 50	802977	14,100	14,100	50	SP 2050 6 ADR 30 O5V CAST STEEL

CAST STEEL, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



D x T [mm]	Grit size			Opt. RPM	Max. RPM	IP	Description
	24	30	46				
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L_2]							
16 x 45	-	-	802991	24,000	24,000	50	KE 1645 6 ADR 46 O5V CAST STEEL
20 x 40	-	803011	-	20,900	20,900	50	KE 2040 6 ADR 30 O5V CAST STEEL
Shank dia. 8 x 40 mm [S_d x L_2]							
35 x 50	642672	-	-	15,600	15,600	50	KE 3550 8 ADR 24 O5V CAST STEEL





RUBBER mounted points

The RUBBER type is specifically designed for universal use on soft materials such as rubber, plastic and wood. The fields of application include removal of burrs on plastic injection-moulded parts, trimming of rubber moulded parts and moulded parts made of polyurethane (PUR), grinding of wooden cores and wooden shapes in model construction workshops and roughening of various adhesive joints (e.g. for repairs on conveyor belts and tyres).

Advantages:

- Open structure and large chip spaces due to bubble grain aluminium oxide.
- Machining of temperature-sensitive materials without addition of cooling lubricant due to large chip spaces.
- Excellent grinding performance.

Materials that can be worked:

- Elastomers
- Thermoplastics
- Rubber
- Wood

Type:

- Vitrified bond
- Bubble grain aluminium oxide

Recommendations for use:

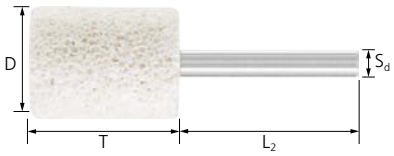
- RUBBER mounted points perform best at a cutting speed of 5 to 20 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

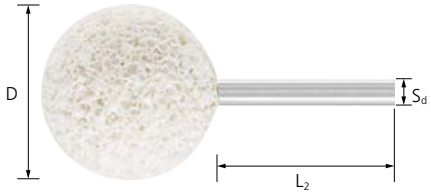
- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



RUBBER, cylindrical type

The cylindrical shape ZY is ideal for grinding radii and contours, and for deburring work.

D x T [mm]	Grit size 1	Grit size 2	Opt. RPM	Max. RPM		Description
	EAN 4007220					
Shank dia. 6 x 40 mm [S_d x L_2]						
16 x 32	096703	-	12,000	51,200	10	ZY 1632 6 AH 1 D12V RUBBER
25 x 32	097540	-	8,000	32,900	10	ZY 2532 6 AH 1 D12V RUBBER
40 x 20	-	100134	5,000	23,800	5	ZY 4020 6 AH 2 D12V RUBBER

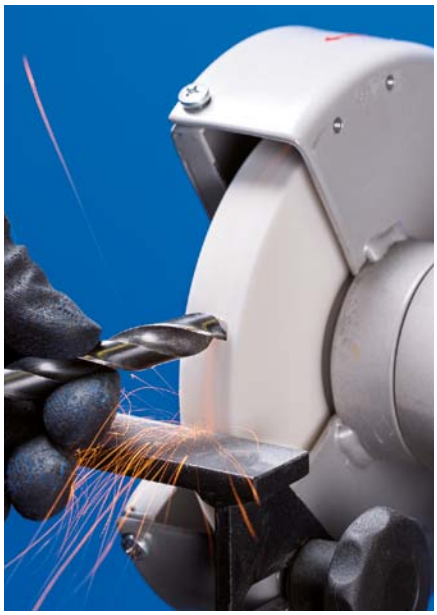


RUBBER, ball type

The ball shape KU is often used for roughening rubber surfaces in tyre repair.

D [mm]	Grit size 2	Opt. RPM	Max. RPM		Description
	EAN 4007220				
Shank dia. 6 x 40 mm [S_d x L_2]					
40	948095	5,000	19,700	5	KU 40 6 AH 2 D12V RUBBER

PFERD offers a very wide range of high-quality bench grinding wheels for working with a large variety of materials and for many different applications.
Bench grinding wheels are available with different dimensions, grains and abrasives.
The PFERD range has been adapted to the standard bench grinders on the market.



Advantages:

- Long tool life.
- High dimensional stability.
- High abrasive performance.
- Integrated adapter sleeves for mounting on almost any bench grinder spindle.

Applications:

- Deburring
- Work on edges (chamfering, rounding)
- Sharpening

Recommendations for use:

- Dressing the wheel on a regular basis exposes sharp grain and maintains an even grinding area.
- Constantly adjust the workpiece support to the grinding wheel diameter (gap width max. 3 mm).

Matching tool drives:

- Bench grinders

Ordering notes:

- Please complete the description with the desired grit size.

Safety notes:

- The maximum permitted peripheral speed is 35 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Before clamping, the grinding tool must be ring tested to make sure that it does not have any cracks (undamaged grinding tools give a clear tone).

 = Wear eye protection!

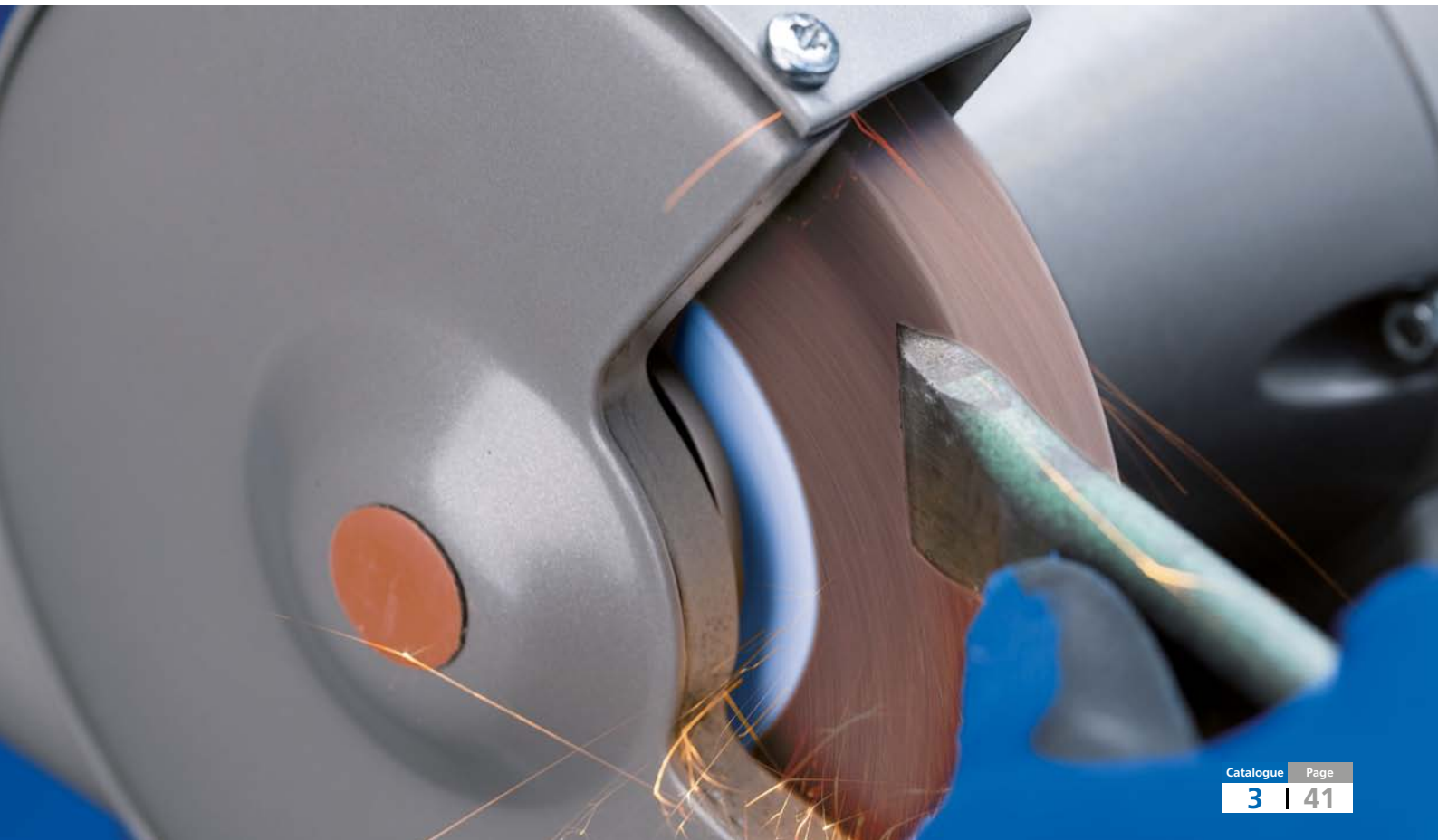
 = Wear a dust mask!

 = Wear hearing protection!

 = Wear gloves!

 = Follow the safety instructions!

 = Do not use if damaged!





UNIVERSAL type

UNIVERSAL type bench grinding wheels are ideal for universal use in the workshop.



Materials that can be worked:
steel, cast steel, stainless steel (INOX), cast iron

Type:
Vitrified bond, regular aluminium oxide, hardness grade: Q (grit size 24), P (grit size 36), M (grit size 60), structural density: 5 (grit size 24 and 36), 6 (grit size 60)

D x T [mm]	H [mm]	Grit size			Reductions	Max. RPM		Description
		24	36	60				
		EAN 4007220						
Aluminium oxide, regular (AN)								
125 x 20	32	-	037904	037997	25/20/16	5,350	1	BW 12520-32 AN ... UNIVERSAL
150 x 16	32	610138	-	610145	25/20/16	4,500	1	BW 15016-32 AN ... UNIVERSAL
150 x 20	32	610176	037911	610183	25/20/16	4,500	1	BW 15020-32 AN ... UNIVERSAL
150 x 25	32	610213	-	610220	25/20/16	4,500	1	BW 15025-32 AN ... UNIVERSAL
175 x 25	32	-	037928	038000	25/20/16	3,750	1	BW 17525-32 AN ... UNIVERSAL
	51	-	037935	038017	32	3,750	1	BW 17525-51 AN ... UNIVERSAL
200 x 20	32	610305	-	610312	25/20/16	3,350	1	BW 20020-32 AN ... UNIVERSAL
200 x 25	32	610350	037942	610367	25/20/16	3,350	1	BW 20025-32 AN ... UNIVERSAL
	51	-	037959	038024	32	3,350	1	BW 20025-51 AN ... UNIVERSAL
200 x 30	32	612378	-	610398	25/20/16	3,350	1	BW 20030-32 AN ... UNIVERSAL
200 x 32	51	-	037966	038031	32	3,350	1	BW 20032-51 AN ... UNIVERSAL
250 x 32	51	-	037973	038048	32	2,700	1	BW 25032-51 AN ... UNIVERSAL
300 x 40	76	-	037980	038062	-	2,250	1	BW 30040-76 AN ... UNIVERSAL



HSS type

HSS type bench grinding wheels are particularly useful for sharpening HSS pilot drills or machining other high-alloy steels.

Materials that can be worked:
tool steels, case-hardened steels, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)

Type:
Vitrified bond, white aluminium oxide, hardness grade: K, structural density: 7

D x T [mm]	H [mm]	Grit size		Reductions	Max. RPM		Description
		60	80				
		EAN 4007220					
Aluminium oxide (AW)							
125 x 20	32	-	037812	25/20/16	5,350	1	BW 12520-32 AW ... HSS
150 x 16	32	610152	-	25/20/16	4,500	1	BW 15016-32 AW ... HSS
150 x 20	32	610190	037829	25/20/16	4,500	1	BW 15020-32 AW ... HSS
150 x 25	32	610237	-	25/20/16	4,500	1	BW 15025-32 AW ... HSS
175 x 25	32	-	037836	25/20/16	3,750	1	BW 17525-32 AW ... HSS
	51	-	037843	32	3,750	1	BW 17525-51 AW ... HSS
200 x 20	32	610329	-	25/20/16	3,350	1	BW 20020-32 AW ... HSS
200 x 25	32	610374	037850	25/20/16	3,350	1	BW 20025-32 AW ... HSS
	51	-	037867	32	3,350	1	BW 20025-51 AW ... HSS
200 x 30	32	612385	-	25/20/16	3,350	1	BW 20030-32 AW ... HSS
200 x 32	51	-	037874	32	3,350	1	BW 20032-51 AW ... HSS
250 x 32	51	-	037881	32	2,700	1	BW 25032-51 AW ... HSS
300 x 40	76	-	037898	-	2,250	1	BW 30040-76 AW ... HSS

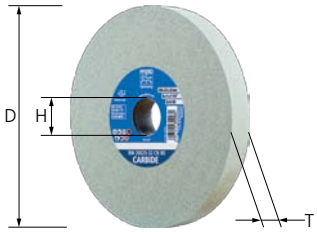
CARBIDE type

CARBIDE type bench grinding wheels are used on hard materials, such as for sharpening tungsten carbide tools.



Materials that can be worked:
tungsten carbide, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC), steel materials with a hardness > 54 HRC, glass

Type:
Vitrified bond, green silicon carbide, hardness grade: J, structural density: 7



D x T [mm]	H [mm]	Grit size 60	Grit size 80	Grit size 120	Reductions	Max. RPM		Description
		EAN 4007220						
Silicon carbide (CN)								
125 x 20	32	-	038079	-	25/20/16	5,350	1	BW 12520-32 CN ... CARBIDE
150 x 16	32	-	-	610169	25/20/16	4,500	1	BW 15016-32 CN ... CARBIDE
150 x 20	32	718902	038086	610206	25/20/16	4,500	1	BW 15020-32 CN ... CARBIDE
150 x 25	32	-	-	610244	25/20/16	4,500	1	BW 15025-32 CN ... CARBIDE
175 x 25	32	-	038093	-	25/20/16	3,750	1	BW 17525-32 CN ... CARBIDE
	51	-	038109	-	32	3,750	1	BW 17525-51 CN ... CARBIDE
200 x 20	32	-	610336	610343	25/20/16	3,350	1	BW 20020-32 CN ... CARBIDE
200 x 25	32	-	629031	610381	25/20/16	3,350	1	BW 20025-32 CN ... CARBIDE
	51	-	038116	-	32	3,350	1	BW 20025-51 CN ... CARBIDE
200 x 30	32	-	-	612392	25/20/16	3,350	1	BW 20030-32 CN ... CARBIDE
200 x 32	51	-	038123	-	32	3,350	1	BW 20032-51 CN ... CARBIDE
250 x 32	51	-	038130	-	32	2,700	1	BW 25032-51 CN ... CARBIDE
300 x 40	76	-	038147	-	-	2,250	1	BW 30040-76 CN ... CARBIDE



Finishing stones
General information



PFERD finishing stones are versatile tools for finish machining on forms in tool and mould-making. They are used for step-by-step fine grinding after machining or after electrical discharge machining (EDM) to grind in a brushed finish/polish in the demoulding direction or to prepare for high-gloss polishing with diamond pastes.

Advantages:

- Long tool life.
- High dimensional stability.
- High abrasive performance.
- Even stock removal.
- Fine surface finish.

Applications:

- Surface work
- Polishing
- Rounding
- Finishing
- Step-by-step fine grinding

Recommendations for use:

- A quick-mounting handle is recommended in manual applications to make work more ergonomic.
- The use of grinding oils is recommended to achieve a better surface finish.
- Sort the finishing stones by type to avoid grain being carried over.

Matching tool drives:

- Manual filing machine

Ordering notes:

- Please complete the description with the desired grit size.



Detailed information on grinding oils can be found in catalogue section 4.

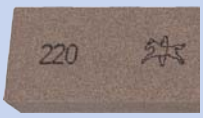
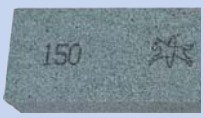


Detailed information on ceramic fibre files can be found in catalogue section 4.



A manual filing machine is recommended to make work easier. Detailed information can be found in catalogue section 9.

The fast way to the best tool

Material group ▼		Type ▶	UNIVERSAL 	CARBIDE 
Steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	●	❍
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	❍	●
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	●	
Tungsten carbide	–	–		●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	●	
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys	●	

● = highly suitable ❍ = suitable





UNIVERSAL type

The UNIVERSAL type finishing stones are the all-rounders for step-by-step fine grinding in tool and mould construction.

Materials that can be worked:
hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC), stainless steel (INOX), aluminium, other non-ferrous metals

Type:
Vitrified bond, regular aluminium oxide



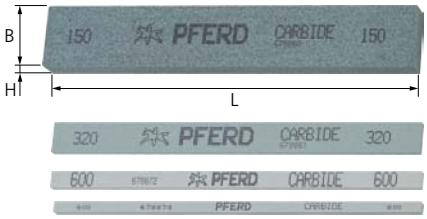
B [mm]	H [mm]	L [mm]	Grit size 220	320	400	600		Description
			EAN 4007220					
Square								
4	4	150	106679	106969	107034	107096	12	SPS 4x4x150 AN ... UNIVERSAL
6	3	150	106914	106976	107041	107102	12	SPS 6x3x150 AN ... UNIVERSAL
	6	150	106921	106983	107058	107119	12	SPS 6x6x150 AN ... UNIVERSAL
13	3	150	106938	107003	107065	107126	12	SPS 13x3x150 AN ... UNIVERSAL
	6	150	106945	107010	107072	107133	12	SPS 13x6x150 AN ... UNIVERSAL
25	13	150	106952	107027	107089	107140	6	SPS 25x13x150 AN ... UNIVERSAL

CARBIDE type

The CARBIDE type soft finishing stones enable high removal rates without clogging on hard materials in tool and mould construction.

Materials that can be worked:
high-temperature-resistant materials, tungsten carbide, steel materials with a hardness > 54 HRC

Type:
Vitrified bond, green silicon carbide



B [mm]	H [mm]	L [mm]	Grit size 150	220	320	400	600		Description
			EAN 4007220						
Square									
4	4	150	107157	107218	107270	107331	107393	12	SPS 4x4x150 CN ... CARBIDE
6	3	150	107164	107225	107287	107348	107409	12	SPS 6x3x150 CN ... CARBIDE
	6	150	107171	107232	107294	107355	107416	12	SPS 6x6x150 CN ... CARBIDE
13	3	150	107188	107249	107300	107362	107423	12	SPS 13x3x150 CN ... CARBIDE
	6	150	107195	107256	107317	107379	107430	12	SPS 13x6x150 CN ... CARBIDE
25	13	150	107201	107263	107324	107386	107447	6	SPS 25x13x150 CN ... CARBIDE

Arbors for finishing stones

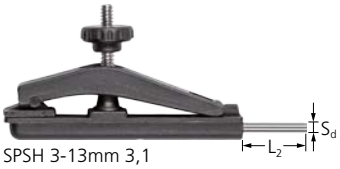
SPSH 6x6/6x13:
Offers space to clamp two different cross sections.

SPSH 6x3/6x6/13x1,5/13x3:
Is used to clamp four different cross sections.

SPSH 3-13mm 3,1:
The arbor for the manual filing machine is variably adjustable.

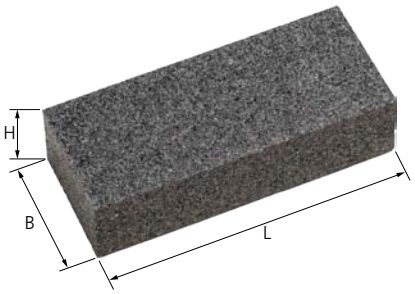


SPSH 6x6/6x13
SPSH 6x3/6x6/13x1,5/13x3



SPSH 3-13mm 3,1

Matching cross sections	EAN 4007220		Description
Manual application			
6 x 6 mm, 13 x 6 mm	107553	1	SPSH 6x6/6x13
6 x 3 mm, 13 x 1.5 mm / 6 x 6 mm, 13 x 3 mm	107560	1	SPSH 6x3/6x6/13x1,5/13x3
Manual filing machine shank diameter of 3.17 x 20 mm [S_d x L_2]			
all finishing stones	107577	1	SPSH 3-13mm 3,1



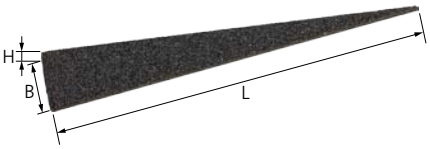
Dressing stones

Dressing stone SE 1203050 CU 30 R 5 V:
Dressing stone with coarse grain (grit size 30) for coarse dressing work. The rubber backing provides a slip-free grip and protects the support surfaces from damage.

Dressing stone SE 1203050 CU 30/60 R 5 V:
Dressing stone with two different grit sizes:
- Upper side (coarse): Profiling and dressing of large mounted points with coarse bonds and grain
- Underside (fine): Profiling and dressing of mounted points with fine bonds and grain

Dressing stone SE 702212 CU 46 M 5 V:
Small dressing stone with finer grain for profiling and dressing of smaller mounted points.

L x H x B [mm]	EAN 4007220		Description
120 x 30 x 50	103500	5	SE 1203050 CU 30 R 5 V
	505687	5	SE 1203050 CU 30/60 R 5 V
70 x 22 x 12	114445	5	SE 702212 CU 46 M 5 V

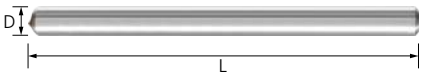


Abrasive segments

Wedge-shaped abrasive segments for work on sand moulds and cores in foundries.
Using the abrasive segments, the intersections and separators on sand moulds and cores can be re-finished and removed.
The wedge-shaped design allows effortless work in both very narrow areas and on large surfaces.



L x H x B [mm]	EAN 4007220		Description
235 x 42 x 4	800034	10	SE 235-42-4 AN 46 N 5 B
246 x 32 x 5	800041	10	SE 246-32-5 AN 46 N 5 B



Diamond dresser

Long-life diamond dresser with large single grit diamond for profiling and dressing mounted points, grinding discs and Poliflex grinding points (see catalogue section 4).
Using this diamond dresser, blunt grit and metal particles can be removed from the grinding tool, and the required grinding wheel shapes can be produced.

Recommendations for use:
- Protect the diamond dresser from impacts and impact-type loads.
- Clamp deeply and ensure it is well tightened.
- Insert at an angle of 5 to 15 degrees, just below the mounted point or disc centre.

L x D [mm]	EAN 4007220	Carats [ct]		Description
81 x 6	103494	0.20	1	400 B

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce mounted points in premium PFERD quality specifically for your application on request. We can take into account your specifications and needs, drawings, information on bonds and hardness grades, grit sizes, grain types, shapes, dimensions, shanks and packaging.

Please speak to our sales representatives. We will be happy to advise you.



1. Process analysis and tool development

Contact us to arrange an appointment with our experienced sales representatives and technical customer support team. **You can find our worldwide sales addresses at www.pferd.com.**

Our employees will **analyse your application with you on-site** and develop the most economic individual tool solution for you! You will then receive a quote.

2. Production

Our production teams subsequently create a technical drawing with which your made-to-order product will be produced.

Each mounted point is supplied **in premium PFERD quality**. We always work to the highest standards, from the inspection of raw materials, through inspections during the course of production by our staff, up to the final visual inspection of each individual mounted point.

The quality of PFERD tools is certified according to ISO 9001.

3. Use

Our flexible production and global logistics network ensure that you receive your new tool on time.

If desired, your personal sales representative and a technical adviser will set up all the process parameters together with you.

See the quality, performance and economic value of PFERD tools for yourself!

Examples of custom PFERD tools



Quality tools from a single source



Catalogue section 1

Files



Catalogue section 2

Milling tools



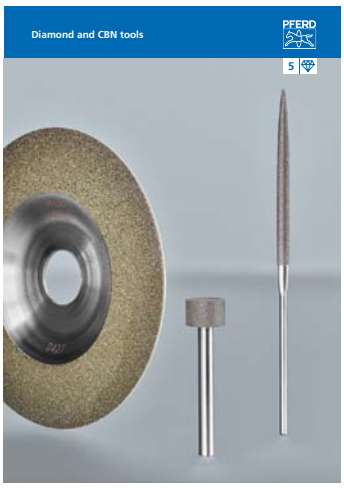
Catalogue section 3

Mounted points



Catalogue section 4

Fine grinding and polishing tools



Catalogue section 5

Diamond and CBN tools



Catalogue section 6

Cut-off wheels, flap discs and grinding wheels



Catalogue section 7

Cut-off wheels for stationary applications



Catalogue section 8

Industrial power brushes



Catalogue section 9

Tool drives

Fine grinding and polishing tools

PFERD

4

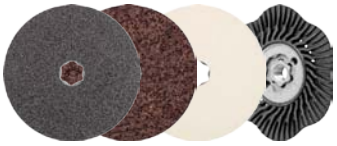


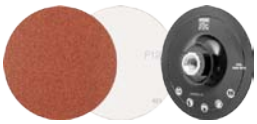
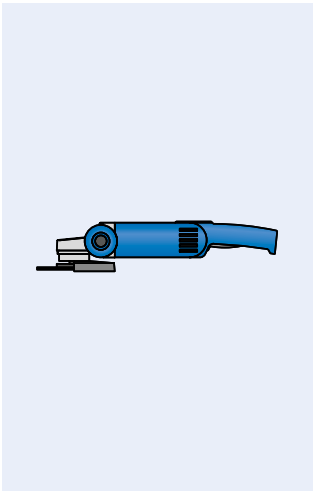
4

Fine grinding and polishing tools
Table of contents

General information 4
The fast way to the best tool 6
Surface roughness – Influencing factors and reference values 8
Coated abrasives 9
Non-woven tools 97

Fine grinding and polishing tools



COMBICLICK

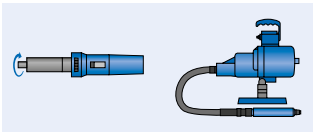
- Fibre discs 12
- Non-woven discs 16
- Felt discs 18
- Backing pads 19
- Set 19

Fibre discs

- Fibre discs 20
- Backing pads 24

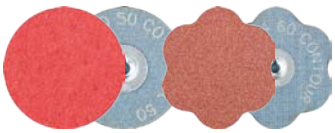
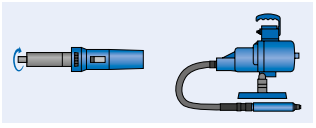
Self-adhesive discs

- Self-adhesive discs and holders 25

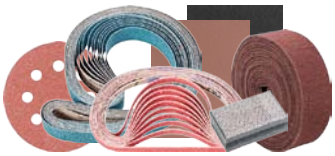
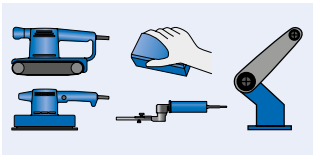
Self-adhesive abrasive discs

- Self-adhesive abrasive discs and abrasive disc holders 27

COMBIDISC grinding tools

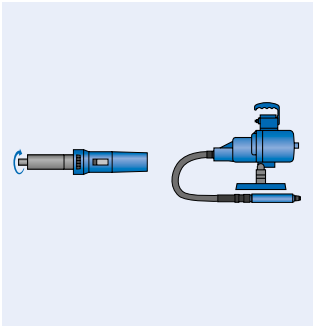
- COMBIDISC grinding tools CD, CDR 28

Flexible abrasives

- Short belts 48
- Long belts 52
- Abrasive sheets 55
- Hand pads 57
- Shop rolls and holders 58
- Non-woven shop rolls 59
- Velcro-backed abrasive discs 61





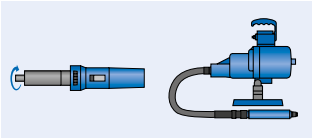
Abrasive spiral bands and rubber drum holders

- Abrasive spiral bands KSB 64
- Abrasive spiral bands GSB 65
- Rubber drum holders 68

POLIROLL, POLICO

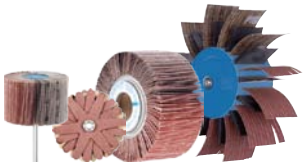
- Cartridge rolls and abrasive cones 69

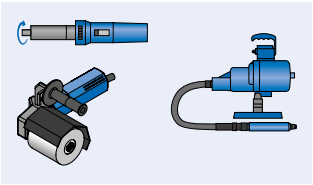




POLICAP

- Abrasive caps and abrasive cap holders 72

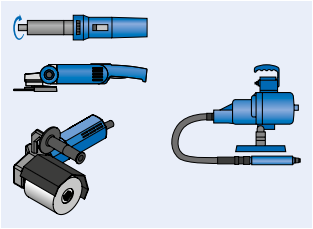




Flap tools

- Mounted flap wheels 81
- Unmounted flap wheels 86
- Flap drums 90
- POLIFLAP tools 91
- Overlap slotted discs 93
- POLISTAR 94

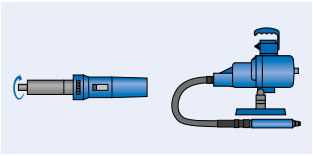




Non-woven tools

- POLINOX unmounted grinding wheels 99, 111
- POLINOX mounted grinding wheels 108
- POLINOX cross buffs 110
- POLINOX fibre-backing discs 115
- POLINOX grinding drums 116
- POLINOX discs 118
- POLINOX marbling tools 120
- POLIVLIES grinding discs 121
- POLICLEAN tools 123

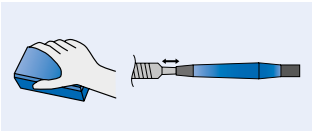




Poliflex tools

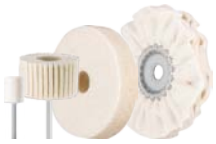
- PUR bond 130
- Structuring tools 133
- GR/GHR bond 135
- LR/LHR bond 138
- TX bond 140

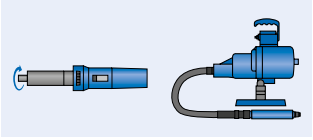




Ceramic fibre files

- Ceramic fibre files 143





Polishing tools

- Felt points 145
- Felt wheels 149
- Felt sheets 150
- Cloth rings 150



Grinding oils and polishing pastes

- Grinding and polishing pastes 153
- Grinding oils 155
- Cleaners 156



Tool sets

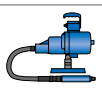
Tool sets with drives
are allocated to the respective tools.



Angle grinder



Straight grinder



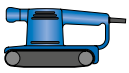
Flexible shaft drive



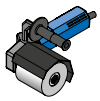
Eccentric orbital sander



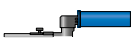
Stationary belt grinder



Belt grinder



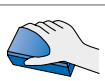
Burnishing machines



Belt grinder

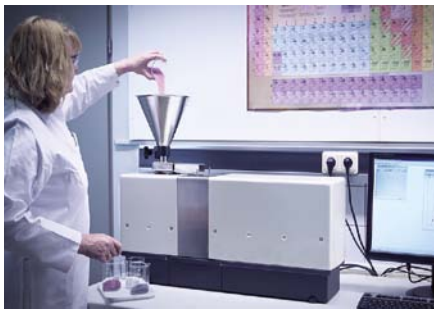


Manual filing machines



Manual application

Fine grinding and polishing tools
General information



PFERD quality

Fine grinding and polishing tools from PFERD are developed, manufactured and tested in accordance with the strictest quality requirements.

Research and development, our own machine and plant construction, and the continuous testing and further development of the quality and safety standards in our own laboratories all guarantee high PFERD quality.

PFERD quality management is certified according to ISO 9001.



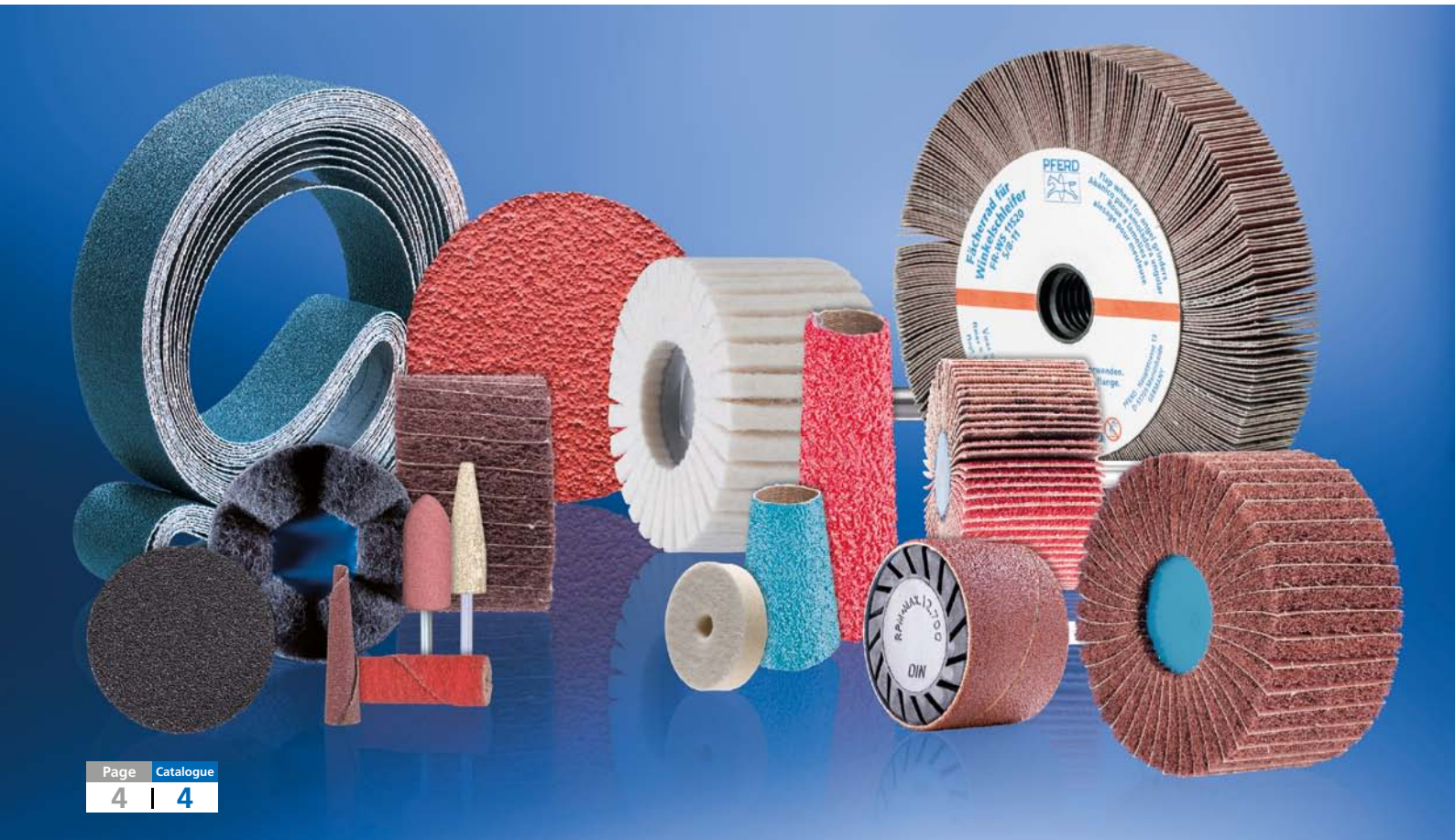
PFERD customer support

If you have any questions regarding the optimization of your grinding work or solutions to specific application problems, our sales representatives and technical advisers will be happy to help. Just get in touch! Our worldwide sales addresses can be found at: **www.pferd.com**

Products made to order

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce fine grinding and polishing tools in premium PFERD quality specifically for your application upon request.

We take into account your specifications and wishes, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixtures, in addition to shank diameters and lengths. Please speak to our sales representatives. We will be happy to advise you.



PFERD packaging

PFERD supplies fine grinding and polishing tools in robust industrial packaging, which protects the tools against damage. You can find details on the packaging unit (PU) in the product tables. Important information such as the item number, description, EAN code, technical specifications and safety notes can be found on the packaging label.



PFERDTOOL-CENTER

You will also find all the important information you require in order to select the most appropriate tool at your local specialist retailer's **PFERD**TOOL-CENTER. The information and theme cards from PFERD provide you with useful tips on tools and applications.

Your local retailer or PFERD sales representative will be glad to answer any questions you might have.



PFERD PRAXIS brochures and theme brochures

Our PFERD PRAXIS brochures, theme brochures and FOCUS brochures contain a wealth of useful information on material properties, as well as tips and tricks for using PFERD tools.

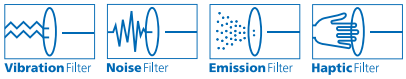


PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

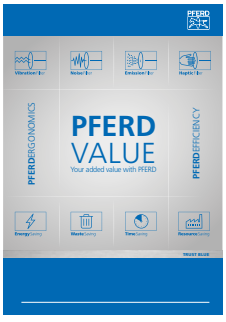
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



All tools and more information:
www.pferd.com

Fine grinding and polishing tools
The fast way to the best tool

Work type / Work steps	Face-down grinding Tools with backing pad	Page		Page	Belt grinding Tools for belt grinders	Page
Changing geometrical profiles	COMBIDISC ■ abrasive discs ■ diamond abrasive discs	31–38 37	Self-adhesive discs	25–26	Short belts	48–51
	COMBIDISC midget fibre discs	35–36	Fibre discs	21–24	Long belts	52–54
	COMBIDISC Mini-POLIFAN	30	COMBICLICK fibre discs	13–15		
Step-by-step fine grinding Reducing roughness depths	COMBIDISC ■ abrasive discs ■ non-woven discs	31–38 39–41	Self-adhesive discs	25–26	Short belts	48–51
	Poliflex discs	131	PSA discs	27	Long belts	52–54
	COMBICLICK non-woven discs	16–17	Velcro-backed abrasive discs	61–62		
	POLINOX unitized discs	102	Fibre discs	21–24		
	POLINOX-discs PNL/PNZ	115	COMBICLICK fibre discs	13–15		
Fine grinding Very fine grinding	Grinding oils	155	Fibre discs	21–24	Grinding oils	155
	COMBIDISC ■ abrasive discs ■ non-woven discs	31–38 39–41	PSA discs	27	Short belts	48–51
	Poliflex discs	131	COMBICLICK fibre discs	13–15	Long belts	52–54
	POLINOX unitized discs	102			Short belts, non-woven	50
Cleaning	COMBIDISC non-woven discs	39–41	POLIVLIES self-adhesive discs	122	Short belts, non-woven	50
	COMBIDISC POLICLEAN discs	38	POLICLEAN discs	125		
	COMBICLICK non-woven discs	16–17				
Creating visual effects	COMBIDISC non-woven discs	39–41	POLIVLIES self-adhesive discs	122	Short belts, non-woven	50
	COMBIDISC TX discs	42	Marbling tools	120, 132		
	POLIVLIES flap discs	121	Poliflex structuring tools	133–134		
	POLINOX discs PNL/PNZ	115	COMBICLICK non-woven discs	16–17		
Polishing	COMBIDISC felt discs	42	Felt flap wheels	149	Short belts, felt	51
	COMBICLICK felt discs	18				

Peripheral grinding

Mounted tools, tools with arbor holes



Manual grinding



Peripheral grinding	Page	Peripheral grinding	Page	Manual grinding	Page	Manual grinding	Page
Abrasive spiral bands	64–67	Overlap slotted discs	93				
POLIROLL, POLICO	70–71						
POLICAP	74–80						
Abrasive spiral bands	64–67	Unmounted flap wheels for angle grinders	89	Poliflex blocks	132		
POLIROLL	70–71	Flap drums	90	Ceramic fibre files	143		
POLICAP	74–80	POLISTAR	94–95	Abrasive sheets, cloth/paper	55–56		
Mounted flap wheels	83–85	Overlap slotted discs	93	Shop rolls, cloth/paper	58–59		
Unmounted flap wheels	87–88						
POLIROLL, POLICO	70–71	Poliflex fine grinding wheels	131, 137, 142	Poliflex blocks	132	Diamond hand pads	57
Grinding oils	155	POLINOX unitized wheels	101, 106	Abrasive sheets, cloth/paper	55–56		
Poliflex fine grinding points	130, 135–136, 138–141			Shop rolls, cloth/paper	58–59		
POLINOX mounted grinding wheels	108–109	POLINOX grinding drums	116–117	Abrasive sheets, cloth/paper	55–56	Non-woven shop rolls	59
POLINOX unmounted grinding wheels	111–113	POLICLEAN wheels	124	POLINOX hand pads	57		
POLINOX cross buffs	110	POLICLEAN mounted tools	125	Shop rolls, cloth/paper	58–59		
POLINOX mounted grinding wheels	108–109	POLIFLAP grinding wheel	91	POLINOX hand pads	57		
POLINOX unmounted grinding wheels	111–113	Poliflex structuring tools	133–134	Non-woven shop rolls	59		
POLINOX grinding drums	116–117	Flap drums	90	Masking tape	119		
POLINOX discs	118						
Felt points	145–148	Mounted felt flap wheels	148	Diamond polishing pastes	154	Grinding pastes	153
Felt wheels and lenses	149	Cloth rings	150–151	Polishing paste bars	153		

Fine grinding and polishing tools
Surface roughness – influencing factors and reference values

Factors influencing surface roughness:

Abrasive:
- The larger the grit, the rougher the surface finish will be.
- Aluminium oxide, ceramic oxide grain and zirconia alumina achieve similar levels of surface roughness.
- Workpieces which are machined with silicon carbide exhibit a slightly finer surface finish.

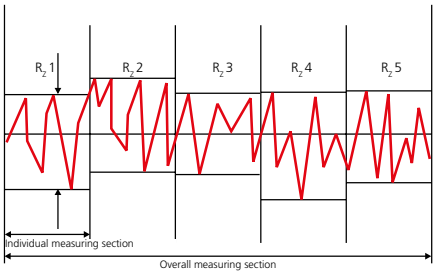
Material to be worked:
- The softer the material to be machined, the coarser the finished surface will be when using the same grit sizes.
- Adding grease or lubricant will achieve a slightly finer surface finish.

Work parameters:
- The relationship between the cutting speed and feed rate has the following impact:
  - Increasing the cutting speed slightly improves the surface quality.
  - Reducing the speed of the feed rate makes the surface quality slightly finer.
- The contact pressure only has a minor influence on the surface roughness.

There is a differentiation between the following roughness depths:

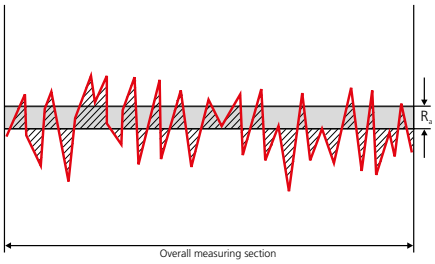
The **individual roughness depth R_{zi}** is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measuring section.

The **roughness depth R_z** is the mean value of the individual roughness depths (R_{zi}) of consecutive individual measuring sections.



The **roughness depth R_{max}** is the largest individual roughness depth within the overall measuring section.

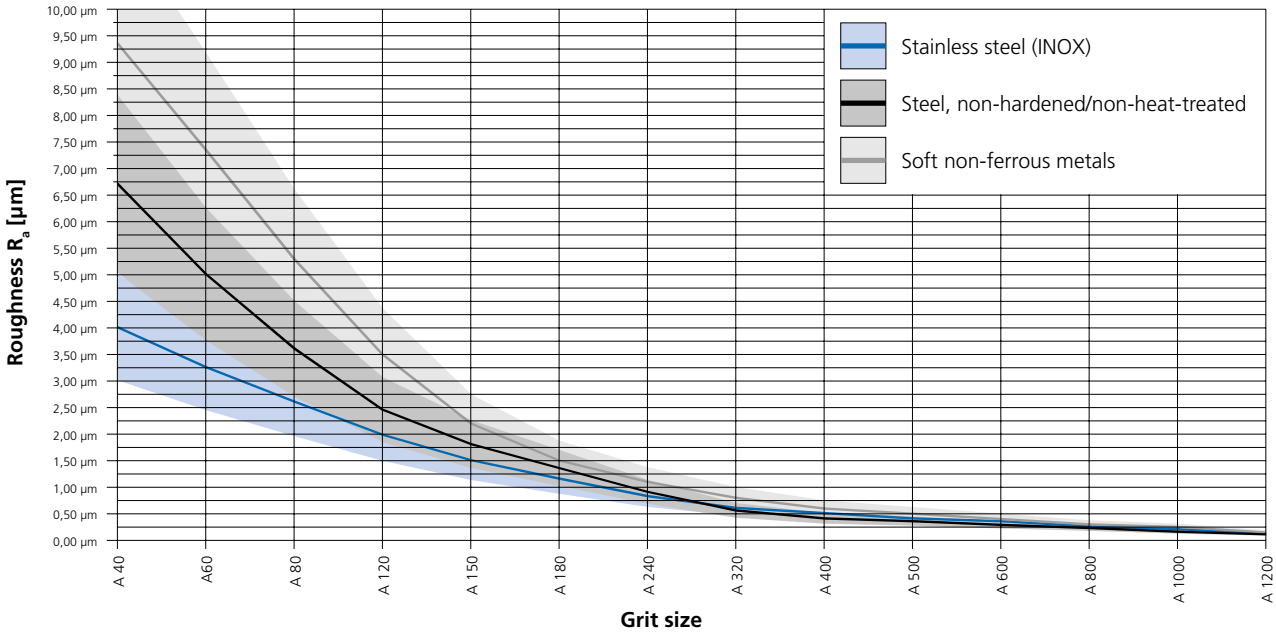
The **average roughness value R_a** is the arithmetic mean value of the sum of all profile values within the roughness profile.



Reference values for roughness depths in the case of different applications

Application	Roughness depth
Coarse grinding: Grit sizes 24 to 150	R_a = 0.70 to 12 µm
Fine grinding: Grit sizes 180 to 400	R_a = 0.20 to 0.70 µm
Very fine grinding: Grit sizes 500 to 1,200	R_a = 0.05 to 0.20 µm
Polishing: Step 1: Step 2: Step 3:	 R_a = 0.10 to 0.20 µm R_a = 0.04 to 0.10 µm R_a = < 0.01 µm
Structuring: Surfaces ground	R_a = 0.20 to 0.70 µm
Satinizing/ matt finishing: With non-woven abrasive	R_a = 0.10 to 0.70 µm

Surface roughness of different materials after machining with tools using coated abrasives



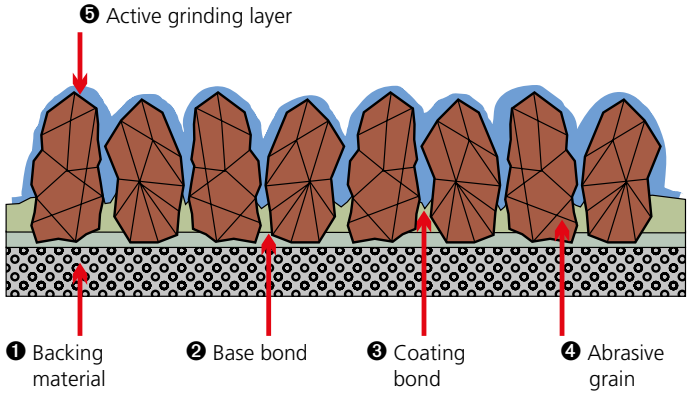
Structure of coated abrasives

PFERD supplies a wide range of tools with coated abrasives for machining a variety of workpiece geometries and materials:

- COMBICLICK fibre discs
- Fibre discs
- COMBIDISC abrasive discs
- Abrasive spiral bands and abrasive belts
- Mounted and unmounted flap wheels
- Abrasive sheets and shop rolls
- POLIROLL cartridge rolls and POLICO abrasive cones
- Velcro-backed abrasive discs
- Self-adhesive abrasive discs (PSA)

You can find additional PFERD tools with coated abrasives in catalogue section 6.

Coated abrasives are used for both wet and dry grinding.



❶ Backing material

Bond and abrasive grain are applied to the base. The backing materials available for selection differ in their properties, such as tear strength, flexibility and wear. The respective grinding tool is adapted to the requirements of the intended application by choosing the appropriate base material. The PFERD range is sub-divided into three groups:

Paper:
The main areas of application for coated abrasives with a paper base are in the woodworking industry and in trade, e.g. among carpenters, painters and decorators. Coated abrasives with a paper base are rarely used for industrial metalwork.
Abrasives for manual grinding are predominantly made from paper with a surface weight of 70 to 100 g/m². Heavier paper types are used to make abrasives for machine applications involving wide and narrow belts alike.

Cloth:
Coated abrasives with a cloth base are predominantly used for metalwork.

Vulcanized fibre:
When adapted to the corresponding applications, vulcanized fibre in various thicknesses is predominantly used for making fibre grinding discs. Vulcanized fibre is a very sturdy, robust backing material, and also very wear-resistant.

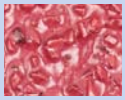
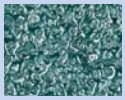
❷ + ❸ Bond

When manufacturing coated abrasives, different resin bonds are used to fix the abrasive grain to the backing material. First, the backing material is coated with the base bond (❷). After this, the abrasive grain is evenly scattered over the surface and aligned to achieve higher aggressiveness with the help of special procedures. The coating bond (❸) ensures that the abrasive grain is fixed in place and protects the grain against the forces and loads resulting from the grinding process.



❹ Abrasive grain

Choosing the right abrasive grain has a significant influence on surface quality and profitability.
The most common materials for abrasive grain are:

Aluminium oxide A		Numerous types of aluminium oxide are used as abrasives. These may be present in molten or sintered form. The hardness and toughness can be influenced by special manufacturing procedures or additives. Standard types of aluminium oxide and a "sharp-edged" grain shape are predominantly used for coated abrasives.
Ceramic oxide grain CO		For sintered aluminium oxides, a differentiation is made between sintered bauxite aluminium oxides and sol-gel aluminium oxides. Sol-gel aluminium oxides are predominantly used for coated abrasives in the form of abrasive ceramic grain. This state-of-the-art abrasive is used for numerous applications thanks to its high toughness and good self-sharpening qualities.
Zirconia alumina Z		Zirconia alumina is a fused mixture of aluminium oxide and zirconium oxide. In comparison to aluminium oxides, zirconia alumina exhibits lower hardness but greater toughness. The high proportion of zirconium oxide results in an extremely powerful self-sharpening effect and contributes to outstanding stock removal rates with cool grinding and a long tool life.
Silicon carbide SiC		Silicon carbide is synthetically manufactured abrasive grain which is very sharp-edged, with low toughness and very high hardness. It is particularly suitable for work on titanium, aluminium, bronze, stone and plastics. Ideally suited for use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.
Diamond grain D		Diamond grain is the hardest abrasive. It consists of pure carbon in a crystalline structure. For grinding tools, the diamonds used are generally synthetic, produced at very high temperatures and under high pressure. The properties of diamond grain can be adapted for use in grinding tools through various synthesis conditions.
Compact grain CK		In the case of compact grain, individual grains are built up as granulate with a bond system. Each individual grain of granulate is one solid unit, in which numerous abrasive grains made from aluminium oxide or silicon carbide (SiC) are joined together. Used abrasive grains are torn out of this compound structure by the forces resulting from the grinding, and expose sharp abrasive points in doing so. This guarantees a long tool life with a constant surface quality.
VICTOGRAIN		**VICTO**GRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance. The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with fast working, a long tool life, less heat build-up in the workpiece, and a lower power output required for the tool drive. The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency. The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off. By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.

Grit sizes
The various grit sizes for coated abrasives are specified in ISO 6344 and have been adopted for FEPA standards:

Coarse	Medium	Fine	Superfine
P 12 – 16 – 20 – 24 – 36 – 40 – 50 – 60 – 80	P 100 – 120 – 150 – 180 – 220 – 240 – 280	P 320 – 360 – 400 – 500 – 600	P 800 – 1000 – 1200 – 1500

❺ Active grinding layer

The use of an active grinding layer considerably increases the stock removal rate and reduces the workpiece temperature.
This is especially advantageous for materials with poor heat-conducting properties, such as stainless steel (INOX).
PFERD tools with an active grinding layer feature the additional "COOL" label in their item description.

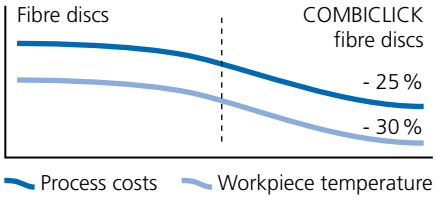
The patented quick-mounting and cooling system from PFERD is suitable for use with fibre, non-woven and felt discs.

The COMBICLICK system consists of a specially developed backing pad and a rugged mounting system at the back of the tool.
With the backing pad, COMBICLICK tools can be used on commercially available angle grinders.

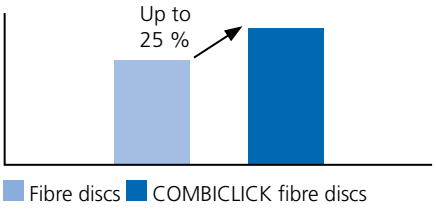
The special geometry of the cooling slots ensures high air throughput, which in turn considerably reduces the thermal load on the abrasive material and the workpiece.

Compared to conventional tools, the quick-mounting system, the robust holder, the safe fixing of the tool and the integrated cooling system together achieve a workpiece temperature that is 30 % lower, a stock removal rate that is 25 % higher, a tool life that is 30 % longer and better exploitation of the abrasive material.

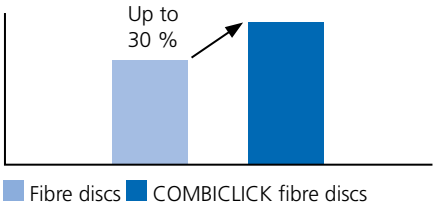
Lower process costs and workpiece temperature

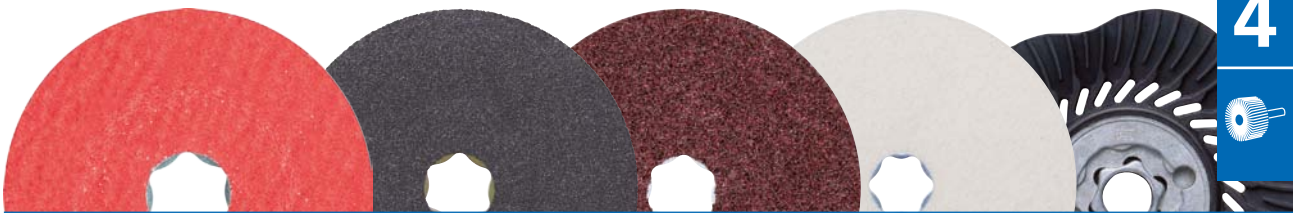


Higher stock removal rate



Longer tool life





Advantages:

System



Very easy and convenient handling.

Clamping



Extremely fast and simple tool changing reduces process costs.

Cooling effect



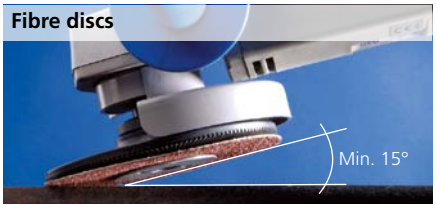
Very good cooling of the tool and workpiece.

Flexible grinding



Particularly soft and flexible grinding properties for face-down grinding with fibre discs of diameter 125 mm.

A very low angle to the workpiece is possible with COMBICLICK!

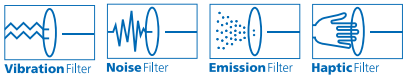




Using COMBICLICK helps to avoid scratches caused by protruding clamping pieces, and exploits the abrasive material that is available.

PFERDVALUE:

PFERDERGONOMICS recommends COMBICLICK as an innovative tool solution to sustainably reduce vibration, noise and dust levels produced by tools, and to improve working comfort.



PFERDEFFICIENCY recommends COMBICLICK for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time. The patented quick-mounting system reduces tool change and setup times.





GERMAN FEDERAL AWARD
FOR OUTSTANDING INNOVATION IN THE CRAFTS SECTOR
INTERNATIONALE HANDWERKSMESSE
(INTERNATIONAL CRAFTS FAIR)

The wide range of COMBICLICK fibre discs offers the best tool for any grinding application, from coarse to fine.

Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.
- High profitability thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives.

Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- Use COMBICLICK fibre discs with COMBICLICK backing pads on commercially available angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.
- For particularly flexible performance when face-down grinding, use fibre discs with a diameter of 125 mm.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**722275**
  CC-FS 125 A-COOL **60**
- **Ordering example explanation:**
  CC-FS = COMBICLICK fibre disc
  125 = Outer diameter D [mm]
  A = Abrasive
  COOL = Bond type
  60 = Grit size

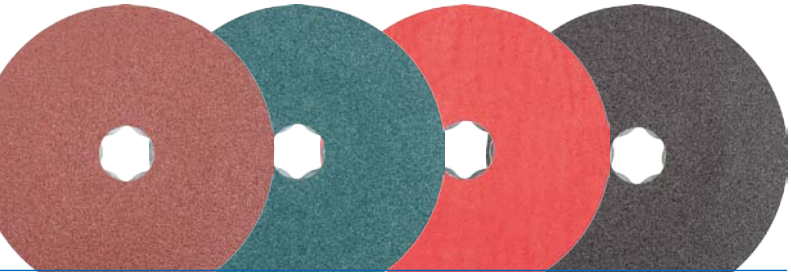
Safety notes:

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- COMBICLICK backing pads



The fast way to the best tool

Material group ▼		Abrasive ▶	Aluminium oxide A	Zirconia Alumina Z	Ceramic oxide grain CO	VICTO-GRAIN COOL	Silicon carbide SiC	Aluminium oxide A-COOL	Ceramic oxide grain CO-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	❍	●	●			
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●	●	●			
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		❍		●		●	●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍					●	❍
		Brass, copper, zinc	●	❍	❍				
	Hard non-ferrous metals	Hard aluminium alloys	●	❍	❍		❍		
		Bronze, titanium		❍	❍	●	●		●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		❍	❍	●			●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●	❍	●				
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	●				●		

● = Highly suitable ❍ = Suitable

Aluminium oxide A type

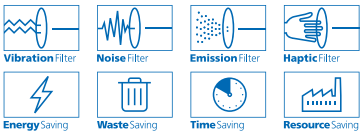
For universal grinding work from coarse to fine grinding in industry and professional trades.



Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

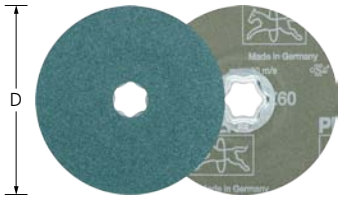
PFERDVALUE:



D [mm]	Grit size						Max. RPM		Description
	24	36	50	60	80	120			
	EAN 4007220								
100	-	836095	836101	836118	836125	836132	15,300	25	CC-FS 100 A ...
115	763179	763186	763193	763209	763216	763223	13,300	25	CC-FS 115 A ...
125	721988	721995	722008	722039	722060	722077	12,200	25	CC-FS 125 A ...

Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

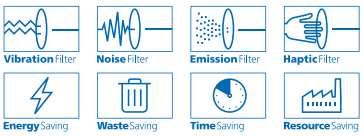


Abrasive:
Zirconia alumina Z

Recommendations for use:
- Use powerful angle grinders in the case of a higher contact pressure.

Ordering notes:
- Please complete the description with the desired grit size.

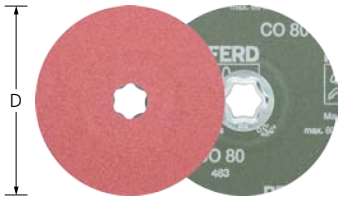
PFERDVALUE:



D [mm]	Grit size						Max. RPM		Description
	24	36	50	60	80	120			
	EAN 4007220								
115	-	722572	722596	763230	722619	722633	13,300	25	CC-FS 115 Z ...
125	722640	722657	722664	722671	722688	722695	12,200	25	CC-FS 125 Z ...

Ceramic oxide grain CO type

For aggressive grinding with a very high stock removal rate and very long tool life.
The ceramic oxide grain is specifically designed for work on hard materials and layers.

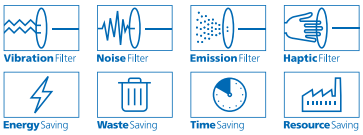


Abrasive:
Ceramic oxide grain CO

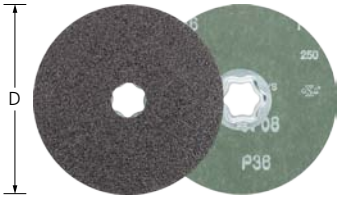
Recommendations for use:
- Use powerful angle grinders.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:



D [mm]	Grit size						Max. RPM		Description
	24	36	50	60	80	120			
	EAN 4007220								
115	763247	763254	763261	763278	763285	763292	13,300	25	CC-FS 115 CO ...
125	722084	722169	722183	722206	722237	722268	12,200	25	CC-FS 125 CO ...



Silicon carbide SiC type

For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

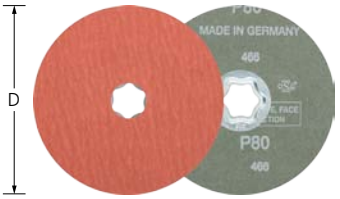
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

Abrasive:
Silicon carbide SiC

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

D [mm]	Grit size 36	60	80	120	Max. RPM		Description
	EAN 4007220						
115	898888	898895	898901	898918	13,300	25	CC-FS 115 SiC ...
125	898925	898932	898949	898956	12,200	25	CC-FS 125 SiC ...



Aluminium oxide A-COOL type

For universal grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX) and aluminium.

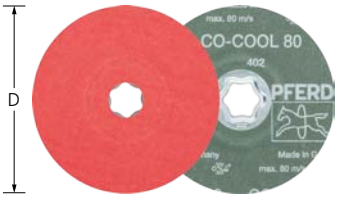
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Aluminium oxide A-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

D [mm]	Grit size 50	60	80	120	150	180	220	Max. RPM		Description
	EAN 4007220									
115	-	722176	722190	722213	722220	-	722244	13,300	25	CC-FS 115 A-COOL ...
125	722251	722275	722299	722312	722329	722343	722367	12,200	25	CC-FS 125 A-COOL ...



Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

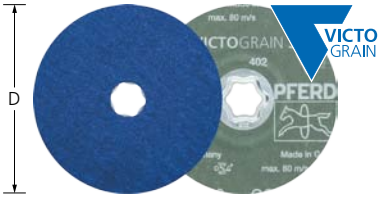
Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

D [mm]	Grit size 24	36	50	60	80	120	Max. RPM		Description
	EAN 4007220								
100	-	836149	836163	836187	836194	892442	15,300	25	CC-FS 100 CO-COOL ...
115	763308	763315	763322	763339	763346	763353	13,300	25	CC-FS 115 CO-COOL ...
125	722442	722473	722480	722497	722503	722510	12,200	25	CC-FS 125 CO-COOL ...
180	722534	722558	722565	722589	722602	-	8,500	25	CC-FS 180 CO-COOL ...

VICTOGRAIN-COOL type



For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

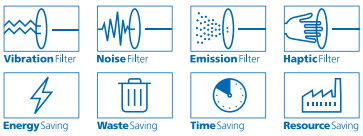
Outstanding, constant high performance thanks to the **VICTO**GRAIN abrasive grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
VICTOGRAIN-COOL

Recommendations for use:
- Use powerful angle grinders.

PFERDVALUE:



D [mm]	EAN 4007220	Max. RPM		Description
100	109267	15,300	25	CC-FS 100 VICTOGRAIN-COOL 36
115	109250	13,300	25	CC-FS 115 VICTOGRAIN-COOL 36
125	109274	12,200	25	CC-FS 125 VICTOGRAIN-COOL 36
180	109281	8,500	25	CC-FS 180 VICTOGRAIN-COOL 36

High-performance tools with VICTOGRAIN abrasive grain

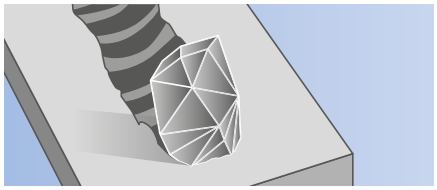
VICTOGRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

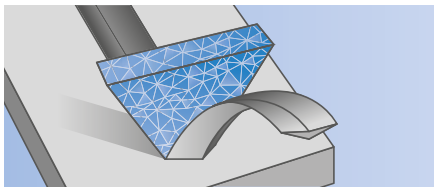
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

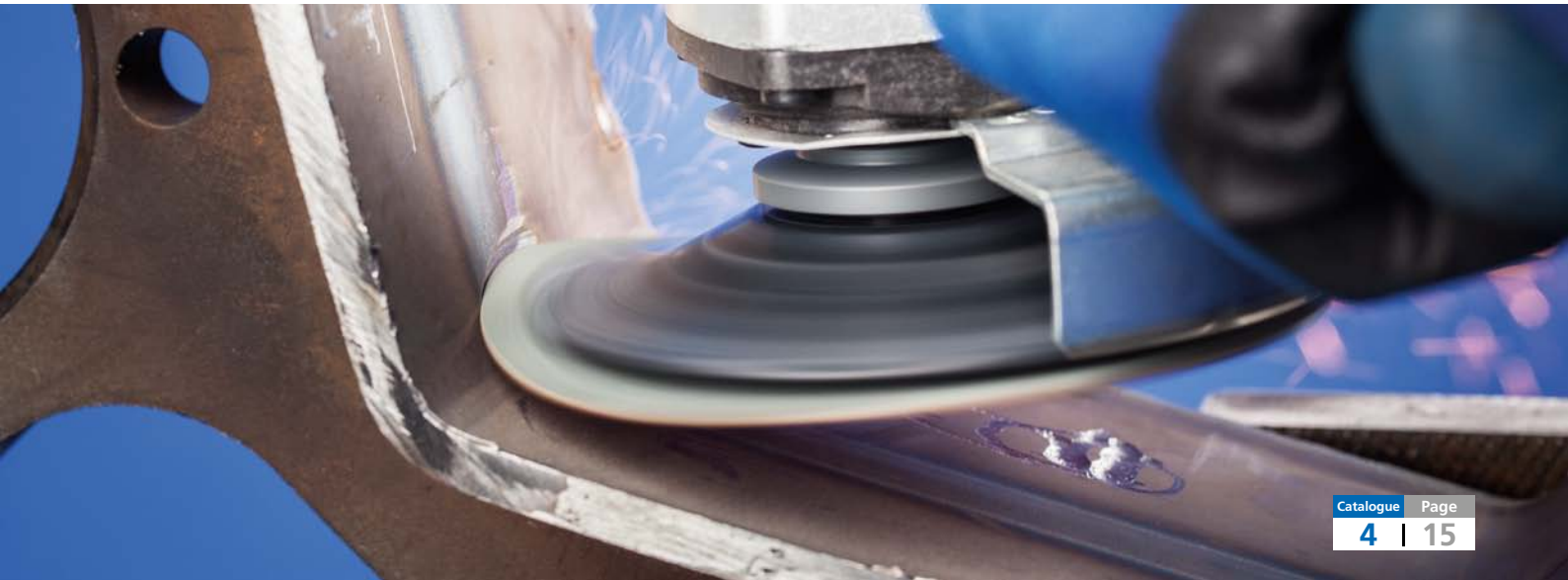
The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.


Conventional abrasive grain


VICTOGRAIN abrasive grain


The **VICTO**GRAIN abrasive grain is optimally aligned



COMBICLICK non-woven discs are used for face-down grinding.
They are available in the following types: VRW (soft), VRH (hard) and PNER.

Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Roughening
- Deburring
- Surface work
- Cleaning
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

Recommendations for use:

- Use COMBICLICK non-woven discs with COMBICLICK backing pads on speed-adjustable angle grinders.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- When ordering, please state the EAN or the full description.

- **Ordering example:**
  EAN 4007220**935873**
  CC-VRH 115 A **180 M**
- **Ordering example explanation:**
  CC-VRH = COMBICLICK non-woven discs, hard type
  115 = Outer diameter D [mm]
  A = Abrasive
  180 M = Grit size

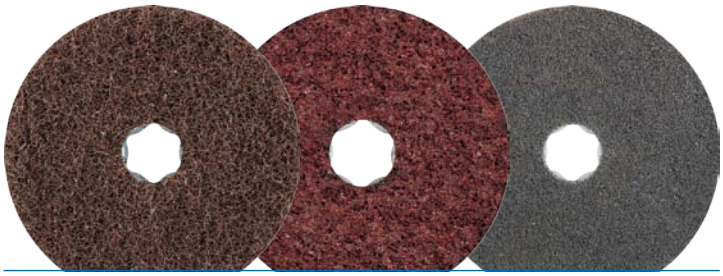
Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

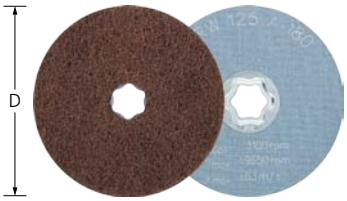


Accessories:

- COMBICLICK backing pads



Non-woven discs



Soft type CC-VRW

Suitable for very fine grinding on moderate and coarse surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.

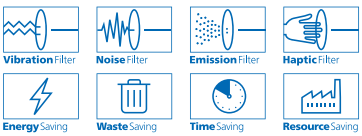
Advantages:
- Can be used for wet and dry working.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

Abrasive:
Aluminium oxide A
Available POLINOX grit sizes:
100 = medium
180 = fine
280 = very fine

Recommendations for use:
- For the best results, use at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:



D [mm]	Grit size			Opt. RPM	Max. RPM		Description
	100	180	280				
	EAN 4007220						
100	948170	948163	948156	3,800	12,000	10	CC-VRW 100 A ...
115	935941	935934	935927	3,300	10,500	10	CC-VRW 115 A ...
125	935972	935965	935958	3,100	9,650	10	CC-VRW 125 A ...

Hard type CC-VRH



Suitable for universal work on moderate and coarse metal surfaces, e.g. removal of rough grinding traces, removal of oxidation and light deburring work.
Achieve matt and satin-finished surfaces.

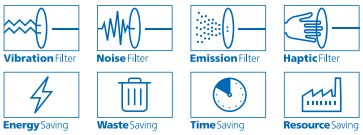
Advantages:
- Little wear due to high tear strength.
- The open structure of the non-woven material prevents tool clogging.

Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer tool life.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:



D [mm]	Grit size			Opt. RPM	Max. RPM		Description
	100 G	180 M	240 F				
	EAN 4007220						
100	948149	948132	948125	3,800	12,000	10	CC-VRH 100 A ...
115	935880	935873	935743	3,300	10,500	10	CC-VRH 115 A ...
125	935910	935903	935897	3,100	9,650	10	CC-VRH 125 A ...

CC-PNER type



For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Especially suitable for work on larger surfaces on components made of stainless steel (INOX).

The different thicknesses/hardnesses of the non-woven material are colour-coded:
W (soft) = grey, MW (medium-soft) = light blue, MH (medium-hard) = dark blue, H (hard) = red

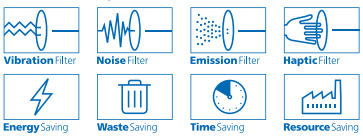
Advantages:
- High edge strength thanks to extreme durability.
- Can be profiled as desired, enabling optimal adjustment to the contour.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Recommendations for use:
- For the best results, use at a recommended cutting speed of 15–35 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering notes:
- Please complete the description with the desired type.
- Further information on PNER type non-woven products can be found on pages 99–100.

PFERDVALUE:



D [mm]	Abrasives	Type				Grit size	Opt. RPM	Max. RPM		Description
		W (soft)	MW (medium-soft)	MH (medium-hard)	H (hard)					
		EAN 4007220								
100	SiC	948187	948194	948200	-	fine	5,700	9,550	5	CC-PNER ... 100 SiC F
	A	-	-	-	948217	fine	5,700	9,550	5	CC-PNER ... 100 A F
115	SiC	935989	936009	936016	-	fine	5,000	8,350	5	CC-PNER ... 115 SiC F
	A	-	-	-	936023	fine	5,000	8,350	5	CC-PNER ... 115 A F
125	SiC	935996	936030	936047	-	fine	4,500	7,650	5	CC-PNER ... 125 SiC F
	A	-	-	-	936054	fine	4,500	7,650	5	CC-PNER ... 125 A F

COMBICLICK
General information – Felt discs

COMBICLICK felt discs are used for face-down grinding on medium-sized and large surfaces. They are supplied in various diameters.

Advantages:

- Innovative quick-mounting system guarantees convenient handling with fast tool changes.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Polishing

Recommendations for use:

- Use COMBICLICK felt discs with COMBICLICK backing pads on speed-adjustable angle grinders.
- For best performance, use with a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between polishing performance, thermal load on the workpiece and tool wear.
- When changing the polishing paste, use a brand-new felt disc.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- Please order grinding and polishing pastes separately. Detailed information and ordering data for grinding and polishing pastes can be found on pages 153–155.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- COMBICLICK backing pads
- Grinding and polishing pastes



Felt discs CC-FR



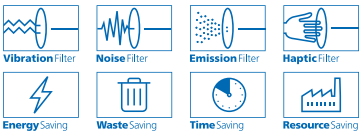
CC-FR type

Suitable for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on medium-sized and large surfaces.

Advantages:

- High economic efficiency due to very long tool life.
- Focused working over the entire lifespan thanks to high dimensional stability.

PFERDVALUE:



D [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
100	948224	1,900	12,000	5	CC-FR 100
115	936061	1,650	10,500	5	CC-FR 115
125	936078	1,500	9,650	5	CC-FR 125





CC-GT type



With this backing pad, COMBICLICK tools can be used on commercially available angle grinders.
The different hardnesses are colour-coded:
CC-GT (medium) = black
CC-H-GT (hard) = blue

Advantages:
- The geometry of the cooling slots significantly reduces the thermal load.
- High economic efficiency due to minimized tool change times.

Recommendations for use:
- Type CC-H-GT is mainly used to work on stainless steel (INOX). It features very high edge strength, which enables a higher contact pressure.

Safety notes:
- The maximum peripheral speed is 80 m/s.
- For backing pads with a diameter of 180 mm, do not apply too high a contact pressure in order to prevent the backing pad from overstretching.

PFERDVALUE:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter
Energy Saving | Waste Saving | Time Saving | Resource Saving

Suitable for CC diameter [mm]	Thread	Hardness	Suitable for machine types	EAN 4007220	Max. RPM		Description
100	M10	medium	Angle grinders 100, spindle M10	836200	15,300	1	CC-GT 100 M10
115, 125	M14	medium	Angle grinders 115 / 125, spindle M14	725764	13,300	1	CC-GT 115-125 M14
	5/8	medium	Angle grinders 115 / 125, spindle 5/8"	725771	13,300	1	CC-GT 115-125 5/8
	M14	hard	Angle grinders 115 / 125, spindle M14	835869	13,300	1	CC-H-GT 115-125 M14
	5/8	hard	Angle grinders 115 / 125, spindle 5/8"	841419	13,300	1	CC-H-GT 115-125 5/8
180	M14	medium	Angle grinders 180, spindle M14	725788	8,500	1	CC-GT 180 M14
	5/8	medium	Angle grinders 180, spindle 5/8"	725795	8,500	1	CC-GT 180 5/8

Set

CC-SET



Set for surface work, from coarse to mirror-polished. The sets with a diameter of 125 mm are especially flexible around the edge.

Contents:
- 3 pcs. each of COMBICLICK fibre discs:
  - CC-FS CO-COOL 36
  - CC-FS CO-COOL 120
  - CC-FS A-COOL 220
- 1 pc. each of COMBICLICK non-woven disc:
  - CC-VRH A 240 F
  - CC-VRH A 180 M
  - CC-VRH A 100 G
  - CC-VRW A 280
  - CC-VRW A 180
  - CC-VRW A 100
  - CC-PNER W SiC F
- 1 pc. each of:
  - Universal polishing paste
  - COMBICLICK felt disc CC-FR
  - COMBICLICK backing pad CC-GT M14 or 5/8-11

Advantages:
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

Abrasive:
Aluminium oxide A
Ceramic oxide grain CO-COOL
Silicon carbide SiC

PFERDVALUE:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter
Energy Saving | Waste Saving | Time Saving | Resource Saving

D [mm]	Thread	EAN 4007220		Description
115	M14	955345	1	CC-SET 115 M14
	5/8-11	955406	1	CC-SET 115 5/8-11
125	M14	955369	1	CC-SET 125 M14
	5/8-11	955413	1	CC-SET 125 5/8-11

Fibre discs
General information

The wide range of fibre discs offers the best tool for any grinding application, from coarse to fine.
PFERD fibre discs are manufactured in compliance with ISO 16057 in shape A1, type F, under the designation "vulcanized fibre disc".

Advantages:

- High profitability thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives.
- Optimum adaptation to contours thanks to high flexibility.

Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- Use fibre discs conforming to ISO 15636 with backing pads on commercially available angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order backing pads separately. More detailed information and ordering data for backing pads can be found on page 24.
- When ordering, please state the EAN or the full description.

- **Ordering example:**
  EAN 4007220**696354**
  FS 115-22 A-COOL **60**
- **Ordering example explanation:**
  FS = Fibre disc
  115 = Outer diameter D [mm]
  22 = Centre hole diameter H [mm]
  A = Abrasive
  COOL = Bond type
  60 = Grit size

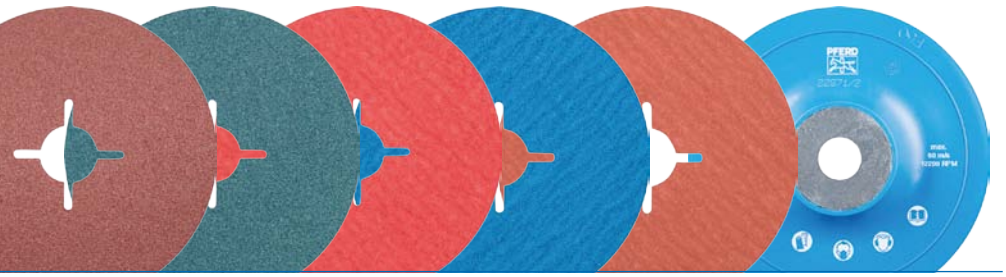
Safety notes:

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- Backing pads



The fast way to the best tool

Material group ▼		Abrasive ▶	Aluminium oxide A	Zirconia Alumina Z	Ceramic oxide grain CO	VICTO-GRAIN COOL	Aluminium oxide A-COOL	Zirconia Alumina Z-COOL	Ceramic oxide grain CO-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	❍	●	●			
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●	●	●			
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		❍		●	●	●	●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍				●	❍	❍
		Brass, copper, zinc	●	❍	❍				
	Hard non-ferrous metals	Hard aluminium alloys	●	❍	❍				
		Bronze, titanium		❍	❍	●		●	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		❍	❍	●		●	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●	❍	●				
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	●						

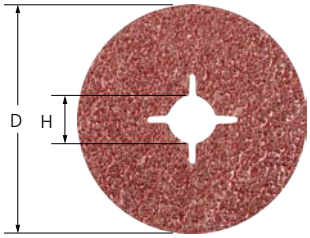
● = Highly suitable ❍ = Suitable

Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.



D [mm]	H [mm]	Grit size								Max. RPM		Description
		16	24	36	50	60	80	100	120			
		EAN 4007220										
100	16	344477	228012	227442	301630	228319	228326	228043	306444	15,300	25	FS 100-16 A ...
115	22	164914	164952	165003	500910	165058	165102	165157	500934	13,300	25	FS 115-22 A ...
125	22	164921	164969	165010	696286	165065	165119	165164	500941	12,200	25	FS 125-22 A ...
150	22	-	-	165027	-	165072	165126	-	-	10,200	25	FS 150-22 A ...
180	22	164945	164983	165034	696323	165089	165133	165188	165201	8,500	25	FS 180-22 A ...

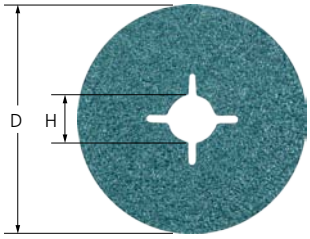
Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

Abrasive:
Zirconia alumina Z

Recommendations for use:
- Use powerful angle grinders in the case of a higher contact pressure.

Ordering notes:
- Please complete the description with the desired grit size.



D [mm]	H [mm]	Grit size							Max. RPM		Description
		24	36	50	60	80	100	120			
		EAN 4007220									
100	16	832943	832950	832967	750636	832974	750643	832981	15,300	25	FS 100-16 Z ...
115	22	216569	216576	216583	216590	216606	696606	696613	13,300	25	FS 115-22 Z ...
125	22	216613	216620	216637	216644	216651	696620	696637	12,200	25	FS 125-22 Z ...
180	22	216668	216675	216682	216699	216705	696644	696651	8,500	25	FS 180-22 Z ...

Ceramic oxide grain CO type

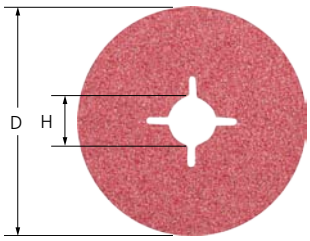
For aggressive grinding with a very high stock removal rate and very long tool life.
Consistently high performance due to self-sharpening ceramic oxide grain.

The ceramic oxide grain is specifically designed for work on hard materials and layers.

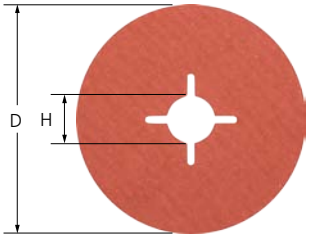
Abrasive:
Ceramic oxide grain CO

Recommendations for use:
- Use powerful angle grinders.

Ordering notes:
- Please complete the description with the desired grit size.



D [mm]	H [mm]	Grit size						Max. RPM		Description
		24	36	50	60	80	120			
		EAN 4007220								
115	22	617434	617441	696781	617458	617465	696804	13,300	25	FS 115-22 CO ...
125	22	617472	617489	696811	617496	617502	696835	12,200	25	FS 125-22 CO ...
180	22	617519	617526	696842	617533	617540	696866	8,500	25	FS 180-22 CO ...



Aluminium oxide A-COOL type

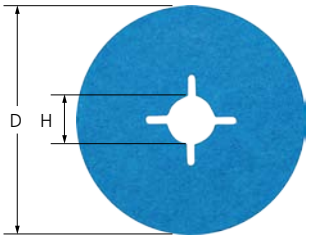
For universal grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX).

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Aluminium oxide A-COOL

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	H [mm]	Grit size								Max. RPM		Description
		50	60	80	100	120	150	180	220			
		EAN 4007220										
115	22	696347	696354	696361	696378	696385	696392	696408	696415	13,300	25	FS 115-22 A-COOL ...
125	22	696422	696439	696446	696453	696460	696477	696484	696491	12,200	25	FS 125-22 A-COOL ...
180	22	696507	696514	696521	696538	696552	696583	696569	696590	8,500	25	FS 180-22 A-COOL ...



Zirconia alumina Z-COOL type

For coarse grinding work with a high stock removal rate and cool grinding.

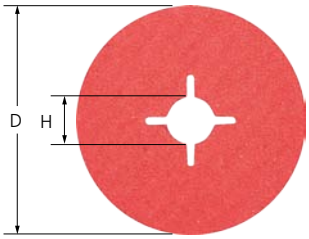
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Zirconia alumina Z-COOL

Recommendations for use:
- Use powerful angle grinders in the case of a higher contact pressure.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	H [mm]	Grit size				Max. RPM		Description
		36	50	60	80			
		EAN 4007220						
115	22	696668	696675	696682	696699	13,300	25	FS 115-22 Z-COOL ...
125	22	696705	696712	696729	696736	12,200	25	FS 125-22 Z-COOL ...



Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

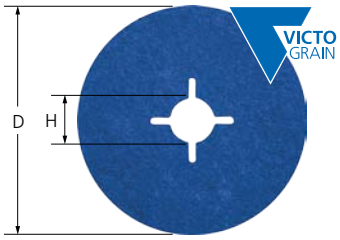
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	H [mm]	Grit size							Max. RPM		Description
		24	36	50	60	80	100	120			
		EAN 4007220									
100	16	899625	832998	833001	833018	833025	-	908129	15,300	25	FS 100-16 CO-COOL ...
115	22	696880	696897	696903	696910	696927	696934	696941	13,300	25	FS 115-22 CO-COOL ...
125	22	696958	696965	696972	696989	696996	697009	697016	12,200	25	FS 125-22 CO-COOL ...
180	22	697023	697030	697047	697054	697061	697078	697085	8,500	25	FS 180-22 CO-COOL ...

VICTOGRAIN-COOL type



For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

Outstanding, constant high performance thanks to the **VICTO**GRAIN abrasive grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
VICTOGRAIN-COOL

D [mm]	H [mm]	EAN 4007220	Max. RPM		Description
100	16	108796	15,300	25	FS 100-16 VICTOGRAIN-COOL 36
115	22	108789	13,300	25	FS 115-22 VICTOGRAIN-COOL 36
125	22	108802	12,200	25	FS 125-22 VICTOGRAIN-COOL 36
180	22	108819	8,500	25	FS 180-22 VICTOGRAIN-COOL 36

High-performance tools with VICTOGRAIN abrasive grain

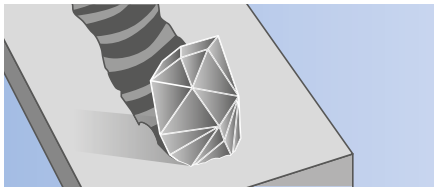
VICTOGRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

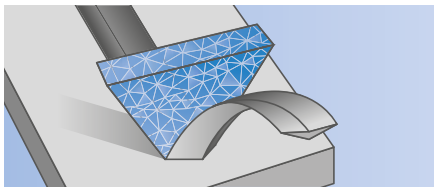
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

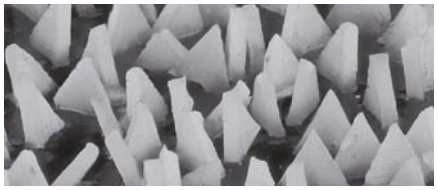
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.


Conventional abrasive grain


VICTOGRAIN abrasive grain


The **VICTO**GRAIN abrasive grain is optimally aligned




GT


H-GT


HT-GT

GT, H-GT and HT-GT types

Three different backing pad types are supplied for using fibre discs on commercially available angle grinders.

GT:
Backing pad for optimum adaptation to contours thanks to high flexibility.
According to ISO 15636.

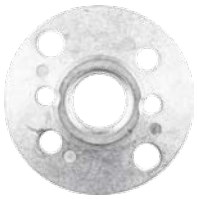
H-GT:
High-performance backing pad with a long tool life thanks to abrasion-resistant, glass-fibre-reinforced plastic. Impresses with particularly cool grinding due to radially arranged cooling fins, and high fibre disc stock removal rate due to sturdy, rigid design.

HT-GT:
Flexible and extremely temperature-resistant backing pad with a long tool life due to the highly temperature-resistant material. Enables high-precision work thanks to high flexibility.
According to ISO 15636.

Ordering notes:
- The matching clamping nut is included.

Accessories:
- Clamping nuts for backing pads GT

Suitable for tool dia. [mm]	Thread	Suitable for machine types	EAN 4007220	Max. RPM		Description
GT						
100	M10	Angle grinders 100, spindle M10	100998	15,300	1	GT 100 MF M10
115	M10	Angle grinders 115, spindle M10	668047	13,300	1	GT 115 MF M10
	M14	Angle grinders 115, spindle M14	668054	13,300	1	GT 115 MF M14
125	M14	Angle grinders 125, spindle M14	668061	12,200	1	GT 125 MF M14
150	M14	Angle grinders 150, spindle M14	668078	10,200	1	GT 150 MF M14
180	M14	Angle grinders 180, spindle M14	668085	8,500	1	GT 180 MF M14
H-GT, high-performance backing pad						
115	M14	Angle grinders 115, spindle M14	668115	13,300	1	H-GT 115 MF M14
125	M14	Angle grinders 125, spindle M14	668122	12,200	1	H-GT 125 MF M14
180	M14	Angle grinders 180, spindle M14	668139	8,500	1	H-GT 180 MF M14
HT-GT, temperature-resistant backing pad						
115	M14	Angle grinders 115, spindle M14	032398	13,300	1	HT-GT 115 MF M14
125	M14	Angle grinders 125, spindle M14	032404	12,200	1	HT-GT 125 MF M14
180	M14	Angle grinders 180, spindle M14	032381	8,500	1	HT-GT 180 MF M14



FL-GT, clamping nuts for backing pads GT

Accessories for GT-type backing pads.

Advantages:
- Matching centre hole distances for standard commercial face pin spanners.

Thread	Suitable for machine types	EAN 4007220		Description
M10	Angle grinders 100–115, spindle M10	668146	1	FL-GT 100-115 M10
M14	Angle grinders 80–115, spindle M14	668153	1	FL-GT 80-115 M14
	Angle grinders 125, spindle M14	668160	1	FL-GT 125 M14
	Angle grinders 150–230, spindle M14	668177	1	FL-GT 150-230 M14



Self-adhesive discs are suited to grinding larger surfaces.

The flexible system comprising a self-adhesive disc and the associated holder enables use on contours.

With the self-adhesive disc holder, self-adhesive discs can be used on commercially available, speed-adjustable or slow-running angle grinders with an M14 spindle.

Advantages:

- Quick tool changes thanks to self-adhesive system.
- Optimum adaptation to contours thanks to high flexibility.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- The best grinding results are achieved with speed-adjustable angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order self-adhesive disc holders separately. More detailed information and ordering data for self-adhesive disc holders can be found on page 26.

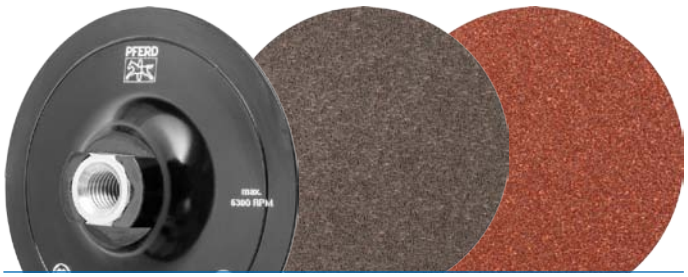
Safety notes:

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Position the self-adhesive discs centrally on the holder.



Accessories:

- Self-adhesive disc holders



Self-adhesive discs KR

Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

Advantages:
- Suitable for universal use on virtually all materials.

Ordering notes:
- Please complete the description with the desired grit size.

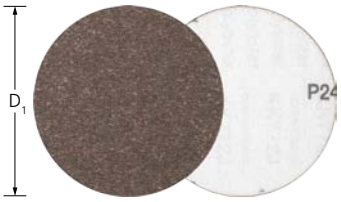
Abrasive:
Aluminium oxide A



D_1 [mm]	Grit size						Opt. RPM	Max. RPM		Description
	40	60	80	120	150	180				
	EAN 4007220									
115	294291	294307	294314	294321	294338	294345	5,000	5,300	50	KR 115 A ...
125	294352	294369	294376	294383	294390	294406	4,600	4,850	50	KR 125 A ...



Self-adhesive discs
Self-adhesive discs KR



Aluminium oxide A compact grain type

The wide range of different grains makes this range outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

Advantages:
- Very long tool life and consistent surface roughness over the entire lifespan thanks to self-sharpening compact grain.

Abrasive:
Aluminium oxide A compact grain

Ordering notes:
- Please complete the description with the desired grit size.

D_1 [mm]	Grit size									Opt. RPM	Max. RPM		Description
	120	180	240	320	400	600	800	1000	1200				
	EAN 4007220												
115	026113	026168	026175	026199	026205	026212	026229	026236	026243	5,000	5,300	50	KR 115 A ... CK
125	026250	026267	026274	026281	026298	026304	026311	026328	026335	4,600	4,850	50	KR 125 A ... CK

Self-adhesive disc holders KRH



KRH type

Flexible arbor for using self-adhesive discs on commercially available angle grinders.

D [mm]	Thread	EAN 4007220	Max. RPM		Description
115	M14	294413	5,300	1	KRH 115 M14
125	M14	294420	4,850	1	KRH 125 M14





The comprehensive range of self-adhesive abrasive discs and abrasive disc holders is specifically intended for tool- and mould-making.

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Quick and easy tool changes.
- Secure hold of the disc on the holder thanks to high-quality adhesive connections.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Levelling
- Surface work
- Finishing
- Step-by-step fine grinding

Recommendations for use:

- Use abrasive discs with abrasive disc holders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Safety notes:

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- Abrasive disc holder



Self-adhesive abrasive discs PSA and abrasive disc holders PSA-H

PSA type

For heavily contoured, delicate components. Different surface quality levels from coarse to very fine can be successively achieved.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please order abrasive disc holders separately.
- Please complete the description with the desired grit size.



D_1 [mm]	Grit size								Opt. RPM	Max. RPM		Description
	60	80	120	180	240	320	400	600				
	EAN 4007220											
12	026182	026731	026991	027004	027011	027028	027035	027042	16,000	31,800	100	PSA 12 A ...
20	027059	027066	027080	027097	027103	027110	027127	027134	10,000	19,100	100	PSA 20 A ...
30	027141	027158	027165	027172	027189	027196	027202	027219	6,500	12,700	100	PSA 30 A ...
50	027226	027233	027240	027257	027264	027271	027288	027295	4,000	7,650	100	PSA 50 A ...

PSA-H type

Flexible abrasive disc holder for using self-adhesive abrasive discs.

Recommendations for use:
- When working on narrow radii, choose the abrasive disc holder to be one size smaller than the abrasive disc so that the outer edges of the abrasive disc can adapt to the contour of the radius.



D [mm]	S [mm]	L [mm]	Suitable for	EAN 4007220	Max. RPM		Description
Shank dia. 2.35 mm							
10	2.35	35	PSA 12	026885	31,800	5	PSA-H 12-2,35
18	2.35	35	PSA 20	026939	19,100	5	PSA-H 20-2,35
25	2.35	35	PSA 30	026953	12,700	5	PSA-H 30-2,35
Shank dia. 3 mm							
10	3	35	PSA 12	026922	31,800	5	PSA-H 12-3
18	3	35	PSA 20	026946	19,100	5	PSA-H 20-3
25	3	35	PSA 30	026960	12,700	5	PSA-H 30-3
45	3	35	PSA 50	026984	7,650	5	PSA-H 50-3
Shank dia. 6 mm							
45	6	35	PSA 50	026977	7,650	5	PSA-H 50-6

COMBIDISC
General information

The COMBIDISC product range contains a wide selection of grinding tools for surface finishing.
From coarse machining and surface texturing to face-down mirror polishing – the range provides the best tool, even for complicated applications.

Advantages:

- High profitability thanks to quick tool changes.
- Great convenience thanks to simple handling and low-vibration working.
- No operational disruptions caused by sticking, slipping or disengaging.

Applications:

- Roughening
- Levelling
- Deburring
- Surface work
- Work on edges
- Polishing
- Cleaning
- Sharpening
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

Recommendations for use:

- Use COMBIDISC grinding tools with arbors or abrasive disc holders on flexible shaft drives with angle handpieces, compressed-air or electric angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Flexible shaft drives
- Straight grinders
- Angle grinders
- Cordless angle grinders

Ordering notes:

- Please order arbors or COMBIDISC abrasive disc holders separately.
  More detailed information and ordering data can be found on page 43.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**266175**
  CD 38 A **180**
- **Ordering example explanation:**
  CD = COMBIDISC abrasive discs
  38 = Outer diameter D_1 [mm]
  A = Abrasive
  180 = Grit size

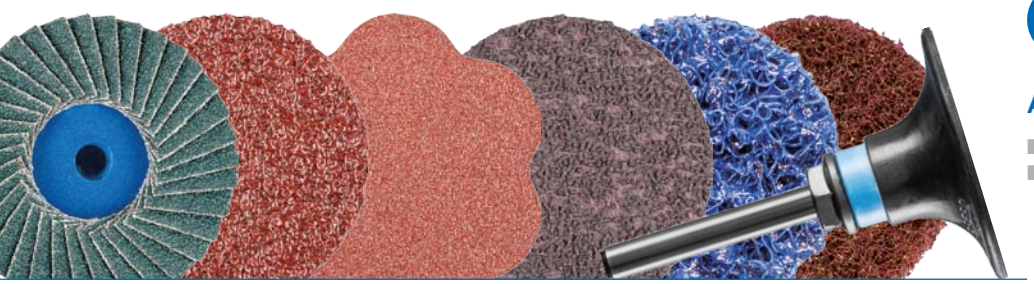
Safety notes:

- The maximum permitted peripheral speed is 50 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- Arbors for COMBIDISC Mini-POLIFAN
- COMBIDISC abrasive disc holders



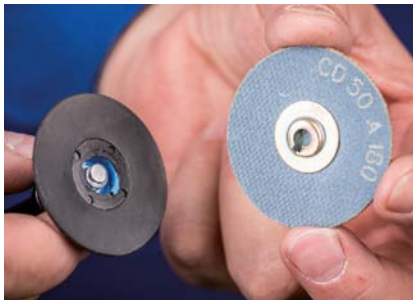
The fast way to the best tool

Material group ▼		Abrasive ▶	Aluminium oxide A, A-PLUS, A-FLEX, A-CONTOUR, A-FORTE	Aluminium oxide A Compact grain	Zirconia alumina Z
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●		❍
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●	●
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		●	❍
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍		
		Brass, copper, zinc	●		❍
	Hard non-ferrous metals	Hard aluminium alloys	●		❍
		Bronze, titanium			❍
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys			❍
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●		❍
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	●		

● = Highly suitable ❍ = Suitable

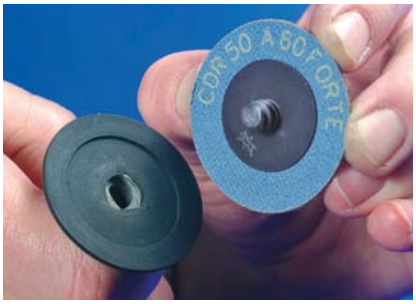
PFERD offers two alternative clamping systems:

CD system



Tool side: Threaded connection with female thread (metal/plastic)
Also suitable for the following systems used on the market: PSG, Power Lock Type II "turn on", SocAtt, Turn-On

CDR system



Tool side: Threaded connection with male thread (plastic)
Also suitable for the following systems used on the market: Roloc™, Lockit, Speed Lok TR, Power Lock Type III, Fastlock-System B, Roll-On

PFERDVALUE:

PFERDERGONOMICS recommends COMBIDISC tools as a solution to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

PFERDEFFICIENCY recommends COMBIDISC tools to reduce tool change and setup times.

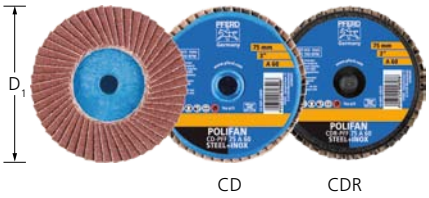
Time Saving

Recommended rotational speed range

Example:
CD 50 A-COOL 60
Application:
Grinding stainless steel (INOX)
Cutting speed: 20–25 m/s
Rotational speed: 7,600–9,500 RPM

D_1 [mm]	Cutting speed [m/s]								
	5	10	15	20	25	30	35	40	50
	Rotational speeds [RPM]								
20	4,700	9,500	14,300	19,000	23,800	28,600	33,400	38,100	47,700
25	3,800	7,600	11,400	15,200	19,000	22,900	26,700	30,500	38,100
38	2,500	5,000	7,500	10,000	12,500	15,000	17,500	20,100	25,100
50	1,900	3,800	5,700	7,600	9,500	11,400	13,300	15,200	19,000
75	1,200	2,500	3,800	5,000	6,300	7,600	8,900	10,100	12,700

Silicon carbide SiC	Aluminium oxide A-COOL	Ceramic oxide grain CO-COOL	VICTOGRAIN-COOL	Diamond abrasive discs	POLICLEAN discs	Non-woven discs PNER, VRH, VRW
		●	●		●	●
		●	●		❍	❍
	●	●	●		●	●
	●	❍			●	●
					●	●
❍					●	●
●		●	●	●	❍	●
		●	●	●	❍	●
					●	●
●				●	●	●



Aluminium oxide A type

For universal coarse grinding work with high stock removal rates.

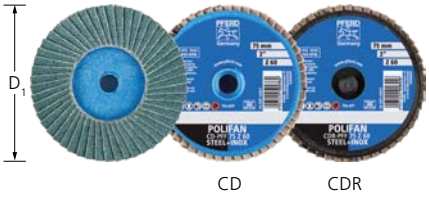
Ideal for dressing weld seams in hard-to-reach places.
Longer tool life and higher stock removal rate when compared to abrasive discs.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 40	60	80	120	Opt. RPM	Suitable arbors		Description
	EAN 4007220							
CD system								
50	617359	617366	617373	617380	12,000–14,000	BO PFF 50, SBH 20–50	10	CD PFF 50 A ...
75	617397	617403	617410	617625	8,000–10,000	BO PFF 75, SBH 75	10	CD PFF 75 A ...
CDR system								
50	016121	016145	821633	016152	12,000–14,000	SBHR 20–75	10	CDR PFF 50 A ...
75	016169	016176	821640	016336	8,000–10,000	SBHR 20–75	10	CDR PFF 75 A ...



Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

Abrasive:
Zirconia alumina Z

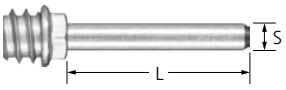
Recommendations for use:
- Use in the case of a higher contact pressure.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 40	60	80	120	Opt. RPM	Suitable arbors		Description
	EAN 4007220							
CD system								
50	592717	592724	592731	592748	12,000–14,000	BO PFF 50, SBH 20–50	10	CD PFF 50 Z ...
75	592755	592762	592779	592786	8,000–10,000	BO PFF 75, SBH 75	10	CD PFF 75 Z ...
CDR system								
50	902707	902714	016534	016541	12,000–14,000	SBHR 20–75	10	CDR PFF 50 Z ...
75	835111	016558	016565	821688	8,000–10,000	SBHR 20–75	10	CDR PFF 75 Z ...

Mini-POLIFAN arbors



BO PFF

Matching arbors for COMBIDISC Mini-POLIFAN.

S [mm]	L [mm]	Suitable tool	EAN 4007220		Description
6	40	CD PFF 50	593196	1	BO PFF 50
		CD PFF 75	593202	1	BO PFF 75

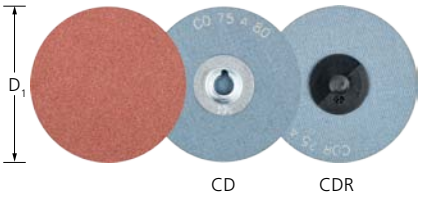
Aluminium oxide A type

For universal coarse to fine grinding applications in industry and professional trades.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving



D1 [mm]	Grit size 36	60	80	120	180	320	Opt. RPM		Description
	EAN 4007220								
CD system									
20	-	265864	266007	266038	266052	266069	20,000–35,000	100	CD 20 A ...
25	-	355718	355725	355732	266083	266151	15,000–26,000	100	CD 25 A ...
38	355749	355756	355763	355770	266175	266199	10,000–16,000	100	CD 38 A ...
50	355787	355794	355800	355817	266212	266281	8,000–13,000	100	CD 50 A ...
75	355824	355831	355848	355855	266328	266359	5,000–9,000	50	CD 75 A ...
CDR system									
20	-	778036	778043	778050	778074	778081	20,000–35,000	100	CDR 20 A ...
25	-	778098	778104	778111	778128	778135	15,000–26,000	100	CDR 25 A ...
38	596456	596463	596470	597255	597262	596500	10,000–16,000	100	CDR 38 A ...
50	596517	596524	596531	596548	596555	596562	8,000–13,000	100	CDR 50 A ...
75	596586	596593	596609	596616	596623	596630	5,000–9,000	50	CDR 75 A ...

Aluminium oxide A-PLUS type

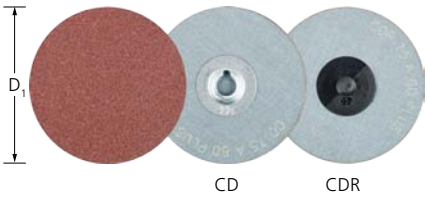
For universal applications from coarse to fine grinding.

Higher stock removal rate due to sturdy backing material.
Particularly for use in edge grinding due to high tear strength.

Abrasive:
Aluminium oxide A-PLUS

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

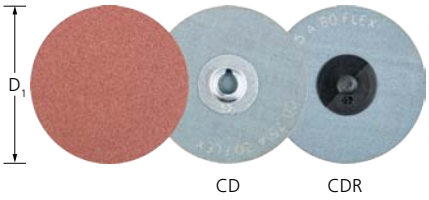


D1 [mm]	Grit size 36 PLUS	60 PLUS	80 PLUS	120 PLUS	Opt. RPM		Description
	EAN 4007220						
CD system							
50	593608	593615	593622	593653	8,000–13,000	100	CD 50 A ...
75	593660	593677	593684	593691	5,000–9,000	50	CD 75 A ...
CDR system							
50	778302	778319	778326	778333	8,000–13,000	100	CDR 50 A ...
75	778340	778357	778364	778371	5,000–9,000	50	CDR 75 A ...









Aluminium oxide A-FLEX type

Particularly flexible abrasive discs, which are especially suitable for work on contours and concave surfaces, e.g. in tool- and mould-making.
For achieving seamless transitions in the surface finish.

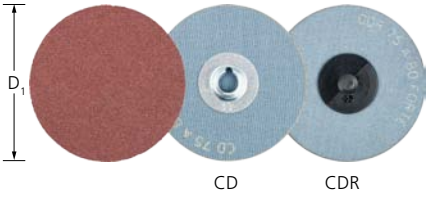
Abrasive:
Aluminium oxide A-FLEX

Recommendations for use:
- These discs should be used with a soft holder to support their flexibility.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 60 FLEX	80 FLEX	120 FLEX	Opt. RPM		Description
	EAN 4007220					
CD system						
38	638842	638859	638866	10,000–16,000	100	CD 38 A ...
50	638873	638880	638897	8,000–13,000	100	CD 50 A ...
75	638903	638910	638927	5,000–9,000	50	CD 75 A ...
CDR system						
38	778166	778159	778173	10,000–16,000	100	CDR 38 A ...
50	778180	778210	778227	8,000–13,000	100	CDR 50 A ...
75	778241	778272	778296	5,000–9,000	50	CDR 75 A ...



Aluminium oxide A-FORTE type

For universal applications from coarse to fine grinding, with a high stock removal rate and long tool life.

Abrasive:
Aluminium oxide A-FORTE

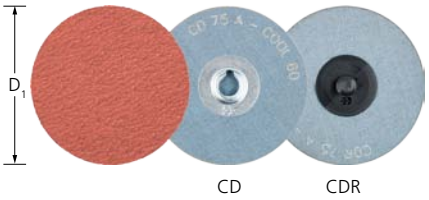
Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 36 FORTE	60 FORTE	80 FORTE	120 FORTE	Opt. RPM		Description
	EAN 4007220						
CD system							
25	-	265833	266021	266045	15,000–26,000	100	CD 25 A ...
38	266076	266090	266106	266113	10,000–16,000	100	CD 38 A ...
50	266120	266137	266144	266168	8,000–13,000	100	CD 50 A ...
75	266182	266205	266229	266250	5,000–9,000	50	CD 75 A ...
CDR system							
25	-	778388	778395	778401	15,000–26,000	100	CDR 25 A ...
38	596647	596661	596678	596685	10,000–16,000	100	CDR 38 A ...
50	596692	596708	596715	596722	8,000–13,000	100	CDR 50 A ...
75	596739	596746	596753	596760	5,000–9,000	50	CDR 75 A ...



Aluminium oxide A-COOL type



For universal applications from coarse to fine grinding on materials with challenging stock removal properties, e.g. stainless steel (INOX).

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

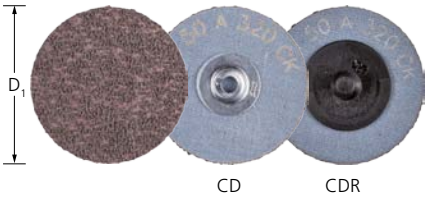
Abrasive:
Aluminium oxide A-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size			Opt. RPM		Description
	36	60	80			
	EAN 4007220					
CD system						
50	265840	266427	266434	8,000–13,000	100	CD 50 A-COOL ...
75	266441	266458	266465	5,000–9,000	50	CD 75 A-COOL ...
CDR system						
50	596777	596784	596791	8,000–13,000	100	CDR 50 A-COOL ...
75	596807	596814	596821	5,000–9,000	50	CDR 75 A-COOL ...

Aluminium oxide A compact grain type



Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

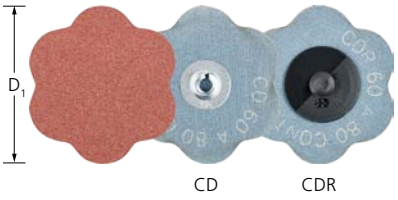
Abrasive:
Aluminium oxide A compact grain

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size									Opt. RPM		Description
	120	180	240	320	400	600	800	1000	1200			
	EAN 4007220											
CD system												
50	003169	065594	065600	065860	065921	065976	066539	066546	066553	3,800–13,000	100	CD 50 A ... CK
75	066775	066782	066799	066805	066812	066836	066843	066850	066867	2,500–9,000	50	CD 75 A ... CK
CDR system												
50	066577	066591	066607	066621	066638	066645	066652	066669	066737	3,800–13,000	100	CDR 50 A ... CK
75	066874	066881	066904	067123	067130	067161	067185	067192	067208	2,500–9,000	50	CDR 75 A ... CK





Aluminium oxide A-CONTOUR type

Very flexible and adaptable on account of the outer contour.
Cutting into the workpiece is avoided.

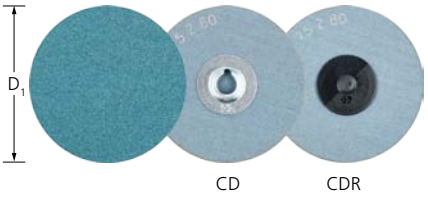
Abrasive:
Aluminium oxide A-CONTOUR

Recommendations for use:
- Use an abrasive disc holder with a diameter of 20–50 mm.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 60 CONTOUR	80 CONTOUR	120 CONTOUR	180 CONTOUR	Opt. RPM		Description
	EAN 4007220						
CD system							
60	898802	898819	898826	898833	7,500–11,000	50	CD 60 A ...
CDR system							
60	898840	898857	898864	898871	7,500–11,000	50	CDR 60 A ...



Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

Particularly high stock removal rate in coarse grinding applications using grit sizes 36 and 60.

Abrasive:
Zirconia alumina Z

Recommendations for use:
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

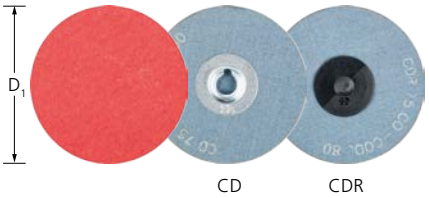
D_1 [mm]	Grit size 36	60	80	Opt. RPM		Description
	EAN 4007220					
CD system						
38	778418	778425	778432	5,000–16,000	100	CD 38 Z ...
50	265857	266472	266519	3,800–13,000	100	CD 50 Z ...
75	266526	266533	266540	2,500–9,000	50	CD 75 Z ...
CDR system						
38	778449	778456	778463	5,000–16,000	100	CDR 38 Z ...
50	596838	596845	596852	3,800–13,000	100	CDR 50 Z ...
75	596869	596876	596883	2,500–9,000	50	CDR 75 Z ...



Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.



Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

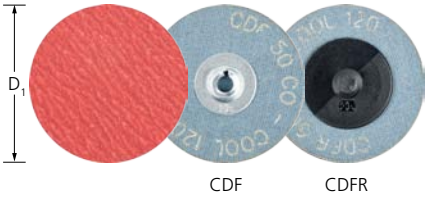
D_1 [mm]	Grit size					Opt. RPM		Description
	24	36	60	80	120			
	EAN 4007220							
CD system								
38	770672	770689	770696	770702	770719	5,000–16,000	100	CD 38 CO-COOL ...
50	617922	617298	617304	617311	771365	3,800–13,000	100	CD 50 CO-COOL ...
75	617939	617328	617335	617342	771372	2,500–9,000	50	CD 75 CO-COOL ...
CDR system								
38	778593	778609	778616	778623	778630	5,000–16,000	100	CDR 38 CO-COOL ...
50	778661	778678	778685	778692	778708	3,800–13,000	100	CDR 50 CO-COOL ...
75	778715	778722	778739	778746	778753	2,500–9,000	50	CDR 75 CO-COOL ...

Ceramic oxide grain CO-COOL midget fibre discs type

Exceptionally well-suited to surface and edge grinding. The fibre backing strengthens the abrasive disc and improves stock removal.

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

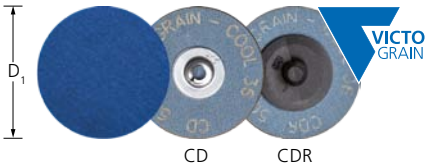


Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size				Opt. RPM		Description
	36	50	80	120			
	EAN 4007220						
CD system							
50	778876	778883	778890	779156	3,800–13,000	100	CDF 50 CO-COOL ...
75	779163	779170	779187	779194	2,500–9,000	50	CDF 75 CO-COOL ...
CDR system							
50	779200	779217	779224	779231	3,800–13,000	100	CDFR 50 CO-COOL ...
75	779255	779262	779279	779286	2,500–9,000	50	CDFR 75 CO-COOL ...



VICTOGRAIN-COOL type

For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

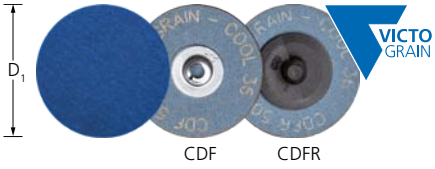
Outstanding, constant high performance thanks to the **VICTO**GRAIN-COOL abrasive grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
VICTOGRAIN-COOL

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	EAN 4007220	Opt. RPM		Description
CD system				
38	108857	5,000–16,000	100	CD 38 VICTOGRAIN-COOL
50	109762	3,800–13,000	100	CD 50 VICTOGRAIN-COOL
75	109779	2,500–9,000	50	CD 75 VICTOGRAIN-COOL
CDR system				
38	109786	5,000–16,000	100	CDR 38 VICTOGRAIN-COOL
50	109793	3,800–13,000	100	CDR 50 VICTOGRAIN-COOL
75	109809	2,500–9,000	50	CDR 75 VICTOGRAIN-COOL



VICTOGRAIN-COOL midget fibre discs type

Exceptionally well-suited to surface and edge grinding. The fibre backing considerably strengthens the abrasive disc and improves stock removal.

For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

Outstanding, constant high performance thanks to the **VICTO**GRAIN-COOL abrasive grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
VICTOGRAIN-COOL

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	EAN 4007220	Opt. RPM		Description
CD system				
38	109298	5,000–16,000	100	CDF 38 VICTOGRAIN-COOL 36
50	109304	3,800–13,000	100	CDF 50 VICTOGRAIN-COOL 36
75	109311	2,500–9,000	50	CDF 75 VICTOGRAIN-COOL 36
CDR system				
38	109328	5,000–16,000	100	CDFR 38 VICTOGRAIN-COOL 36
50	109335	3,800–13,000	100	CDFR 50 VICTOGRAIN-COOL 36
75	109342	2,500–9,000	50	CDFR 75 VICTOGRAIN-COOL 36

High-performance tools with VICTOGRAIN abrasive grain

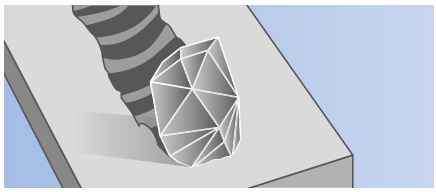
VICTOGRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

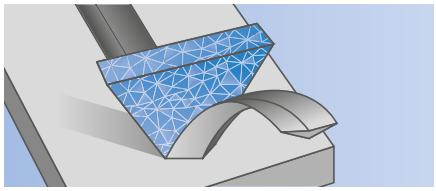
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.



Conventional abrasive grain



VICTOGRAIN abrasive grain



The **VICTO**GRAIN abrasive grain is optimally aligned

Diamond type



Exceptionally suitable for work on wear-resistant coatings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide, etc. Particularly recommended for work on materials used for aircraft engine construction, e.g. Hastelloy, Inconel and titanium/titanium alloys. Also highly suitable for work on extremely hard materials such as tungsten carbide, glass, ceramics, enamel, stone and GRP/CRP.

Detailed information on diamond grinding tools can be found in catalogue section 5.

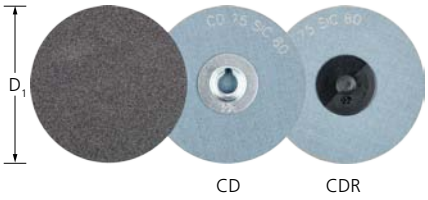
Abrasive:
Diamond
D 251 = P 60
D 126 = P 120
D 76 = P 220
(P = Grit size according to ISO 6344)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 10–20 m/s.
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

Ordering notes:
- Please complete the description with the desired grit size.
- Grit sizes are indicated in µm.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size [µm] 251	126	76	Opt. RPM		Description
	EAN 4007220					
CD system						
25	750292	750315	750322	7,500–15,000	10	CD DIA 25 D ...
38	750339	750346	750353	5,000–10,000	10	CD DIA 38 D ...
50	750360	750377	750384	3,800–7,500	10	CD DIA 50 D ...
75	750391	750407	750414	2,500–5,000	10	CD DIA 75 D ...
CDR system						
25	750421	750438	750445	7,500–15,000	10	CDR DIA 25 D ...
38	750452	750469	750476	5,000–10,000	10	CDR DIA 38 D ...
50	750483	750490	750506	3,800–7,500	10	CDR DIA 50 D ...
75	750513	750520	750537	2,500–5,000	10	CDR DIA 75 D ...



Silicon carbide SiC type

For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

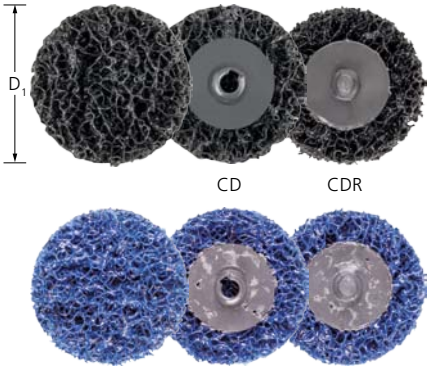
Abrasive:
Silicon carbide SiC

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 36	60	80	120	240	Opt. RPM		Description
	EAN 4007220							
CD system								
50	441176	441183	441190	441206	441213	3,800–13,000	100	CD 50 SiC ...
75	441220	441237	441244	441251	441268	2,500–9,000	50	CD 75 SiC ...
CDR system								
50	778470	778487	778494	778500	778517	3,800–13,000	100	CDR 50 SiC ...
75	778524	778548	778555	778562	778579	2,500–9,000	50	CDR 75 SiC ...

POLICLEAN discs CD, CDR



PCLR and PCLR PLUS types

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in face-down grinding.

POLICLEAN-PLUS discs (blue) exhibit a higher stock removal rate with a very long tool life.

Applications:
roughening, surface work, cleaning

Abrasive:
Aluminium oxide A
Silicon carbide SiC

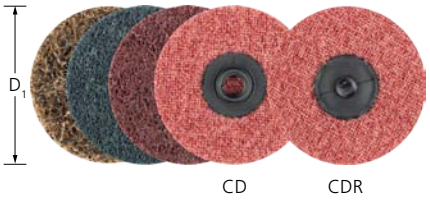
Recommendations for use:
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Type	Abrasives	EAN 4007220	Opt. RPM		Description
CD system						
50	PCLR	SiC	471500	5,500–8,000	10	CD 50 PCLR
75	PCLR	SiC	471517	3,800–5,000	10	CD 75 PCLR
50	PCLR PLUS	A	069288	5,500–8,000	10	CD 50 PCLR PLUS
75	PCLR PLUS	A	069295	3,800–5,000	10	CD 75 PCLR PLUS
CDR system						
50	PCLR	SiC	677124	5,500–8,000	10	CDR 50 PCLR
75	PCLR	SiC	677131	3,800–5,000	10	CDR 75 PCLR
50	PCLR PLUS	A	069301	5,500–8,000	10	CDR 50 PCLR PLUS
75	PCLR PLUS	A	069318	3,800–5,000	10	CDR 75 PCLR PLUS

Hard type VRH

Suitable for universal work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work.
Achieve matt and satin-finished surfaces.



Applications:
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer tool life.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

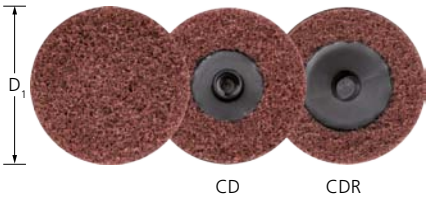
D_1 [mm]	Grit size			Opt. RPM		Description
	100 G	180 M	240 F			
	EAN 4007220					
CD system						
20	628218	584507	265871	14,000–19,000	50	CD VRH 20 A ...
25	268865	266564	266571	11,000–15,000	50	CD VRH 25 A ...
38	266588	266595	268872	7,000–10,000	50	CD VRH 38 A ...
50	266618	266625	266632	5,500–7,500	50	CD VRH 50 A ...
75	266649	266656	266663	3,800–5,000	25	CD VRH 75 A ...
CDR system						
38	596906	596913	596920	7,000–10,000	50	CDR VRH 38 A ...
50	596937	596944	596951	5,500–7,500	50	CDR VRH 50 A ...
75	596968	596975	597354	3,800–5,000	25	CDR VRH 75 A ...







COMBIDISC
Non-woven discs CD, CDR



Soft type VRW

Suitable for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.

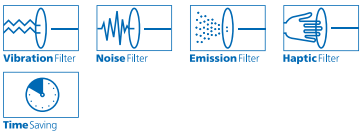
Applications:
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

Abrasive:
Aluminium oxide A
Available POLINOX grit sizes:
100 = medium
180 = fine
280 = very fine

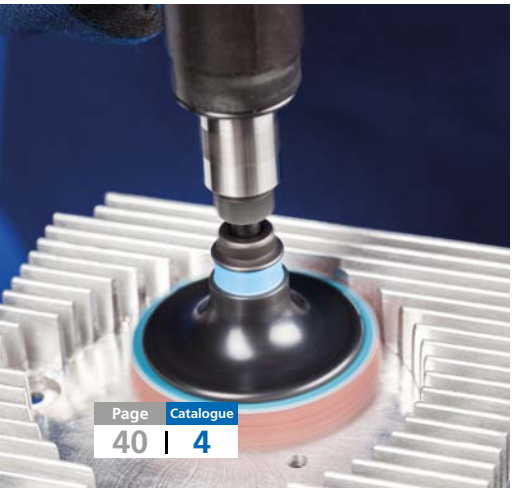
Recommendations for use:
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer tool life.

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:



D_1 [mm]	Grit size			Opt. RPM		Description
	100	180	280			
	EAN 4007220					
CD system						
38	537039	450345	450352	7,000–10,000	50	CD VRW 38 A ...
50	266670	266687	266694	5,500–7,500	50	CD VRW 50 A ...
75	266717	266724	266731	3,800–5,000	25	CD VRW 75 A ...
CDR system						
50	596999	597002	597019	5,500–7,500	50	CDR VRW 50 A ...
75	597026	597033	597040	3,800–5,000	25	CDR VRW 75 A ...







PNER type

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Particularly suitable for work on small and medium-sized surfaces of stainless steel (INOX) components.

The different thicknesses/hardnesses of the non-woven material are colour-coded:
W (soft) = grey
MH (medium-hard) = dark blue
H (hard) = red



Further information on non-woven products in the PNER type can be found on pages 99–100.

Applications:
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Ordering notes:
- Please complete the description with the desired grit size.
- The non-woven discs are supplied with a thickness of 6 mm.

PFERDVALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Time Saving

D_1 [mm]	Type	Abrasives	Grit size G (coarse)	Grit size F (fine)	Opt. RPM	Max. RPM		Description
			EAN 4007220					
CD system								
50	soft	A	832783	-	9,500	19,100	25	CD PNER-W 5006 A ...
	soft	SiC	-	832776	9,500	19,100	25	CD PNER-W 5006 SiC ...
	medium-hard	A	-	832806	9,500	19,100	25	CD PNER-MH 5006 A ...
	medium-hard	SiC	-	832790	9,500	19,100	25	CD PNER-MH 5006 SiC ...
	hard	A	832851	832813	9,500	19,100	25	CD PNER-H 5006 A ...
75	soft	A	832868	-	6,400	12,500	25	CD PNER-W 7506 A ...
	soft	SiC	-	832837	6,400	12,500	25	CD PNER-W 7506 SiC ...
	medium-hard	A	-	832882	6,400	12,500	25	CD PNER-MH 7506 A ...
	medium-hard	SiC	-	832875	6,400	12,500	25	CD PNER-MH 7506 SiC ...
	hard	A	832905	832899	6,400	12,500	25	CD PNER-H 7506 A ...
CDR system								
50	soft	A	832660	-	9,500	19,100	25	CDR PNER-W 5006 A ...
	soft	SiC	-	832653	9,500	19,100	25	CDR PNER-W 5006 SiC ...
	medium-hard	A	-	832684	9,500	19,100	25	CDR PNER-MH 5006 A ...
	medium-hard	SiC	-	832677	9,500	19,100	25	CDR PNER-MH 5006 SiC ...
	hard	A	832707	832691	9,500	19,100	25	CDR PNER-H 5006 A ...
75	soft	A	832721	-	6,400	12,500	25	CDR PNER-W 7506 A ...
	soft	SiC	-	832714	6,400	12,500	25	CDR PNER-W 7506 SiC ...
	medium-hard	A	-	832745	6,400	12,500	25	CDR PNER-MH 7506 A ...
	medium-hard	SiC	-	832738	6,400	12,500	25	CDR PNER-MH 7506 SiC ...
	hard	A	832769	832752	6,400	12,500	25	CDR PNER-H 7506 A ...







Aluminium oxide A type

For achieving fine, matt grinding finishes in one process. The very sturdy granular bond facilitates very aggressive abrasive performance.
Particularly suitable for work on stainless steel (INOX) and aluminium.

Applications:
deburring, surface work, weld dressing, structuring, fine grinding in multiple steps

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	Grit size 36 TX	80 TX	120 TX	320 TX	Opt. RPM		Description
	EAN 4007220						
CD system							
50	505724	505731	505748	505755	7,500–9,500	25	CD 50 A ...
75	505786	505793	505809	505816	5,000–6,500	25	CD 75 A ...

Felt discs CD, CDR



FR type

Suitable for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on small and medium-sized surfaces.

Applications:
polishing

Recommendations for use:
- Use COMBIDISC felt discs with an abrasive disc holder on flexible shaft drives with an angle handpiece or small compressed-air or electric angle grinders.
- For the best results, use at a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between polishing performance, thermal load on the workpiece and tool wear.
- When applying a different polishing paste, use a new unused felt disc.

Ordering notes:
- Further information on felt tools can be found on page 144.

Accessories:
- Grinding and polishing pastes

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	EAN 4007220	Opt. RPM		Description
CD system				
50	440490	2,000–4,000	10	CD FR 50
75	440506	1,200–2,500	10	CD FR 75
CDR system				
50	004784	2,000–4,000	10	CDR FR 50
75	004791	1,200–2,500	10	CDR FR 75

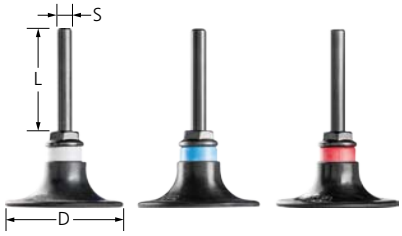






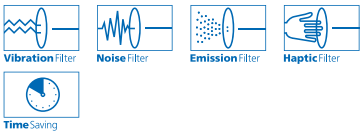
SBH and SBHR types

Matching arbors for COMBIDISC grinding tools. Available in three different hardness grades.



Ordering notes:
- The different hardness grades are colour-coded: W (soft) – grey; M (medium) – blue; H (hard) – red
- Please complete the description with the desired hardness grade.

PFERDVALUE:



D [mm]	S [mm]	L [mm]	Hardness			Max. RPM		Description
			W (soft)	M (medium)	H (hard)			
			EAN 4007220					
CD system								
20	6	40	-	265901	-	47,500	1	SBH 20 ...
25	6	40	-	266755	-	38,000	1	SBH 25 ...
38	6	40	266762	266779	266786	25,000	1	SBH 38 ...
50	6	40	266793	266809	266816	19,000	1	SBH 50 ...
75	6	40	266823	266830	266847	12,500	1	SBH 75 ...
CDR system								
20	6	40	-	776315	-	47,500	1	SBHR 20 ...
25	6	40	-	776322	-	38,000	1	SBHR 25 ...
38	6	40	776346	597057	776339	25,000	1	SBHR 38 ...
50	6	40	776360	597064	776353	19,000	1	SBHR 50 ...
75	6	40	776384	597071	776377	12,500	1	SBHR 75 ...

Adapters:
The shank of the abrasive disc holders can be replaced by suitable adapters. This enables the abrasive disc holder to be mounted directly to the drive spindle of the tool drive.

The following adapters are available:



AF 14-1/4,
(EAN 4007220**302026**)
Female thread M14,
male thread 1/4-20 UNC.
Suitable for drives with spindle M14.



SPV-20 CD 1/4-20 UNC,
(EAN 4007220**333167**)
Female thread 1/4-20 UNC,
male thread 1/4-20 UNC.
Suitable for drives with spindle 1/4-20 UNC, e.g. for PW 3/120 DH.

Ordering notes:
More detailed information and ordering data for adapters can be found in catalogue section 9.



AF M5 CD 1/4-20 UNC
(EAN 4007220**064702**)
Male thread M5,
male thread 1/4-20 UNC.
Suitable for cordless angle grinder, dia. 75, with spindle M5 (female thread).









COMBIDISC SET

Set of various COMBIDISC tools.

Contents:
- 3 pcs. each of COMBIDISC abrasive discs:
  - CD A 60 FORTE
  - CD A 120 FORTE
  - CD A-COOL 60
  - CD CO-COOL 36
  - CD Z 60
- 3 pcs. each of COMBIDISC non-woven discs:
  - CD VRH A 180 M
  - CD VRW A 100
- 1 pc. each of:
  - Abrasive disc holder SBH M

Advantages:
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

Abrasive:
Aluminium oxide A
Zirconia alumina Z
Aluminium oxide A-FORTE
Aluminium oxide A-COOL
Ceramic oxide grain CO-COOL

Recommendations for use:
- Use COMBIDISC grinding tools with an arbor or abrasive disc holder on flexible shaft drives with an angle handpiece or small compressed-air or electric angle grinders.

PFERDVALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	EAN 4007220		Description
50	265918	1	COMBIDISC-SET 50
75	265932	1	COMBIDISC-SET 75



SET CD UWER

Set of different COMBIDISC tools, including single-hand angle grinder, for all coarse and fine grinding, polishing and cleaning work, especially on assembly and construction sites.

Contents:
- Electric angle grinder UWER 5/200 SI with electronic rotational speed control (9,000–20,000 RPM), output 500 watts
- 4 abrasive disc holders and 2 adapters for alternative tool drives
- 135 different abrasive discs, TX discs, Mini-POLIFAN, non-woven and felt discs with a diameter of 50 mm
- Polishing paste bar for using felt discs

Advantages:
- Entire rotational speed range covered for COMBIDISC tools with a diameter of 50 mm.
- Easy and comfortable to use thanks to the handy angle grinder design.
- Coordinated selection of the most common versions.

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

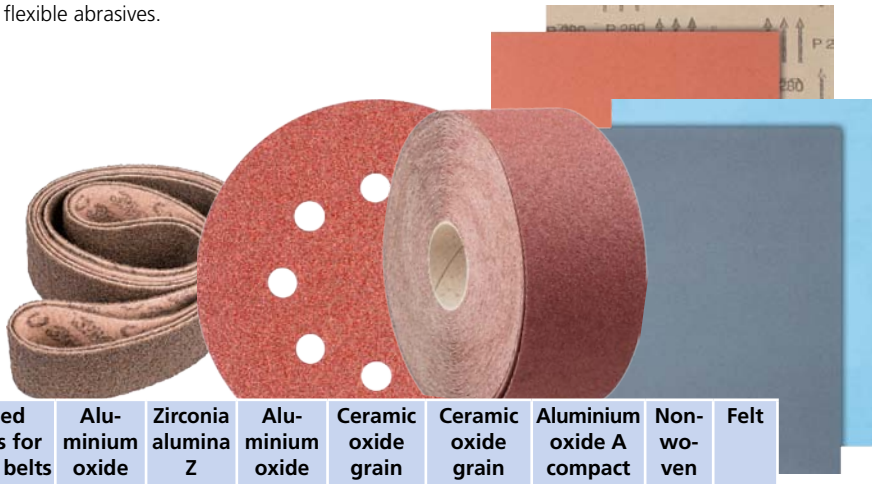
PFERDVALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

D_1 [mm]	EAN 4007220		Description
50	607893	1	SET CD 50 UWER 5/200 230 V

PFERD supplies a comprehensive range of products which utilize flexible abrasives.

- Short and long belts
- Abrasive sheets, cloth and paper
- Hand pads, non-woven and diamond
- Shop rolls, non-woven, cloth and paper
- Velcro-backed abrasive discs



The fast way to the best tool

Material group ▼		Abrasive ▶	Recommended cutting speeds for short and long belts [m/s]	Alu-minium oxide A	Zirconia alumina Z	Alu-minium oxide A-COOL	Ceramic oxide grain CO	Ceramic oxide grain CO-COOL	Aluminium oxide A compact grain	Non-wo-ven	Felt
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	25–35	●	❍		●			●	●
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	20–30	❍	●		●		●	❍	●
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	15–25		❍	●		●	●	●	●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	30–40	❍		●		❍		●	●
		Brass, copper, zinc		●	❍		❍			●	●
	Hard non-ferrous metals	Hard aluminium alloys	20–30	●	❍		❍			●	●
		Bronze, titanium			❍		❍	●		●	●
	High-temper-ature-resistant materials	Nickel-based and cobalt-based alloys	5–15		❍		❍	●		●	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/ nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	25–35	●	❍		●			●	
Plastics, other materials		Fibre-reinforced plastics, thermo-plastics, wood, chipboard, paint-work	10–25	●						●	●

● = Highly suitable ❍ = Suitable

Coated abrasives
General information – Short and long belts

The comprehensive range of short and long belts is tailored to the belt grinders that are commonly found on the market.

Short and long belts from PFERD are designated as "abrasive belts" in ISO 2976.

Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent work results thanks to very high grain adhesion.

Applications:

- Levelling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Belt grinders

Ordering notes:

- When ordering, please state the EAN or the full description. Please include the desired grit size with the description.
- **Ordering example:**
  EAN 4007220**585269**
  BA 10/480 A **80**
- **Ordering example explanation:**
  BA = Abrasive belt
  10 = Width T [mm]
  480 = Length L [mm]
  A = Abrasive
  80 = Grit size

Safety notes:

- Observe the safety notes "Safety notes for the correct use of abrasive belts" provided by the German Abrasives Association (VDS). You can find this information at www.pferd.com.





Recommended rotational speed range

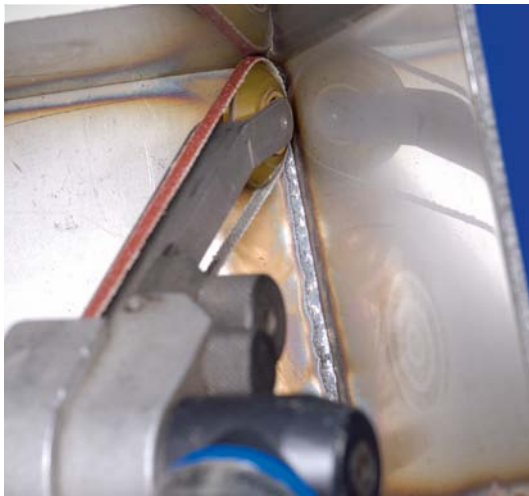
Using the table opposite, you can determine the rotational speed in RPM based on the cutting speed. Please refer to page 45 for the recommended cutting speeds.

Example:
BA 16/480 A 60
Diameter of the drive roller: 30 mm
Cutting speed: 20–30 m/s
Rotational speed: 12,700–19,000 RPM

Drive roller dia. [mm]	Cutting speed [m/s]							
	5	10	15	20	25	30	35	40
	Rotational speeds [RPM]							
20	4,700	9,500	14,300	19,000	23,800	28,600	33,400	38,100
30	3,100	6,300	9,500	12,700	15,900	19,000	22,200	25,400
40	2,300	4,700	7,100	9,500	11,900	14,300	16,700	19,000
50	1,900	3,800	5,700	7,600	9,500	11,400	13,300	15,200
80	1,100	2,300	3,500	4,700	5,900	7,100	8,300	9,500
100	900	1,900	2,800	3,800	4,700	5,700	6,600	7,600
120	700	1,500	2,300	3,100	3,900	4,700	5,500	6,300
160	500	1,100	1,700	2,300	2,900	3,500	4,100	4,700
200	400	900	1,400	1,900	2,300	2,800	3,300	3,800
250	300	700	1,100	1,500	1,900	2,200	2,600	3,000
300	300	600	900	1,200	1,500	1,900	2,200	2,500



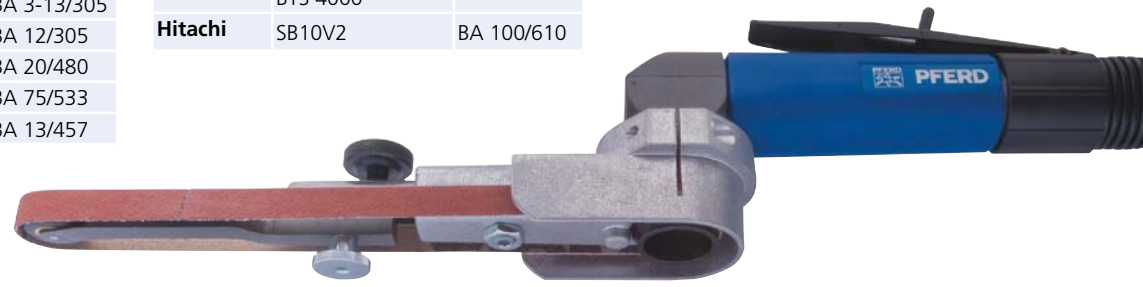


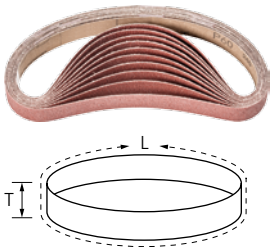


Manu-facturer	Model	Abrasive belts' width/ length [mm]
PFERD	**Compressed-air belt grinder**	
	PBS 3/200 DH 99	BA 3/305
	PWS 3/200 DH + BSVH 25.5	BA 6/305 BA 9/305 BA 12/305
	PBSA 5/160 HV 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	PBS 5/155 HV	BA 6/610 BA 10/480 BA 16/480 BA 20/480 BA 25/480 BA 12/610
	Electric belt grinders	
	UBS 5/100 SI 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	Pipe belt grinders	
	UBS 5/70 SI-R	BA 30/533
	UBS 11/90 SI-R	BA 30/610
	BSG belt grinders for flexible shaft drives	
	BSG 10/35E	BA 35/450
	BSG 10/50E	BA 50/450
	Angle handpieces	
	WT 7 E M14 + BSVH 41	BA 3/520 BA 6/520
	WZ 7 B + BSVH 36	BA 12/520 BA 16/520
	WZ 10 B + BSVH 36	BA 20/520 BA 6/610 BA 12/610
	WZ 4 A + BSVH 24	BA 3/305 BA 6/305 BA 9/305 BA 12/305
3M	3M™ file belt sander	BA 13/457
AEG	HBS 1000E	BA 75/533
	BBSE 1100	BA 100/560
Atlas Copco	G2403	BA 10/330
	G2404	BA 20/520
	G2410	BA 3-13/305
ATA	RAL20L	BA 12/305
	BL16L	BA 20/480
Black & Decker	KA 88	BA 75/533
	KA 900 E	BA 13/457

Manu-facturer	Model	Abrasive belts' width/ length [mm]
Bosch	GBS 75 AE	BA 75/533
DeWalt	DW432	BA 75/533
	DW433	
	DWP352VS	
Dynabrade	40352	BA 13/457
	40353	
	40320	
	40321	
	40324	
	40335	
	40381	
	15300	
	15400	
	40326	BA 6-16/520
	40330	BA 13/457
	40615	BA 6/610
	40503	BA 12/610
	15360	BA 6/610 BA 12/610
	15420	
	14000	
	15401	BA 12-0/520
	15003	BA 3-12/305
Einhell	RT-BS 75	BA 75/533
	BT-US 400	BA 100/920
Fein/Grit	GX 75 / 75 2H	BA 75/2000
	GXC	
	GI 75 (2H) / GI 150 (2H)	
	GIS 75	
	GIC	BA 75/2000 BA 150/2000
	GI 100 / 100 EF	BA 100/1000
	GIM	BA 150/2000
	GIL	BA 150/2000
	GIS 150	
	BF10-280E	BA 3-20/520
	RS10-70E	BA 12-20/520 BA 30/533
Festool	BS 75	BA 75/533
Flott	BSM 75 / 75A / 75A pol	BA 75/2000
	BSM 150 / 150A / 150A pol	BA 150/2000
	TBSM 75	BA 75/1000
Güde	BS 76-900 E	BA 75/533
	BTS 4000 ECO	BA 100/920
	BTS 4000	
Hitachi	SB10V2	BA 100/610

Manu-facturer	Model	Abrasive belts' width/ length [mm]
Makita	9910	BA 75/457
	9911	
	9902	BA 75/533
	9903	
	9920	BA 75/610
	9404	BA 100/610
	9403	
	9031	BA 30/533
	9032	BA 9/533
Metabo	BF 18 LTX 90	BA 13/457
	RB 18 LTX 60	BA 30/533
	BFE 9-20	BA 13/457
	BAE 75	BA 75/533
	DBF 457	BA 13/457
Milwaukee	BS 100 LE	BA 100/620
	HBSE 75 S	BA 75/533
Proxxon	BS/E	BA 10/330
	BS/A	BA 10/330
Rexon	BD480A	BA 100/920
	BD460M	
Ryobi	EBS800V	BA 75/533
	EBS1310VFHG	BA 100/610
SCANTOOL	SC 75	BA 75/2000
	SC 150	BA 150/2000
Scheppach	BTS 800	BA 100/920
SKIL	1215AA	BA 75/457
	1210AA	
Suhner	UBK 6-R	BA 35-50/450
	UTG 9-R	BA 30/610
	UTC 7-R	BA 30/533
	LBH 7 D 35	BA 35/450
	LBH 7 D 50	BA 50/450
	UBC 10-R	BA 6-12/520
	LBC 16 H	
	WB 10	
	LBB 20 DH	BA 6/305 BA 12/305
	FTM	BA 30/610
	BSG 10/35	BA 35/450
	BSG 10/50	BA 50/450
Triton	TA 1200BS	BA 75/533





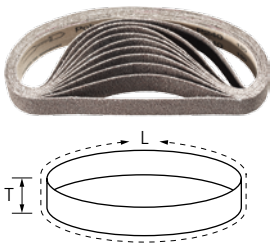
Aluminium oxide A type

For universal applications from coarse to fine grinding.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size										Acc. to ISO stand-ards		Description
		40	50	60	80	100	120	180	240	320	400			
		EAN 4007220												
305	3	-	-	663899	-	-	663912	-	-	-	-	-	100	BA 3/305 A ...
	6	-	-	664025	664032	-	-	664056	-	-	-	-	100	BA 6/305 A ...
	9	-	-	664179	664186	-	664193	664209	-	-	-	-	100	BA 9/305 A ...
	12	664261	-	664278	664285	-	664445	664292	-	-	-	-	100	BA 12/305 A ...
330	10	-	-	620151	620168	-	620182	620199	-	-	-	2976	100	BA 10/330 A ...
450	35	-	-	585665	-	585672	-	-	664704	664711	-	-	20	BA 35/450 A ...
	50	585719	-	585726	-	585733	-	-	664766	-	-	2976	20	BA 50/450 A ...
457	13	620267	-	620274	620298	-	620304	-	-	-	-	2976	100	BA 13/457 A ...
480	10	585542	-	585252	585269	-	585559	-	-	-	-	-	100	BA 10/480 A ...
	16	-	-	585368	-	-	585382	-	-	-	-	-	50	BA 16/480 A ...
	20	585610	664520	585429	585436	-	585443	664544	664551	-	-	2976	10	BA 20/480 A ...
	25	585634	-	585481	585498	-	585641	-	-	-	-	2976	20	BA 25/480 A ...
520	3	663950	-	663967	663974	-	663981	663998	664001	-	-	-	100	BA 3/520 A ...
	6	585528	-	585191	585207	-	585214	664124	664131	-	664155	2976	100	BA 6/520 A ...
	12	585573	-	585306	585313	-	585320	664322	664339	664346	664353	-	100	BA 12/520 A ...
	16	585603	-	585399	585405	-	585412	664407	-	-	-	-	50	BA 16/520 A ...
	20	585627	-	585450	585467	-	585474	664568	664575	-	-	2976	20	BA 20/520 A ...
533	30	620359	-	620380	620397	-	620410	664667	664674	664681	-	2976	20	BA 30/533 A ...
	75	584958	-	584965	584972	600429	584989	-	-	-	-	2976	10	BA 75/533 A ...
610	12	585580	-	585337	585344	-	585351	-	-	-	-	-	100	BA 12/610 A ...
	30	776414	-	776421	776438	-	776445	776452	776469	-	-	-	10	BA 30/610 A ...
	100	585030	-	585047	585054	600467	585061	-	-	-	-	2976	10	BA 100/610 A ...
920	100	620786	-	620793	620809	-	620823	-	-	-	-	-	10	BA 100/920 A ...



Aluminium oxide A compact grain type

Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

Abrasive:
Aluminium oxide A compact grain

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size									Description
		120	180	240	320	400	600	800	1000	1200	
		EAN 4007220									
533	30	025925	025932	025949	025956	025963	025970	025987	025994	026007	BA 30/533 J A ... CK
610	30	026014	026021	026038	026045	026052	026069	026076	026083	026090	BA 30/610 J A ... CK

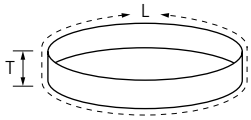
Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

Abrasive:
Zirconia alumina Z

Ordering notes:
- Please complete the description with the desired grit size.





L [mm]	T [mm]	Grit size 36	40	60	80	Acc. to ISO standards		Description
		EAN 4007220						
330	10	-	620205	620212	-	2976	100	BA 10/330 Z ...
	12	-	-	620236	620250	-	100	BA 12/330 Z ...
520	12	-	586273	586198	586204	-	100	BA 12/520 Z ...
	20	620342	586303	586259	586310	2976	20	BA 20/520 Z ...
610	12	-	586280	586211	586228	-	100	BA 12/610 Z ...

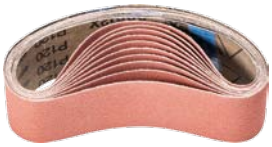
Aluminium oxide A-COOL type

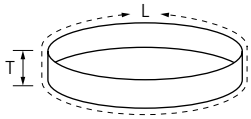
For universal grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX).

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Aluminium oxide A-COOL

Ordering notes:
- Please complete the description with the desired grit size.





L [mm]	T [mm]	Grit size 40	80	120	180	Acc. to ISO standards		Description
		EAN 4007220						
450	50	586099	586105	586112	586129	2976	20	BA 50/450 A-COOL ...

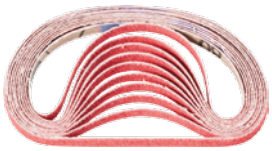
Ceramic oxide grain CO-COOL type

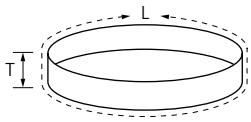
For aggressive grinding with the highest stock removal rates on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.





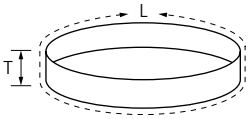
L [mm]	T [mm]	Grit size 40	60	80	120	Acc. to ISO standards		Description
		EAN 4007220						
305	6	799215	799222	799239	799246	-	100	BA 6/305 CO-COOL ...
	9	799352	799369	799376	799383	-	100	BA 9/305 CO-COOL ...
	12	799444	799451	799468	799475	-	100	BA 12/305 CO-COOL ...
330	10	799390	799406	799413	799420	2976	100	BA 10/330 CO-COOL ...
	12	799482	799499	799505	799536	-	100	BA 12/330 CO-COOL ...
450	35	949887	949894	949917	949924	2976	20	BA 35/450 CO-COOL ...
	50	949931	949948	949955	949962	2976	20	BA 50/450 CO-COOL ...
457	13	799628	799635	799642	799659	2976	100	BA 13/457 CO-COOL ...
480	16	799666	799673	799680	799697	-	50	BA 16/480 CO-COOL ...
	20	799741	799758	799772	799789	2976	20	BA 20/480 CO-COOL ...

Continued on next page

L [mm]	T [mm]	Grit size 40	60	80	120	Acc. to ISO standards		Description
		EAN 4007220						
480	25	799833	799840	799857	799864	2976	20	BA 25/480 CO-COOL ...
520	6	799260	799277	799284	799307	2976	100	BA 6/520 CO-COOL ...
	12	799543	799550	799567	799574	-	100	BA 12/520 CO-COOL ...
	16	799703	799710	799727	799734	-	50	BA 16/520 CO-COOL ...
	20	799796	799802	799819	799826	2976	20	BA 20/520 CO-COOL ...
533	30	799871	799888	799895	799901	-	20	BA 30/533 CO-COOL ...
610	6	799314	799321	799338	799345	2976	100	BA 6/610 CO-COOL ...
	12	799581	799598	799604	799611	-	100	BA 12/610 CO-COOL ...
	30	799918	799925	799932	799949	-	10	BA 30/610 CO-COOL ...

Short belts VB





Non-woven type

Suitable for universal work on surfaces such as metal tubular structures, e.g. removal of rough grinding traces, removal of oxidation and light deburring work. Achieve matt and satin-finished surfaces.

Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 5–15 m/s.

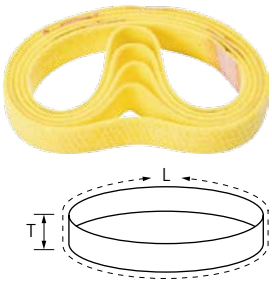
Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size 100 G	180 M	240 F	Acc. to ISO standards		Description
		EAN 4007220					
305	6	667552	667569	667545	-	10	VB 6/305 A ...
	9	667668	667675	667620	-	10	VB 9/305 A ...
	12	667637	667644	667651	-	10	VB 12/305 A ...
450	35	586631	586648	586655	-	10	VB 35/450 A ...
	50	586662	586679	586686	2976	10	VB 50/450 A ...
520	6	586518	586525	586532	-	10	VB 6/520 A ...
	12	586549	586556	586563	-	10	VB 12/520 A ...
	16	586570	586587	586594	-	10	VB 16/520 A ...
	20	586600	586617	586624	2976	5	VB 20/520 A ...
533	30	667699	667705	667682	2976	5	VB 30/533 A ...
610	6	101063	101070	101087	2976	10	VB 6/610 A ...
	12	101117	101124	101131	-	10	VB 12/610 A ...
	30	776520	776537	776551	-	5	VB 30/610 A ...



Felt type

Suitable for polishing with polishing paste bars and grinding pastes on tubular constructions and rails.



Recommendations for use:
- For the polishing process, apply pre-polishing and high-gloss polishing successively.
- When changing the polishing paste, also replace the polishing belt in order not to introduce any contaminants from the previous work step.
- For the best results, use at a recommended cutting speed of 5–15 m/s.

Accessories:
- Grinding and polishing pastes

L [mm]	T [mm]	EAN 4007220	Acc. to ISO standards		Description
533	30	936269	2976	5	P-BA 30/533
610	30	936276	-	5	P-BA 30/610

Belt grinder set BA

Set of different short belts, including electric belt grinder, for universal work on surfaces from coarse to fine, especially for assembly work.



Contents:
- Electric belt grinder UBS 5/100 SI 925 with continuous rotational speed control from 6.5–16 m/s, output 500 watts
- 2 pcs. each of abrasive belts, width 6 and 12 mm, in aluminium oxide A type, grain 40, 60, 80, 120 and 180
- 2 pcs. each of non-woven belts (6 and 12 mm wide) in coarse, medium and fine

Advantages:
- Optimal, stepless rotational speed regulation for the use of high-speed abrasive belts and low-speed non-woven belts.
- Coordinated selection of the most common versions.

Abrasive:
Aluminium oxide A

Recommendations for use:
- Use abrasive belts at the higher rotational speed levels 4–6 (7,000–10,000 RPM = 11–16 m/s).
- Use non-woven belts at the lower rotational speed levels 1–4 (4,000–7,000 RPM = 6–11 m/s).

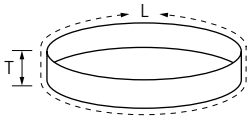
Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

Safety notes:
- The maximum peripheral speed for abrasive belts is 32 m/s.
- The maximum peripheral speed for non-woven belts is 25 m/s.

L [mm]	EAN 4007220		Description
520	344125	1	SET BA 6-12/520 UBS 5/100 230 V







Aluminium oxide A type

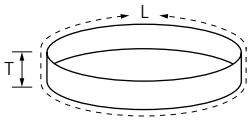
For universal applications from coarse to fine grinding.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size					Acc. to ISO standards		Description
		36	40	60	80	120			
		EAN 4007220							
1,000	50	-	-	621059	621066	621073	2976	10	BA 50/1000 A ...
	100	-	585917	585924	585931	585948	2976	10	BA 100/1000 A ...
2,000	50	-	585771	585788	585795	585801	2976	10	BA 50/2000 A ...
	75	600481	585832	585849	585856	585863	2976	10	BA 75/2000 A ...
	150	600597	585955	585962	585979	-	2976	10	BA 150/2000 A ...
2,500	75	620373	585870	585887	585894	585900	2976	10	BA 75/2500 A ...





Zirconia alumina Z type

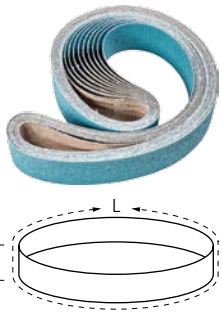
For coarse grinding work with a high stock removal rate and a long tool life.

Abrasive:
Zirconia alumina Z

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size						Acc. to ISO standards		Description
		24	36	40	60	80	120			
		EAN 4007220								
1,000	100	-	-	586457	586464	586471	621042	2976	10	BA 100/1000 Z ...
2,000	50	621219	621233	586327	586334	586341	619353	2976	10	BA 50/2000 Z ...
	75	600511	586358	586365	586372	586389	586396	2976	10	BA 75/2000 Z ...
	150	-	600641	586488	586495	586501	600672	2976	10	BA 150/2000 Z ...
2,250	75	-	-	613191	613214	-	-	2976	10	BA 75/2250 Z ...
2,500	75	-	586402	586419	586426	586433	-	2976	10	BA 75/2500 Z ...
	150	-	621141	-	-	-	-	2976	10	BA 150/2500 Z ...

Zirconia alumina Z-FORTE type



For coarse grinding work with a high stock removal rate, a long tool life and very cool grinding.

Particularly suitable for work on thin-walled stainless steel (INOX) components and on steels or nickel-based alloys which do not conduct heat well.

Abrasive:
Zirconia alumina Z-FORTE

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size				Acc. to ISO stand-ards		Description
		36 FORTE	40 FORTE	60 FORTE	80 FORTE			
		EAN 4007220						
2,000	75	620175	620243	620311	620335	2976	10	BA 75/2000 Z ...
2,500	75	620458	620502	-	-	2976	10	BA 75/2500 Z ...

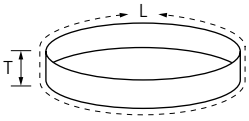
Ceramic oxide grain CO type



For aggressive grinding with a very high stock removal rate and very long tool life. Consistently high performance due to self-sharpening ceramic oxide grain. The ceramic oxide grain is specifically designed for work on hard materials and layers.

Abrasive:
Ceramic oxide grain CO

Ordering notes:
- Please complete the description with the desired grit size.



L [mm]	T [mm]	Grit size							Acc. to ISO stand-ards		Description
		24	36	40	50	60	80	120			
		EAN 4007220									
2,000	50	950623	950630	950647	950654	950661	950678	950685	2976	10	BA 50/2000 CO ...
	75	950692	950708	950715	950722	950739	950746	950753	2976	10	BA 75/2000 CO ...
2,500	75	950760	950777	950784	950791	950807	950814	950821	2976	10	BA 75/2500 CO ...

Ceramic oxide grain CO-COOL type

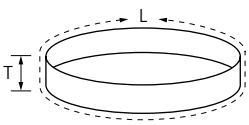


For aggressive grinding with the highest stock removal rates on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

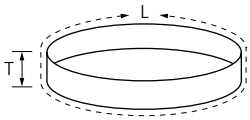
Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.



L [mm]	T [mm]	Grit size						Acc. to ISO stand-ards		Description
		36	40	50	60	80	120			
		EAN 4007220								
2,000	50	950173	950333	950357	950371	950401	950425	2976	10	BA 50/2000 CO-COOL ...
	75	950449	950470	950494	950500	950517	950524	2976	10	BA 75/2000 CO-COOL ...
2,500	75	950562	950579	950586	950593	950609	950616	2976	10	BA 75/2500 CO-COOL ...





Non-woven type

Suitable for universal work on metal surfaces in stationary applications, e.g. removal of rough grinding traces, removal of oxidation and light deburring work.
Achieve matt and satin-finished surfaces.

Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

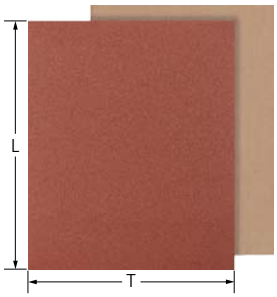
Recommendations for use:
- For the best results, use at a recommended cutting speed of 5–15 m/s.

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size				Description
		100 G	180 M	240 F		
		EAN 4007220				
2,000	75	066164	066188	066195	2	VB 75/2000 A ...
2,500	75	066225	066232	066249	2	VB 75/2500 A ...



Brown BR type



The brown cloth-backed variant is suitable for universal, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals.

The cloth-backed abrasive sheets comply with ISO 21948.

Advantages:
- Very high grain adhesion on very flexible cloth.
- High abrasive performance.
- Oil and kerosene-resistant.

Abrasive:
Aluminium oxide A

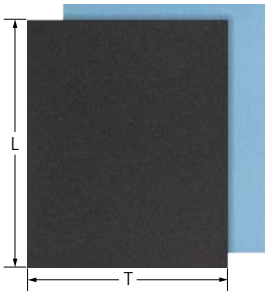
Recommendations for use:
- Tear to the necessary size if required.

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size								Description
		40	60	80	100	120	150	180		
		EAN 4007220								
280	230	587393	587409	587416	587423	587430	587447	587454	50	BG BR 230x280 A ...

L [mm]	T [mm]	Grit size								Description
		220	240	280	320	400	444	999		
		EAN 4007220								
280	230	587461	587478	587485	587492	587515	587522	587539	50	BG BR 230x280 A ...

Blue BL type



The blue cloth-backed variant is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

The cloth-backed abrasive sheets comply with ISO 21948.

Advantages:
- Good grain adhesion on sturdy cloth.
- Good abrasive performance.

Abrasive:
Aluminium oxide A

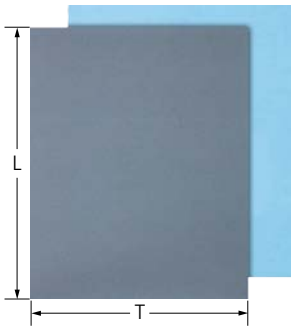
Recommendations for use:
- Tear to the necessary size if required.

Ordering notes:
- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size									Description
		40	60	80	100	120	150	180	220	240	
		EAN 4007220									
280	230	587270	587287	587294	587300	587317	587324	587331	587348	587355	100	BG BL 230x280 A ...







SiC type, waterproof W

The SiC abrasive enables use on paint and glass.
Particularly suitable for all wet grinding work on conventional painted constructions.

The paper-backed abrasive sheets comply with ISO 21948.

Advantages:
- Very high grain adhesion on very flexible and light paper.
- Maximum abrasive performance.
- Can be used for wet and dry grinding.

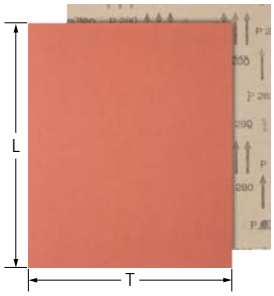
Abrasive:
Silicon carbide SiC

Recommendations for use:
- Tear to the necessary size if required.

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size									Description
		100	120	150	180	220	240	280	320		
		EAN 4007220									
280	230	587546	588222	588239	588246	588253	588260	588277	588284	50	BP W 230x280 SiC ...

L [mm]	T [mm]	Grit size							Description
		360	400	500	600	800	1000	1200	
		EAN 4007220							
280	230	588291	588307	588314	588321	588338	588345	588352	50	BP W 230x280 SiC ...



Aluminium oxide A type

The aluminium oxide A abrasive is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

The paper-backed abrasive sheets comply with ISO 21948.

Advantages:
- Good grain adhesion on sturdy paper.
- Good abrasive performance.

Abrasive:
Aluminium oxide A

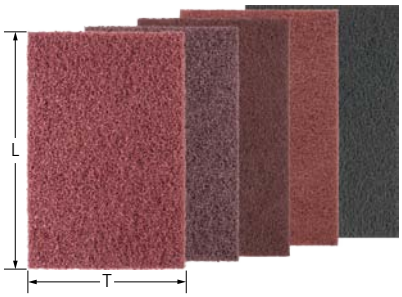
Recommendations for use:
- Tear to the necessary size if required.

Ordering notes:
- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size											Description
		40	60	80	100	120	150	180	220	240	280	400	
		EAN 4007220											
280	230	622520	622544	622551	622568	622575	622582	622476	622483	622490	622506	622513	100	BP 230x280 A ...



POLINOX hand pads PVSK



Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces.
Highly open structure.

Advantages:
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

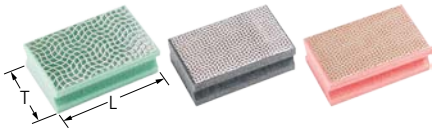
Abrasive:
Aluminium oxide A
Silicon carbide SiC

Recommendations for use:
- Cut to the necessary size if required.

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Abrasives	Grit size						Description
			80	100	180	280	400		
			EAN 4007220						
224	154	A	294611	294628	294635	294642	-	10	PVSK 150 A ...
		SiC	-	-	-	-	294659	10	PVSK 150 SiC ...

HP diamond type



Exceptionally suitable for work on wear-resistant coatings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide, etc.
Particularly recommended for work on materials used for aircraft engine construction, e.g. Hastelloy, Inconel and titanium/titanium alloys.
Also highly suitable for work on extremely hard materials such as tungsten carbide, glass, ceramics, enamel, stone and GRP/CRP.

Advantages:
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

Abrasive:
Diamond
D 251 (green) = P 60
D 126 (black) = P 120
D 76 (red) = P 200
(P = Grit size according to ISO 6344)

Recommendations for use:
- Work with little contact pressure.

Ordering notes:
- Grit sizes are indicated in µm.
- Further information on diamond grinding tools can be found in catalogue section 5.
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size [µm]				Description
		251	126	76		
		EAN 4007220				
90	55	804568	804575	804582	1	HP 5590 DIA ...



Thanks to their high flexibility, shop rolls are ideally suited to a range of grinding applications.
The matching shop roll holder is suitable for storing and tearing off the belts to the required length.

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Low wear thanks to high tear strength and very high grain adhesion.

Applications:

- Roughening
- Surface work
- Cleaning
- Step-by-step fine grinding

Recommendations for use:

- Cut to the required dimensions if necessary.

Matching tool drives:

- Manual application

Ordering notes:

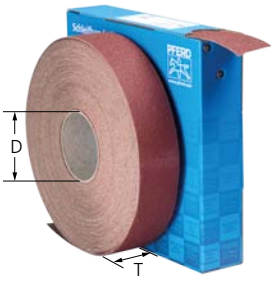
- Please order shop roll holders separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**587775**
  SBR 50 A **100**
- **Ordering example explanation:**
  SBR = Shop rolls
  50 = Width T [mm]
  A = Abrasive
  100 = Grit size

Accessories:

- Shop roll holders



Shop rolls SBR



Cloth, aluminium oxide A type

The brown cloth-backed variant is suitable for universal, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals. The carton has a tear-off edge for separating the sections of abrasive belt at the workplace.

SBR 25, SBR 40 and SBR 50 correspond to shape B, ISO 3366.
SBR 100 corresponds to shape A, ISO 3366.

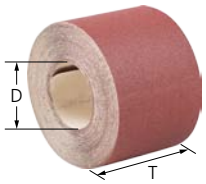
Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

Length [m]	T [mm]	D [mm]	Grit size								Description
			40	50	60	80	100	120	150		
			EAN 4007220								
25	38	75.0	602010	602027	602034	602041	602058	602065	602072	1	SBR 38 A ...
50	25	75.0	-	-	587553	587560	587577	587584	587591	1	SBR 25 A ...
	40	75.0	587645	-	587652	587669	587676	587683	587690	1	SBR 40 A ...
	50	75.0	587744	-	587751	587768	587775	587782	587799	1	SBR 50 A ...
	100	75.0	587843	-	587850	588864	587874	587881	587973	1	SBR 100 A ...

Length [m]	T [mm]	D [mm]	Grit size								Description
			180	220	240	320	400	600	800		
			EAN 4007220								
25	38	75.0	602089	602096	602102	602119	602126	-	-	1	SBR 38 A ...
50	25	75.0	587607	-	587614	587621	587638	607237	607244	1	SBR 25 A ...
	40	75.0	587706	622612	587713	587720	587737	-	-	1	SBR 40 A ...
	50	75.0	587805	621981	587812	587829	587836	607251	-	1	SBR 50 A ...
	100	75.0	587980	-	587997	588000	588017	-	-	1	SBR 100 A ...

Paper, aluminium oxide A type



The abrasive material aluminium oxide A is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

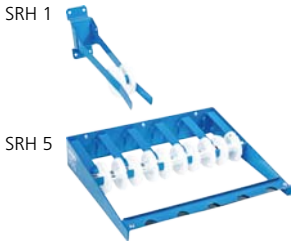
Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

Length [m]	T [mm]	D [mm]	Grit size							Description
			40	60	80	100	120	150		
			EAN 4007220							
25	115	75.0	667774	667781	622858	622865	667798	667804	1	SBR-P 115 A ...

Shop roll holder SRH

SRH 1 and SRH 5 types



Holder for wall-mounting: for storing and tearing off to the required length as necessary.
With the variant SRH 5, various roll sizes can be combined with each other as desired.

Advantages:
- Enable shop rolls to be stored correctly.

No. of rolls	Suitable for roll widths [mm]	Suitable for roll dia. [mm]	EAN 4007220		Description
1	25, 38, 40, 50	380	297551	1	SRH 1
5	25, 38, 40, 50	260	297568	1	SRH 5

POLINOX non-woven shop rolls VBR

Aluminium oxide A and silicon carbide SiC types



Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces.
Highly open structure.

Advantages:
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Recommendations for use:
- Cut to the necessary size if required.

Ordering notes:
- Please complete the description with the desired grit size.

Length [m]	T [mm]	Abrasives	Grit size						Description
			80	100	180	280	400		
			EAN 4007220						
10	100	A	095690	622711	622728	622735	-	1	VBR 100 A ...
		SiC	-	-	-	-	951385	1	VBR 100 SiC ...



SS type

High flexibility, therefore ideal for very fine deburring and finishing work in hard-to-reach places.

Especially recommended for work on very small holes, grooves and cut-outs in tool- and mould-making.

Explanation of the abbreviations:
D = Abrasive cord diameter

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	Length [m]	Grit size					Description
		120	150	180	200		
		EAN 4007220					
Aluminium oxide A							
0.8	15	-	-	-	037614	1	SS 0,8mm x 15m A ...
1	15	-	-	037638	-	1	SS 1,0mm x 15m A ...
1.4	15	-	037645	-	-	1	SS 1,4mm x 15m A ...
1.8	15	-	-	037652	-	1	SS 1,8mm x 15m A ...
2.1	15	037676	-	-	-	1	SS 2,1mm x 15m A ...
Silicon carbide SiC							
0.5	15	-	-	-	037607	1	SS 0,5mm x 15m SiC ...







Velcro-backed abrasive discs are suitable for fine-grinding large surfaces using eccentric orbital sanders and can be universally used on metal, wood, plastic and paintwork.

The velcro-backed abrasive discs with extraction holes are realized in shape A in compliance with ISO 21951:

O L: Without extraction holes
Dia. 125 8 L: 8 extraction holes, dia. 10 mm, reference circle 65 mm, ISO 21951 – nominal size 6
Dia. 150 8 L: 8 extraction holes, dia. 10 mm, reference circle 65 mm, ISO 21951 – nominal size 9
Dia. 150 6 L: 6 extraction holes, dia. 10 mm, reference circle 80 mm, ISO 21951 – nominal size 10

Advantages:

- High profitability thanks to quick tool changes and high abrasive performance.
- Longest possible tool life thanks to low clogging.

Applications:

- Roughening
- Surface work
- Cleaning
- Step-by-step fine grinding

Matching tool drives:

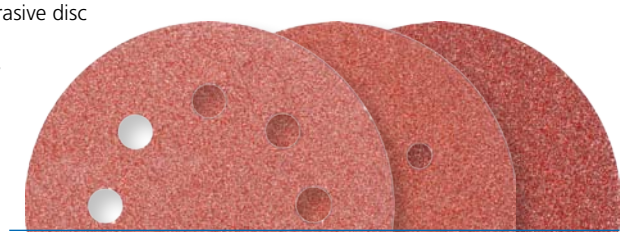
- Eccentric orbital sanders

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**599297**
  KSS 125 8 L A **60**
- **Ordering example explanation:**
  KSS = Velcro-backed abrasive disc
  125 = Diameter
  8 L = 8 extraction holes
  A = Abrasive
  60 = Grit size

Safety notes:





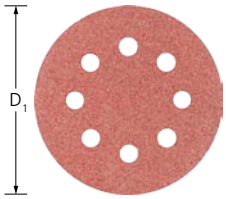
Velcro-backed abrasive discs KSS

Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.



D_1 [mm]	Holes	Grit size											Description
		40	60	80	100	120	150	180	240	320	400		
		EAN 4007220											
125	0	599273	599297	599303	599310	599426	599327	-	-	-	-	25	KSS 125 O L A ...
	8	588024	588031	588048	588055	588062	588079	588086	588093	588109	588116	25	KSS 125 8 L A ...
150	0	599341	599358	599365	599372	599389	599396	599402	599419	-	-	25	KSS 150 O L A ...
	8	599105	599112	599129	599136	599143	599150	-	-	-	-	25	KSS 150 8 L A ...
	6	588123	588130	588147	588154	588161	588178	588185	588192	588208	588215	25	KSS 150 6 L A ...







Coated abrasives

General information – Velcro-backed abrasive discs KSS-NET

Velcro-backed abrasive discs in the NET type feature a netting fabric, to which the abrasive grain is bonded with a high-performance bond system, which makes it very durable.

The range comprises various diameters that have been adapted to the drives common on the market, and also a comprehensive choice of grains, from 80 to 1,000.

Advantages:

- Very long tool life and high stock removal rate.
- Very fine, even surfaces can be achieved.
- Dust-free work thanks to good extraction capability.
- No clogging thanks to netting structure.
- Durable netting structure with high tear strength and edge stability.

Materials that can be worked:

- Aluminium
- Additional non-ferrous metals
- Stainless steel (INOX)
- Wood
- Plastics
- Steel, cast steel

Applications:

- Roughening
- Surface grinding
- Cleaning
- Step-by-step fine grinding

Matching tool drives:

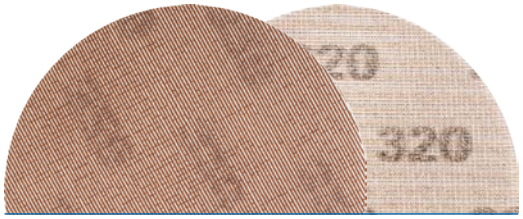
- Eccentric orbital sanders

Ordering notes:

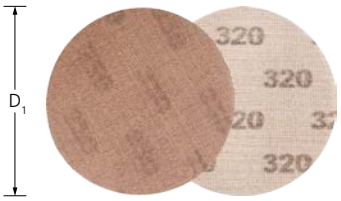
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**105207**
  KSS NET 125 A **80**
- **Ordering example explanation:**
  KSS NET = Velcro-backed abrasive disc, NET type
  125 = Diameter
  A = Abrasive
  80 = Grit size

Safety notes:





Velcro-backed abrasive discs KSS-NET



KSS-NET type

For dust-free, universal grinding work on medium-sized and large surfaces.

Abrasive:
Aluminium oxide A

Recommendations for use:
- Use the extraction connection on the machine to effectively remove the grinding dust.

Ordering notes:
- Please complete the description with the desired grit size.

D_1 [mm]	Grit size												Description
	80	100	120	150	180	240	320	400	600	800	1000		
	EAN 4007220												
125	105207	105214	105221	105238	105245	105252	105269	105276	105283	105290	105306	25	KSS NET 125 A ...
150	105313	105320	105337	105344	105351	105368	105375	105382	105399	105405	105412	25	KSS NET 150 A ...





The comprehensive range of abrasive spiral bands offers the best tool solution for every application, from fine grinding through to aggressive grinding.

Matching, reusable rubber drum holders in two different shapes are available for using abrasive spiral bands:
- Cylindrical
- Conical

In ISO 2421, abrasive spiral bands are designated as "cylindrical abrasive sleeves".

In ISO 15637-1, cylindrical rubber drum holders are designated as "holding fixtures for cylindrical abrasive sleeves".

KSB = Small pack of abrasive spiral bands
GSB = Bulk pack of abrasive spiral bands

Advantages:

- Abrasive spiral band fits securely on the rubber drum holder as the holder expands during use.
- Outstanding tool life thanks to special manufacturing process – even under the toughest work conditions.
- Highest possible profitability thanks to particularly high stock removal and aggressiveness of the abrasive.

Applications:

- Roughening
- Levelling
- Deburring
- Surface work
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- To change the abrasive spiral bands easily, raise and lower them while turning slightly to the right. When doing so, leave the rubber drum holder engaged in the tool drive.
- Adhere to the minimum speed for the rubber drum holder to ensure that the abrasive spiral band fits securely.
- For best performance, use with a recommended cutting speed of 20–30 m/s.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- Please order rubber drum holders separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**148426**
  GSB 4530 Z-COOL **36**
- **Ordering example explanation:**
  GSB = Bulk pack of abrasive spiral bands
  4530 = Inner diameter D x width T [mm]
  Z = Abrasive
  COOL = Bond type
  36 = Grit size

Safety notes:

- The maximum permitted peripheral speed is 30 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Do not allow abrasive spiral bands to protrude beyond the rubber drum holder.



Accessories:

- Rubber drum holder



Recommended rotational speed range

Example:
KSB 4530 A 60
Cutting speed: 20–30 m/s
Rotational speed: 8,400–12,700 RPM

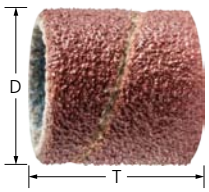
Tool dia. [mm]	Cutting speed [m/s]		
	20	25	30
	Rotational speeds [RPM]		
4	95,400	119,300	143,200
6	63,600	79,500	95,400
8	47,700	59,600	71,600
10	38,100	47,700	57,200
13	29,300	36,700	44,000
15	25,400	31,800	38,100
19	20,100	25,100	30,100
22	17,300	21,700	26,000
25	15,200	19,000	22,900
30	12,700	15,900	19,000
38	10,000	12,500	15,000
45	8,400	10,600	12,700
51	7,400	9,300	11,200
60	6,300	7,900	9,500
75	5,000	6,300	7,600
100	3,800	4,700	5,700

The fast way to the best tool

Material group ▼			Abrasive ▶ Aluminium oxide A	Zirconia alumina Z	Zirconia alumina Z-COOL	Ceramic oxide grain CO-COOL	Silicon carbide SiC
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	❍		●	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●		●	
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		❍	●	●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍		❍	❍	
		Brass, copper, zinc	●	❍	❍		
	Hard non-ferrous metals	Hard aluminium alloys	●	❍	❍		❍
		Bronze, titanium		❍	●	●	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		❍	●	●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●	❍			
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	●				●

● = Highly suitable ❍ = Suitable

Small pack KSB



Aluminium oxide A type

For universal applications from coarse to fine grinding.

Abrasive:
Aluminium oxide A

Ordering notes:
■ Please complete the description with the desired grit size.

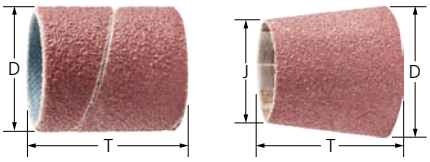
D [mm]	T [mm]	Grit size 40	50	60	80	150	240	Opt. RPM		Description
		EAN 4007220								
Cylindrical shape										
10	10	-	-	-	148921	148938	-	30,000–44,000	25	KSB 1010 A ...
	20	-	-	-	148952	148969	148976	30,000–44,000	25	KSB 1020 A ...
13	10	-	-	-	148983	148990	-	30,000–44,000	25	KSB 1310 A ...
	25	-	-	-	149010	149027	-	30,000–44,000	25	KSB 1325 A ...
15	10	-	-	149041	149058	149065	-	26,000–36,000	25	KSB 1510 A ...
	30	-	149089	149096	149102	149119	149126	26,000–36,000	25	KSB 1530 A ...
19	25	-	-	149133	149140	149157	149164	20,000–30,000	25	KSB 1925 A ...
22	20	-	149171	149188	149195	149201	-	18,000–26,000	25	KSB 2220 A ...
25	25	-	-	149225	149232	149249	-	16,000–22,900	25	KSB 2525 A ...
30	20	149263	-	149270	149287	149294	-	13,000–19,100	25	KSB 3020 A ...
	30	149324	149317	149331	149348	149355	-	13,000–19,100	25	KSB 3030 A ...
38	25	149379	-	149386	149393	149409	-	10,000–15,900	25	KSB 3825 A ...
45	30	149461	149454	149478	149485	149492	-	8,500–12,700	10	KSB 4530 A ...
51	25	149515	-	149522	149539	149546	-	7,500–11,200	10	KSB 5125 A ...
60	30	149577	149560	149584	149591	149607	-	6,500–9,500	10	KSB 6030 A ...
75	30	149614	-	149621	149638	149645	-	5,000–7,600	10	KSB 7530 A ...

Aluminium oxide A type

For universal applications from coarse to fine grinding.

Abrasive:
Aluminium oxide A

Ordering notes:
■ Please complete the description with the desired grit size.



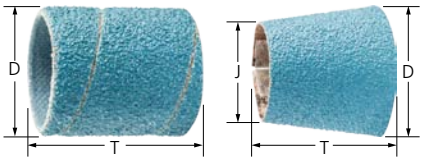
D [mm]	J [mm]	T [mm]	Grit size 40	50	60	80	150	240	Opt. RPM		Description
			EAN 4007220								
Cylindrical shape											
4	-	10	-	-	-	-	147610	-	30,000–55,000	100	GSB 0410 A ...
6	-	10	-	-	-	-	147634	-	30,000–55,000	100	GSB 0610 A ...
8	-	10	-	-	-	-	147658	-	30,000–55,000	100	GSB 0810 A ...
10	-	10	-	-	-	147672	147689	-	30,000–44,000	100	GSB 1010 A ...
		20	-	-	949740	147702	147719	147726	30,000–44,000	100	GSB 1020 A ...
13	-	10	-	-	-	147733	147740	-	30,000–44,000	100	GSB 1310 A ...
		25	-	-	-	147764	147771	-	30,000–44,000	100	GSB 1325 A ...
15	-	10	-	-	147795	147801	147818	-	26,000–36,000	100	GSB 1510 A ...
		30	-	147832	147849	147856	147863	147870	26,000–36,000	100	GSB 1530 A ...
19	-	25	-	-	147931	147948	147955	-	20,000–30,000	100	GSB 1925 A ...
22	-	20	-	147979	147986	147993	148006	148013	18,000–26,000	100	GSB 2220 A ...
25	-	25	-	-	148075	148082	148099	-	16,000–22,900	100	GSB 2525 A ...
30	-	20	148112	-	148129	148136	148143	-	13,000–19,100	100	GSB 3020 A ...
		30	148174	148167	148181	148198	148204	148211	13,000–19,100	100	GSB 3030 A ...
38	-	25	148280	-	148297	148303	148310	-	10,000–15,900	100	GSB 3825 A ...
45	-	30	148372	148365	148389	148396	148402	148419	8,500–12,700	100	GSB 4530 A ...
51	-	25	148488	-	148495	148501	148518	-	7,500–11,200	100	GSB 5125 A ...
60	-	30	148549	148532	148556	148563	148570	-	6,500–9,500	100	GSB 6030 A ...
75	-	30	148648	-	148655	148662	148679	-	5,000–7,600	100	GSB 7530 A ...
100	-	40	148686	-	148693	148709	148716	-	4,000–5,700	50	GSB 10040 A ...
Conical shape											
20	14	63	148723	-	148730	148747	148754	148761	19,000–26,000	100	GSB 201463 A ...
29	22	30	148778	-	148785	148792	148808	-	13,000–19,100	100	GSB 292230 A ...
36	22	60	148822	-	148839	148846	148853	-	10,000–15,900	100	GSB 362260 A ...







Abrasive spiral bands
Bulk pack GSB



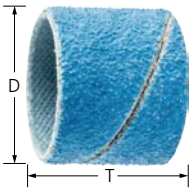
Zirconia alumina Z type

For coarse grinding work with a high stock removal rate and a long tool life.

Abrasive:
Zirconia alumina Z

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	J [mm]	T [mm]	Grit size						Opt. RPM		Description
			36	40	50	60	80	120			
			EAN 4007220								
Cylindrical shape											
13	-	25	-	-	804827	804872	804889	949757	30,000–44,000	100	GSB 1325 Z ...
19	-	25	-	804896	804902	804940	804957	949764	20,000–30,000	100	GSB 1925 Z ...
25	-	25	949771	805022	805077	805084	805091	949788	16,000–22,900	100	GSB 2525 Z ...
30	-	30	949795	805145	805152	805176	805183	-	13,000–19,100	100	GSB 3030 Z ...
38	-	25	949801	805190	949818	805206	949825	949832	10,000–15,900	100	GSB 3825 Z ...
45	-	30	-	805664	805671	805725	805732	-	8,500–12,700	100	GSB 4530 Z ...
51	-	25	949849	803943	949856	803950	803967	949863	7,500–11,200	100	GSB 5125 Z ...
Conical shape											
20	14	63	950050	-	950074	950081	950098	950104	19,000–26,000	100	GSB 201463 Z ...
29	22	30	950067	-	950128	950135	950142	950159	13,000–19,100	100	GSB 292230 Z ...
36	22	60	950166	-	950241	950258	950265	950289	10,000–15,900	100	GSB 362260 Z ...



Zirconia alumina Z-COOL type

For coarse grinding work with a high stock removal rate and cool grinding.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Zirconia alumina Z-COOL

Ordering notes:
- Grit size 150 is supplied with aluminium oxide A-COOL (brown).
- Please complete the description with the desired grit size.

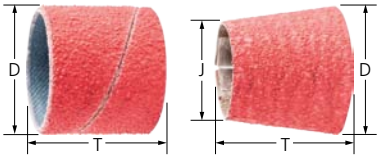
D [mm]	T [mm]	Grit size				Opt. RPM		Description
		36	50	80	150			
		EAN 4007220						
Cylindrical shape								
15	30	-	147887	147894	147924	26,000–36,000	100	GSB 1530 Z-COOL ...
22	20	-	148020	148037	148068	18,000–26,000	100	GSB 2220 Z-COOL ...
30	30	148228	148235	148242	148273	13,000–19,100	100	GSB 3030 Z-COOL ...
45	30	148426	148433	148440	148471	8,500–12,700	100	GSB 4530 Z-COOL ...
60	30	148587	148594	148600	148631	6,500–9,500	100	GSB 6030 Z-COOL ...







Ceramic oxide grain CO-COOL type



For aggressive grinding with maximum stock removal rate on hard and tough materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

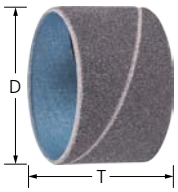
The packaging size is ideally suited to industrial requirements.

Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	J [mm]	T [mm]	Grit size 36	60	80	120	Opt. RPM		Description
			EAN 4007220						
Cylindrical shape									
13	-	25	-	088074	092415	088227	30,000–44,000	100	GSB 1325 CO-COOL ...
15	-	30	-	772195	772201	772218	26,000–36,000	100	GSB 1530 CO-COOL ...
19	-	25	088234	088333	088340	088432	20,000–30,000	100	GSB 1925 CO-COOL ...
22	-	20	-	772225	772232	772249	18,000–26,000	100	GSB 2220 CO-COOL ...
25	-	25	088456	772256	772263	772270	16,000–22,900	100	GSB 2525 CO-COOL ...
30	-	30	772287	772294	772317	772331	13,000–19,100	100	GSB 3030 CO-COOL ...
38	-	25	088494	088500	088579	088586	10,000–15,900	100	GSB 3825 CO-COOL ...
45	-	30	772355	772362	772393	772409	8,500–12,700	100	GSB 4530 CO-COOL ...
51	-	25	088661	088678	088753	088760	7,500–11,200	100	GSB 5125 CO-COOL ...
60	-	30	772416	772423	772430	772447	6,500–9,500	100	GSB 6030 CO-COOL ...
Conical shape									
20	14	63	950302	950319	950326	950340	19,000–26,000	100	GSB 201463 CO-COOL ...
29	22	30	950364	950388	950395	950418	13,000–19,100	100	GSB 292230 CO-COOL ...
36	22	60	950432	950456	950463	950487	10,000–15,900	100	GSB 362260 CO-COOL ...

Silicon carbide SiC type



For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

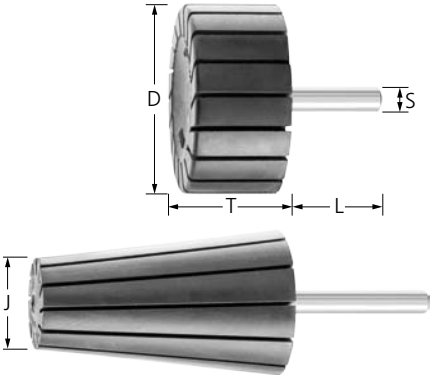
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

Abrasive:
Silicon carbide SiC

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 60	80	100	150	Opt. RPM		Description
		EAN 4007220						
Cylindrical shape								
10	20	066270	066294	066300	066317	30,000–44,000	100	GSB 1020 SiC ...
13	25	066324	066348	066355	066362	30,000–44,000	100	GSB 1325 SiC ...
15	30	066379	066386	066393	066409	26,000–36,000	100	GSB 1530 SiC ...
22	20	066416	066423	066430	066447	18,000–26,000	100	GSB 2220 SiC ...
30	30	066454	066461	066478	066485	13,000–19,100	100	GSB 3030 SiC ...
45	30	066492	066508	066515	066522	8,500–12,700	100	GSB 4530 SiC ...

Abrasive spiral bands
Rubber drum holders GK



Conical and cylindrical types

Matching rubber drum holder for conical and cylindrical abrasive spiral bands.

Rubber drum holders marked "H" are the harder type and permit grinding at higher contact pressure. They are extremely well-suited to work on weld seams.

D [mm]	J [mm]	T [mm]	S [mm]	L [mm]	Hardness [Shore A]	EAN 4007220	Acc. to ISO standards	Max. RPM	Minimum rotational speed [RPM]		Description
Cylindrical shape											
4	-	10	3	40	65–70	146729	-	55,000	30,000	5	GK 0410/3
			6	40	65–70	146712	-	55,000	30,000	5	GK 0410/6
6	-	10	3	40	65–70	146743	-	55,000	30,000	5	GK 0610/3
			6	40	65–70	146736	-	55,000	30,000	5	GK 0610/6
8	-	10	3	40	65–70	146767	-	55,000	30,000	5	GK 0810/3
			6	40	65–70	146750	-	55,000	30,000	5	GK 0810/6
10	-	10	6	35	65–70	146774	15637-1	44,000	30,000	5	GK 1010/6
		20	6	35	65–70	146781	15637-1	44,000	30,000	5	GK 1020/6
13	-	10	6	35	65–70	146798	-	44,000	30,000	5	GK 1310/6
		25	6	35	65–70	146804	-	44,000	30,000	5	GK 1325/6
15	-	10	6	35	65–70	146811	15637-1	36,000	26,000	5	GK 1510/6
		30	6	35	65–70	146828	15637-1	36,000	26,000	5	GK 1530/6
19	-	25	6	35	65–70	146835	-	30,000	20,000	5	GK 1925/6
22	-	20	6	35	65–70	146842	15637-1	26,000	18,000	5	GK 2220/6
					80	146859	15637-1	26,000	18,000	5	GK 2220/6 H
25	-	25	6	35	65–70	146866	-	22,900	16,000	5	GK 2525/6
30	-	20	6	35	65–70	146873	15637-1	19,100	13,000	5	GK 3020/6
		30	6	35	65–70	146880	15637-1	19,100	13,000	5	GK 3030/6
		30	6	35	80	146897	15637-1	19,100	13,000	5	GK 3030/6 H
38	-	25	6	35	65–70	146903	-	15,900	10,000	5	GK 3825/6
45	-	30	6	35	65–70	146927	15637-1	12,700	8,500	5	GK 4530/6
					80	146934	15637-1	12,700	8,500	5	GK 4530/6 H
51	-	25	6	35	65–70	146941	-	11,200	7,500	5	GK 5125/6
60	-	30	6	35	65–70	146958	15637-1	9,500	6,500	5	GK 6030/6
			8	35	65–70	146965	15637-1	9,500	6,500	5	GK 6030/8
75	-	30	8	35	65–70	146972	15637-1	7,600	5,000	5	GK 7530/8
100	-	40	8	35	65–70	146989	15637-1	5,700	4,000	5	GK 10040/8
Conical shape											
20	14	63	6	40	65–70	147078	-	26,000	19,000	5	GK 201463/6
29	22	30	6	40	65–70	147085	-	19,100	13,000	5	GK 292230/6
36	22	60	6	40	65–70	147092	-	15,900	10,000	5	GK 362260/6



POLIROLL and POLICO tools are suited for work in hard-to-access places.

They consist of spirally wound, coated abrasives. The abrasive grain is embedded in the resinoid coating on the sturdy backing material, which achieves the best possible abrasive performance.

Advantages:

- Constantly high abrasive performance throughout the entire tool life thanks to fresh abrasive grain being constantly freed up in operation.
- Secure fit of the POLIROLL/POLICO when in use due to self-tensioning provided by grooved, conical arbor.
- Easy tool changing.

Applications:

- Levelling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

Recommendations for use:

- Grind with the tip instead of the flat surface so as not to damage the bond through exposure to heat.
- Mount POLIROLL with the bonded side facing towards the arbor.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**803394**
  PR 1225 A **80**
- **Ordering example explanation:**
  PR = POLIROLL cylindrical cartridge rolls
  1225 = Outer diameter D x width T [mm]
  A = Abrasive
  80 = Grit size

Safety notes:

- The maximum permitted peripheral speed is 11 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- Arbor for POLIROLL and POLICO



Recommended rotational speed range

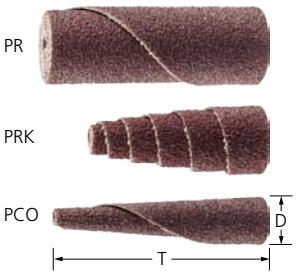
Example:
PR 1225 A 80
Cutting speed: 8 m/s
Rotational speed: 12,700 RPM

Tool dia. [mm]	Cutting speed [m/s]		
	5	8	11
	Rotational speeds [RPM]		
6	15,900	25,400	35,000
9	10,600	16,900	23,300
12	7,900	12,700	17,500
14	6,800	10,900	15,000
18	5,300	8,400	11,600



POLIROLL, POLICO

POLIROLL cartridge rolls PR and PRK, POLICO abrasive cones PCO



Aluminium oxide A type

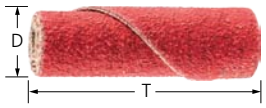
For universal grinding work on metals and other materials.

Materials that can be worked:
aluminium, copper, brass, grey/nodular cast iron (GG/GJL, GGG/GJS), annealed cast iron, steel, cast steel, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 50	80	150	Opt. RPM	Max. RPM	Suitable arbors		Description
		EAN 4007220							
Cylindrical shape (PR)									
6	25	-	152300	152317	20,000	25,000	BO 3-18-3, BO 6-18-3	50	PR 0625 A ...
	35	-	152324	152331	20,000	25,000	BO 6-24-3	50	PR 0635 A ...
9	25	-	152348	152355	15,000	23,000	BO 6-18-3	50	PR 0925 A ...
	35	-	152362	152379	15,000	23,000	BO 6-24-3	50	PR 0935 A ...
12	25	152386	152393	152409	12,000	17,000	BO 6-18-3	50	PR 1225 A ...
	35	152416	152423	152430	12,000	17,000	BO 6-24-3	50	PR 1235 A ...
18	35	152447	152454	152461	8,000	12,000	BO 6-25-5	50	PR 1835 A ...
	50	152478	152485	152492	8,000	12,000	BO 6-30-5	50	PR 1850 A ...
Conical shape (PRK)									
10	25	-	152508	152515	15,000	23,000	BO 3-18-3, BO 6-18-3	50	PRK 1025 A ...
12	25	152522	152539	152546	12,000	17,000	BO 6-18-3	50	PRK 1225 A ...
	35	152553	152560	152577	12,000	17,000	BO 6-24-3	50	PRK 1235 A ...
15	35	152584	152591	152607	10,000	15,000	BO 6-24-3	50	PRK 1535 A ...
POLICO abrasive cones (PCO)									
10	50	-	152614	152621	15,000	23,000	BO 6-50-8	50	PCO 1050 A ...



Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well.

Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Materials that can be worked:
aluminium, cobalt-based alloys, nickel-based alloys (e.g. Inconel and Hastelloy), titanium, stainless steel (INOX)

Abrasive:
Ceramic oxide grain CO-COOL

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 60	80	120	Opt. RPM	Max. RPM	Suitable arbors		Description
		EAN 4007220							
6	25	803264	803271	803288	20,000	25,000	BO 3-18-3, BO 6-18-3	50	PR 0625 CO-COOL ...
	35	803295	803301	803318	20,000	25,000	BO 6-24-3	50	PR 0635 CO-COOL ...
9	25	803325	803332	803349	15,000	23,000	BO 6-18-3	50	PR 0925 CO-COOL ...
	35	803356	803363	803370	15,000	23,000	BO 6-24-3	50	PR 0935 CO-COOL ...
12	25	803387	803394	803400	12,000	17,000	BO 6-18-3	50	PR 1225 CO-COOL ...
	35	803424	803431	803448	12,000	17,000	BO 6-24-3	50	PR 1235 CO-COOL ...

Arbors BO



Arbors for POLIROLL and POLICO tools.

Advantages:
- Tool can be changed without unclamping the arbor from the tool drive collet.

Ordering notes:
- Arbor BO 6-50-8 – matching PCO 1050. The cone of the clamping piece is 5°.

Suitable for	S [mm]	L [mm]	EAN 4007220		Description
PR 0625, PRK 1025	3	27	152171	1	BO 3-18-3
PR 0625, PR 0925, PR 1225, PRK 1025, PRK 1225	6	30	152188	1	BO 6-18-3
PR 0635, PR 0935, PR 1235, PRK 1235, PRK 1535	6	30	152195	1	BO 6-24-3
PR 1835	6	30	152201	1	BO 6-25-5
PR 1850	6	30	152218	1	BO 6-30-5
PCO 1050	6	30	152232	1	BO 6-50-8

POLIROLL set



Set of different POLIROLL cartridge rolls with matching arbors.

Contents:
150 POLIROLL cartridge rolls with matching arbor:
- 20 pcs. each of PR 0625, A 80 and A 150
- 20 pcs. each of PR 0925, A 80 and A 150
- 20 pcs. each of PR 1225, A 80 and A 150
- 10 pcs. each of PRK 1025, A 80 and A 150
- 10 pcs. each of PRK 1225, A 80

Advantages:
- Coordinated selection of the most common versions.

L x B x H [mm]	EAN 4007220		Description
180 x 145 x 40	335727	1	PRS 151



POLICAP
General information

The broad, material-specific range of POLICAP abrasive cap and spiral band products offers tool solutions with the highest possible stock removal rate for universal and specific grinding applications alike.

POLICAP tools have a seamless design, and the entire tool surface can be used.

Perfectly matching, reusable holders are available for using abrasive caps and spiral bands.

Advantages:

- Abrasive caps and spiral bands fit securely on the holder as it expands during use.
- High standards of shape accuracy and excellent fine grinding thanks to a special manufacturing process.
- Easy tool changing.

Applications:

- Levelling
- Surface work
- Step-by-step fine grinding

Recommendations for use:

- To change the abrasive caps and spiral bands easily, raise and lower them while turning slightly to the right. When doing so, leave the tool carrier engaged in the tool drive and fix in place.
- For best performance, use with a recommended cutting speed of 10–20 m/s.

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**150849**
  PC ZYA 1015 A **60**
- **Ordering example explanation:**
  PC = POLICAP abrasive caps
  ZYA = Cylindrical shape
  1015 = Outer diameter D x width T [mm]
  A = Abrasive
  60 = Grit size

Safety notes:

- The maximum permitted peripheral speed is 25 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



Accessories:

- Abrasive cap and rubber drum holder



Type	Application
Aluminium oxide A  A60/80 A150 A280	For universal use on steel materials (hardened, heat-treated, non-hardened). Especially developed for specific applications, e.g. in tool- and mould-making, in addition to corresponding repair tasks. Also suitable for work on plastics, wood and fillers in model-making applications.
SiC-COOL (Silicon carbide with active grinding layer) 	Ideal for work on components made from titanium, aluminium and their respective alloys. Ideally suited to use in aircraft and turbine construction, in addition to associated maintenance tasks. The special grain selection and the active grinding additive in the bond facilitate cool grinding, reduce the workpiece temperature and prevent chips from adhering.
CO-COOL (Ceramic oxide grain with active grinding layer) 	The specific structure of the ceramic oxide grain and the active-grinding bond components make this ideal for work on stainless steels (INOX) and the high-temperature-resistant nickel-based and cobalt-based alloys that are frequently used in turbine construction, e.g. Inconel, Hastelloy. The active grinding additives prevent clogging and facilitate cooler grinding with considerably higher stock removal rate.

The fast way to the best tool

Material group ▼		Abrasive ▶	Aluminium oxide A	Ceramic oxide grain CO-COOL	Silicon carbide SiC-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	❍	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●	
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍	❍	●
		Brass, copper, zinc	●		
	Hard non-ferrous metals	Hard aluminium alloys	❍		●
		Bronze, titanium		❍	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●	❍	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	❍		●

● = Highly suitable ❍ = Suitable

Recommended rotational speed range

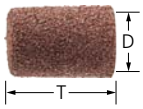
Example:
PC ZYA 1015 A 150
Cutting speed: 10–20 m/s
Rotational speed: 19,000–38,100 RPM

Tool dia. [mm]	Cutting speed [m/s]			
	10	15	20	25
	Rotational speeds [RPM]			
5	38,100	57,200	76,300	95,400
7	27,200	40,900	54,500	68,200
10	19,000	28,600	38,100	47,700
11	17,300	26,000	34,700	43,400
16	11,900	17,900	23,800	29,800
21	9,000	13,600	18,100	22,700
29	6,500	9,800	13,100	16,400
36	5,300	7,900	10,600	13,200









A 60/80


A 150


A 280

Abrasive caps PC ZYA

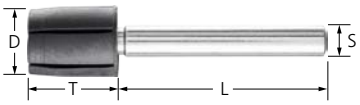
POLICAP abrasive caps in cylindrical shape ZYA (previously shape A).

Abrasive:
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size				Opt. RPM		Description
		60	80	150	280			
		EAN 4007220						
5	10	-	150788	150795	150801	40,000	50	PC ZYA 0510 A ...
7	12	150818	-	150825	150832	30,000	50	PC ZYA 0712 A ...
10	15	150849	-	150856	150863	20,000	50	PC ZYA 1015 A ...
13	17	150870	-	150887	150894	16,000	50	PC ZYA 1317 A ...
16	26	150900	-	150917	150924	12,000	50	PC ZYA 1626 A ...

PCT, shape ZYA



Abrasive cap holders PCT ZYA

Matching POLICAP abrasive cap holder in cylindrical shape ZYA (previously shape A).

D [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM		Description
5	10	3	25	147139	95,000	5	PCT ZYA 0510/3
7	12	3	25	147146	65,000	5	PCT ZYA 0712/3
10	15	3	25	147153	45,000	5	PCT ZYA 1015/3
13	17	6	40	147221	35,000	5	PCT ZYA 1317/6
16	26	6	40	147238	30,000	5	PCT ZYA 1626/6

PCS, shape ZYA



Set PCS ZYA

Set of various POLICAP abrasive caps with matching holder in cylindrical shape ZYA (previously shape A).

Contents:
- 5 pcs. each of POLICAP abrasive caps PC ZYA 1015 A, 1317 A and 1626 A (grit size 60, 150, 280)
- 10 pcs. each of POLICAP abrasive caps PC ZYA 0510 A and 0712 A (grit size 60 or 80 and 150, 280)
- 1 pc. each of POLICAP abrasive cap holder PCT ZYA 0510/3, 0712/3, 1015/3, 1317/6 and 1626/6

Advantages:
- Sturdy, reusable plastic packaging.

Abrasive:
Aluminium oxide A
60 and 80 = brown
150 = black
280 = red-brown

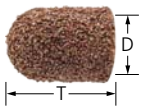
Shape	L x B x H [mm]	EAN 4007220		Description
ZYA	180 x 145 x 40	355404	1	PCS ZYA 110

Abrasive caps PC WRC

POLICAP abrasive caps in cylindrical shape with radius end WRC (previously shape C).

Abrasive:
Aluminium oxide A
Silicon carbide SiC-COOL (grey)
Ceramic oxide grain CO-COOL (red)
Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

Ordering notes:
- Please complete the description with the desired grit size.



A 60/80


A 150


A 280

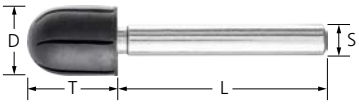

SiC-COOL


CO-COOL

D [mm]	T [mm]	Grit size 60	80	120	150	280	Opt. RPM		Description
		EAN 4007220							
Aluminium oxide A									
5	11	-	150931	-	150948	150955	40,000	50	PC WRC 0511 A ...
7	13	150962	-	-	150979	150986	30,000	50	PC WRC 0713 A ...
10	15	150993	-	-	151006	151013	20,000	50	PC WRC 1015 A ...
13	17	151020	-	-	151037	151044	16,000	50	PC WRC 1317 A ...
16	26	151051	-	-	151068	151075	12,000	50	PC WRC 1626 A ...
Silicon carbide SiC-COOL									
5	11	-	953716	-	953723	-	40,000	50	PC WRC 0511 SiC-COOL ...
7	13	-	953730	-	953747	-	30,000	50	PC WRC 0713 SiC-COOL ...
10	15	-	953754	-	953761	-	20,000	50	PC WRC 1015 SiC-COOL ...
13	17	-	953778	-	953792	-	16,000	50	PC WRC 1317 SiC-COOL ...
16	26	-	953808	-	953815	-	12,000	50	PC WRC 1626 SiC-COOL ...
Ceramic oxide grain CO-COOL									
5	11	-	953938	953945	-	-	40,000	50	PC WRC 0511 CO-COOL ...
7	13	-	953952	953969	-	-	30,000	50	PC WRC 0713 CO-COOL ...
10	15	-	953976	954041	-	-	20,000	50	PC WRC 1015 CO-COOL ...
13	17	-	954058	954119	-	-	16,000	50	PC WRC 1317 CO-COOL ...
16	26	-	954126	954133	-	-	12,000	50	PC WRC 1626 CO-COOL ...

Abrasive cap holders PCT WRC

Matching POLICAP abrasive cap holder in cylindrical shape with radius end WRC (previously shape C).



D [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM		Description
5	11	2.35	40	621820	30,000	5	PCT WRC 0511/2,35
		3	25	147160	95,000	5	PCT WRC 0511/3
7	13	2.35	40	621837	24,500	5	PCT WRC 0713/2,35
		3	25	147177	65,000	5	PCT WRC 0713/3
10	15	2.35	40	621844	17,500	5	PCT WRC 1015/2,35
		3	25	147184	45,000	5	PCT WRC 1015/3
13	17	2.35	40	621851	13,750	5	PCT WRC 1317/2,35
		6	40	147245	35,000	5	PCT WRC 1317/6
16	26	6	40	147252	30,000	5	PCT WRC 1626/6

POLICAP
PCS, shape WRC



Set PCS WRC

Set of various POLICAP abrasive caps with matching holder in cylindrical shape with radius end WRC (previously shape C).

Contents:
- 5 pcs. each of POLICAP abrasive caps PC WRC 1015 A, 1317 A and 1626 A (grit size 60, 150, 280)
- 10 pcs. each of POLICAP abrasive caps PC WRC 0511 A and 0713 A (grit size 60 or 80 and 150, 280)
- 1 pc. each of POLICAP abrasive cap holder PCT WRC 0511/3, 0713/3, 1015/3, 1317/6 and 1626/6

Advantages:
- Sturdy, reusable plastic packaging.

Abrasive:
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

Shape	L x B x H [mm]	EAN 4007220		Description
WRC	180 x 145 x 40	355411	1	PCS WRC 110







Abrasive caps PC WKG



A 60/80 A 150 A 280

POLICAP abrasive caps in tapered conical shape with radius end WKG (previously shape G). The taper angle of the cone is 30°.

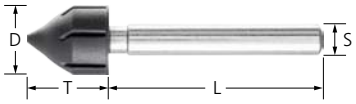
Abrasive:
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 60	80	150	280	Opt. RPM		Description
		EAN 4007220						
5	11	-	151082	151099	151105	40,000	50	PC WKG 0511 A ...
7	13	151112	-	151129	151136	30,000	50	PC WKG 0713 A ...
10	15	151143	-	151150	151167	20,000	50	PC WKG 1015 A ...
13	17	151174	-	151181	151198	16,000	50	PC WKG 1317 A ...
16	26	151204	-	151211	151228	12,000	50	PC WKG 1626 A ...

PCT, shape WKG

Abrasive cap holders PCT WKG



Matching POLICAP abrasive cap holder in tapered conical shape with radius end WKG (previously shape G).

D [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM		Description
5	11	3	25	147191	95,000	5	PCT WKG 0511/3
7	13	3	25	147207	65,000	5	PCT WKG 0713/3
10	15	3	25	147214	45,000	5	PCT WKG 1015/3
13	17	2.35	40	434338	13,750	5	PCT WKG 1317/2,35
		6	40	147269	35,000	5	PCT WKG 1317/6
16	26	6	40	147276	30,000	5	PCT WKG 1626/6

PCS, shape WKG

Set PCS WKG



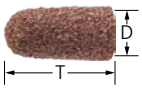
Set of various POLICAP abrasive caps with matching holder in tapered conical shape with radius end WKG (previously shape G).

Contents:
- 5 pcs. each of POLICAP abrasive caps PC WKG 1015 A, 1317 A and 1626 A (grit size 60, 150, 280)
- 10 pcs. each of POLICAP abrasive caps PC WKG 0511 A and 0713 A (grit size 60 or 80 and 150, 280)
- 1 pc. each of POLICAP abrasive cap holder PCT WKG 0511/3, 0713/3, 1015/3, 1317/6 and 1626/6

Advantages:
- Sturdy, reusable plastic packaging.

Abrasive:
Aluminium oxide A
60 and 80 = brown
150 = black
280 = red-brown

Shape	L x B x H [mm]	EAN 4007220		Description
WKG	180 x 145 x 40	355428	1	PCS WKG 110



A 60/80


A 150


A 280


SiC-COOL


CO-COOL

Abrasive caps PC KEL

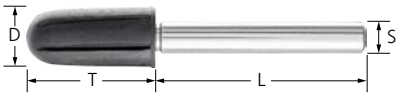
POLICAP abrasive caps in conical shape with radius end KEL (previously shape L).

Abrasive:
Aluminium oxide A
Silicon carbide SiC-COOL (grey)
Ceramic oxide grain CO-COOL (red)
Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 60	80	120	150	280	Opt. RPM		Description
		EAN 4007220							
Aluminium oxide A									
5	15	-	151235	-	151242	151259	40,000	50	PC KEL 0515 A ...
11	25	151266	-	-	151273	151280	20,000	50	PC KEL 1125 A ...
16	32	151297	-	-	151303	151310	12,000	50	PC KEL 1632 A ...
21	40	151327	-	-	151334	151341	9,500	50	PC KEL 2140 A ...
Silicon carbide SiC-COOL									
5	15	-	953822	-	953839	-	40,000	50	PC KEL 0515 SiC-COOL ...
11	25	-	953846	-	953853	-	20,000	50	PC KEL 1125 SiC-COOL ...
16	32	-	953891	-	953907	-	12,000	50	PC KEL 1632 SiC-COOL ...
21	40	-	953914	-	953921	-	9,500	50	PC KEL 2140 SiC-COOL ...
Ceramic oxide grain CO-COOL									
5	15	-	954140	954263	-	-	40,000	50	PC KEL 0515 CO-COOL ...
11	25	-	954164	954188	-	-	20,000	50	PC KEL 1125 CO-COOL ...
16	32	-	954195	954218	-	-	12,000	50	PC KEL 1632 CO-COOL ...
21	40	-	954225	954232	-	-	9,500	50	PC KEL 2140 CO-COOL ...

PCT, shape KEL



Abrasive cap holders PCT KEL

Matching POLICAP abrasive cap holder in conical shape with radius end KEL (previously shape L).

D [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM		Description
5	15	6	40	147283	95,000	5	PCT KEL 0515/6
11	25	6	40	147290	40,000	5	PCT KEL 1125/6
16	32	6	40	147306	30,000	5	PCT KEL 1632/6
21	40	6	40	147313	20,000	5	PCT KEL 2140/6

Set PCS 650

Set of various POLICAP abrasive caps with matching holder.



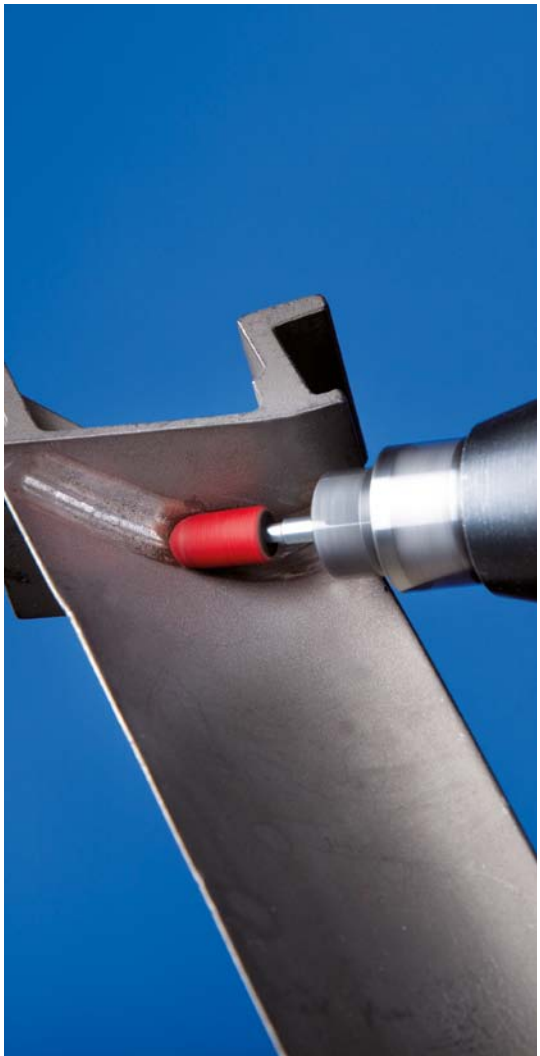
Contents:
- 10 pcs. each of POLICAP abrasive caps PC ZYA 1626 A and PC WKG 1626 A (grit size 150 and 280)
- 25 pcs. each of POLICAP abrasive caps PC ZYA 1015 A, PC ZYA 1317 A, PC WKG 1015 A and PC WKG 1317 A (grit size 150 and 280)
- 50 pcs. each of POLICAP abrasive caps PC ZYA 0510 A, PC ZYA 0712 A, PC WKG 0511 A and PC WKG 0713 A (grit size 150 and 280)
- 1 pc. each of POLICAP abrasive cap holder PCT ZYA 0510/3, PCT ZYA 0712/3, PCT ZYA 1015/3, PCT ZYA 1317/6, PCT ZYA 1626/6, PCT WKG 0511/3, PCT WKG 0713/3, PCT WKG 1015/3, PCT WKG 1317/6 and PCT WKG 1626/6

Advantages:
- Sturdy, reusable plastic packaging.

Abrasive:
Aluminium oxide A
Grit size colour code:
150 = black
280 = red-brown

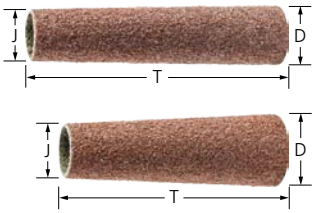
Shape	L x B x H [mm]	EAN 4007220		Description
ZYA, WKG	332 x 235 x 50	355435	1	SET PCS 650







POLICAP
PCH, conical shape



Abrasive cones PCH

POLICAP abrasive cones with a conical shape.

Abrasive:
Aluminium oxide A
Grit size colour code:
60 = brown
150 = black
280 = red-brown

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	J [mm]	T [mm]	Grit size 60	Grit size 150	Grit size 280	Opt. RPM	Suitable arbors		Description
			EAN 4007220						
7	5	85	151358	151365	151372	12,000	PCT 0585	10	PCH 070585 L A …
14	11	85	151389	151396	-	12,000	PCT 1185	10	PCH 141185 L A …
20	16	85	151419	151426	-	12,000	PCT 1685	10	PCH 201685 L A …
24	21	85	151440	151457	-	12,000	PCT 2185	10	PCH 242185 L A …
20	15	65	151471	151488	-	18,500	GK 201463	10	PCH 201565 L A …
36	22	65	151532	-	-	13,000	GK 362260	10	PCH 362265 L A …

PCT, shape KEL



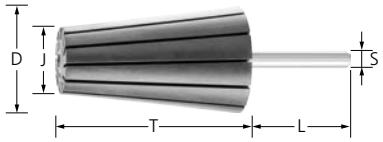
Rubber abrasive cone holders PCT KEL

Matching POLICAP rubber abrasive cone holder in conical shape with radius end KEL (previously shape L).

Advantages:
- The abrasive spiral bands are firmly held in place on the holder as the rubber surface offers excellent adhesion.

D [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM		Description
8	85	6	40	147320	20,000	5	PCT KEL 0585/6
13	85	6	40	147337	15,000	5	PCT KEL 1185/6
18	85	6	40	147344	13,000	5	PCT KEL 1685/6
23	85	6	30	147351	12,000	5	PCT KEL 2185/6

GK, conical shape



Rubber drum holders GK

Matching POLICAP rubber drum holder with a conical shape.

Advantages:
- The abrasive spiral bands are firmly held in place on the holder as the holder expands during use.

D [mm]	J [mm]	T [mm]	S [mm]	L [mm]	EAN 4007220	Max. RPM	Minimum rotational speed [RPM]		Description
20	14	63	6	40	147078	26,000	19,000	5	GK 201463/6
36	22	60	6	40	147092	15,900	10,000	5	GK 362260/6

On mounted flap wheels, the flaps made of coated abrasive are arranged radially around the tool axis in a fan-type structure. Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 3919, mounted flap wheels are designated as "flap wheels with shaft".

Factors that influence working results:

- **Tool wear and thermal load:**
  Tool wear and the thermal load of the workpiece are reduced by decreasing the contact pressure and peripheral speed, and adding grinding oil.
- **Stock removal:**
  Stock removal rate should be increased by using a coarser granulation and not by increasing the contact pressure. This avoids unnecessary tool wear and prevents the thermal load of the workpiece.
- **Surface roughness:**
  Increasing the cutting speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Consistently high stock removal throughout the entire tool life as new, aggressive abrasive material is constantly freed up.
- Face-down use very close to edges and in corners is possible thanks to the flat, moulded-core design.

Applications:

- Levelling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**155455**
  F 6030/6 A **120**
- **Ordering example explanation:**
  F = Mounted flap wheel
  6030 = Outer diameter D x width T [mm]
  6 = Shank diameter S_d [mm]
  A = Abrasive
  120 = Grit size

Safety notes:

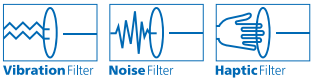
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.
- Safety is only guaranteed when:
  - The clamping length is at least 15 mm.
  - The specified maximum rotational speed is not exceeded with unsupported shank lengths.

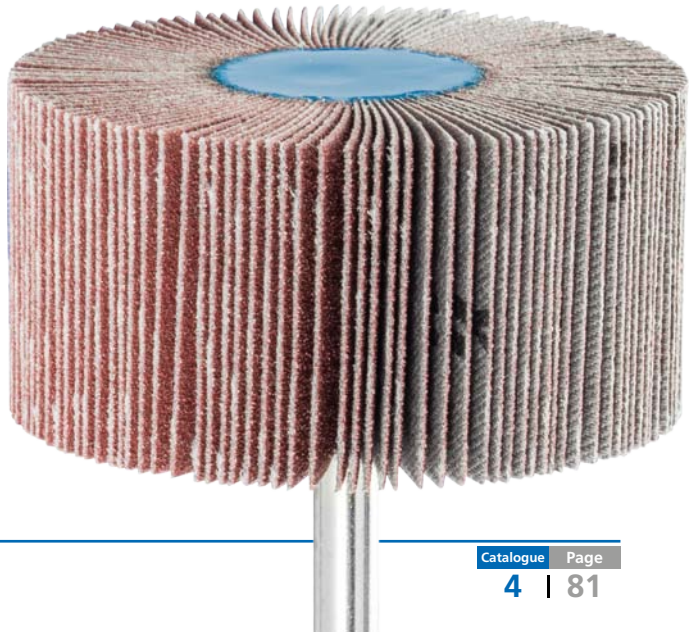




PFERDVALUE:

PFERDERGONOMICS recommends mounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.





The fast way to the best tool

Material group ▼		Abrasive ▶	Aluminium oxide A	Zirconia alumina Z-COOL	Ceramic oxide grain CO-COOL	Silicon carbide SiC-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	❍	❍	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	❍	●	●	
Stain-less steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels		●	●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	❍			●
		Brass, copper, zinc	●	❍	❍	
	Hard non-ferrous metals	Hard aluminium alloys	❍			●
		Bronze, titanium		❍	❍	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		❍	●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	●	❍	●	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork	❍			●

● = Highly suitable ❍ = Suitable

Recommended rotational speed range

Example:
F 6030/6 A 120
Cutting speed: 15–20 m/s
Rotational speed: 4,700–6,300 RPM

Tool dia. [mm]	Cutting speed [m/s]		
	15	20	40
	Rotational speeds [RPM]		
10	28,600	38,100	76,300
15	19,000	25,400	50,900
20	14,300	19,000	38,100
25	11,400	15,200	30,500
30	9,500	12,700	25,400
40	7,100	9,500	19,000
50	5,700	7,600	15,200
60	4,700	6,300	12,700
80	3,500	4,700	9,500



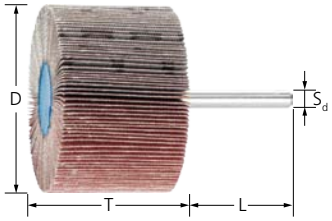
Aluminium oxide A type

For universal applications from coarse to fine grinding.

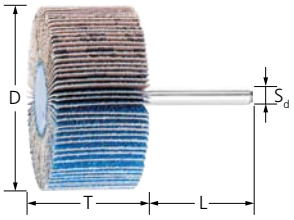
Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter | Noise Filter | Haptic Filter



D [mm]	T [mm]	Grit size 40	60	80	120	150	180	240	320	400	Opt. RPM	Max. RPM		Description
		EAN 4007220												
Shank dia. 3 x 40 mm [S_d x L]														
10	10	-	661529	661635	661642	661659	661673	-	661680	-	38,000	75,000	10	F 1010/3 A ...
	15	-	661697	661703	661710	661727	661734	-	661741	-	38,000	75,000	10	F 1015/3 A ...
15	5	-	661758	661765	661772	661796	661802	-	661819	-	25,000	50,000	10	F 1505/3 A ...
	10	-	661871	661918	661925	661932	661963	-	661987	-	25,000	50,000	10	F 1510/3 A ...
	15	-	661994	662014	662038	662045	662052	-	662069	-	25,000	50,000	10	F 1515/3 A ...
20	10	-	-	336892	154113	154120	292563	378663	378670	-	19,000	38,100	10	F 2010/3 A ...
30	5	-	154137	154151	154175	154199	292693	154212	154236	-	12,000	25,400	10	F 3005/3 A ...
	10	-	154250	154274	154298	154311	292716	154335	154359	-	12,000	25,400	10	F 3010/3 A ...
Shank dia. 6 x 40 mm [S_d x L]														
20	10	-	235478	292594	292617	292624	292631	-	-	-	19,000	38,100	10	F 2010/6 A ...
25	10	-	-	536896	536902	-	536919	-	-	-	15,000	30,500	10	F 2510/6 A ...
	15	-	-	154557	154564	154571	292648	-	-	-	15,000	30,500	10	F 2515/6 A ...
	20	-	-	536926	536933	-	536940	-	-	-	15,000	30,500	10	F 2520/6 A ...
	25	-	557440	292655	292662	292679	292686	-	-	-	15,000	30,500	10	F 2525/6 A ...
30	3	-	-	950838	950845	950852	950869	950876	950883	-	12,000	25,400	10	F 3003/6 A ...
	5	-	154144	154168	154182	154205	292709	154229	154243	-	12,000	25,400	10	F 3005/6 A ...
	10	-	154267	154281	154304	154328	292723	154342	154366	533017	12,000	25,400	10	F 3010/6 A ...
	15	-	154687	154694	154700	154717	292730	154724	154731	-	12,000	25,400	10	F 3015/6 A ...
	20	035153	035160	-	-	035177	035184	035191	035207	-	12,000	25,400	10	F 3020/6 A ...
	30	-	292747	292754	292761	292778	292785	292792	292808	-	12,000	25,400	10	F 3030/6 A ...
40	10	-	154373	154380	154403	154410	292815	154427	-	-	9,600	19,100	10	F 4010/6 A ...
	15	-	154441	154458	154465	154489	292822	154496	154519	-	9,600	19,100	10	F 4015/6 A ...
	20	800607	154625	154632	154649	154656	292839	154663	-	-	9,600	19,100	10	F 4020/6 A ...
50	5	-	950968	951019	951026	951033	951040	951057	951064	-	7,000	15,200	10	F 5005/6 A ...
	10	-	155189	155196	155202	155219	292846	155226	155233	-	7,000	15,200	10	F 5010/6 A ...
	15	-	155240	155257	155264	155271	292853	155288	155295	-	7,000	15,200	10	F 5015/6 A ...
	20	-	155127	155134	155141	155158	292860	-	155172	-	7,000	15,200	10	F 5020/6 A ...
	30	800591	155066	155073	155080	155097	292877	155103	155110	-	7,000	15,200	10	F 5030/6 A ...
60	5	-	951071	951088	951095	951101	951118	951125	951132	-	6,300	12,700	10	F 6005/6 A ...
	15	-	155301	155318	155325	155332	-	155349	155356	-	6,300	12,700	10	F 6015/6 A ...
	20	-	155363	155370	155387	155394	-	155400	155417	-	6,300	12,700	10	F 6020/6 A ...
	30	155424	155431	155448	155455	155462	292907	155479	155486	533024	6,300	12,700	10	F 6030/6 A ...
	40	-	155493	155509	155516	155523	-	155530	-	-	6,300	12,700	10	F 6040/6 A ...
	50	155554	155561	155578	155585	155592	-	155608	155615	-	6,300	12,700	10	F 6050/6 A ...
80	5	-	549780	373743	463062	403396	958889	102114	102121	-	4,800	9,500	10	F 8005/6 A ...
	10	-	422120	262184	422137	065877	065907	065914	048412	-	4,800	9,500	10	F 8010/6 A ...
	15	-	155622	155639	155646	155653	-	-	-	-	4,800	9,500	10	F 8015/6 A ...
	20	-	155684	155691	155707	155714	-	-	-	-	4,800	9,500	10	F 8020/6 A ...
	30	155745	155752	155769	155776	155783	-	155790	155806	-	4,800	9,500	10	F 8030/6 A ...
	40	-	155813	155820	155837	155844	-	155851	-	-	4,800	9,500	10	F 8040/6 A ...
	50	155875	155882	155899	155905	155912	-	155929	155936	-	4,800	9,500	10	F 8050/6 A ...



Zirconia alumina Z-COOL type

For coarse grinding work with a high stock removal rate and cool grinding.

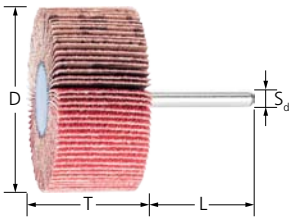
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Zirconia alumina Z-COOL

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Grit size 60	Grit size 80	Opt. RPM	Max. RPM		Description
		EAN 4007220					
Shank dia. 6 x 40 mm [S_d x L]							
30	20	297353	297360	12,000	25,400	10	F 3020/6 Z-COOL ...
40	20	297377	297384	9,600	19,100	10	F 4020/6 Z-COOL ...
50	20	297391	297407	7,000	15,200	10	F 5020/6 Z-COOL ...
60	30	297414	297421	6,300	12,700	10	F 6030/6 Z-COOL ...
80	50	297438	297445	4,800	9,500	10	F 8050/6 Z-COOL ...



Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Abrasive:
Ceramic oxide grain CO-COOL

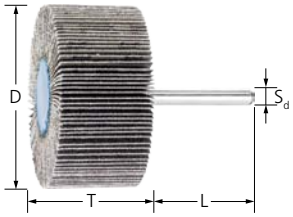
Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Grit size 40	Grit size 60	Grit size 80	Grit size 120	Opt. RPM	Max. RPM		Description
		EAN 4007220							
Shank dia. 6 x 40 mm [S_d x L]									
20	10	-	065938	884751	884775	19,000	38,100	10	F 2010/6 CO-COOL ...
30	10	803738	803745	803752	803769	12,000	25,400	10	F 3010/6 CO-COOL ...
	15	803776	803783	803790	803806	12,000	25,400	10	F 3015/6 CO-COOL ...
	20	035009	035016	035023	962046	12,000	25,400	10	F 3020/6 CO-COOL ...
40	20	803813	803820	803837	803844	9,600	19,100	10	F 4020/6 CO-COOL ...
50	30	803868	803875	803899	803882	7,000	15,200	10	F 5030/6 CO-COOL ...
60	15	065945	065952	000137	065969	6,300	12,700	10	F 6015/6 CO-COOL ...
	30	803905	803912	803929	803936	6,300	12,700	10	F 6030/6 CO-COOL ...



Silicon carbide SiC type



For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.
Particularly recommended for use on titanium alloys.
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

Abrasive:
Silicon carbide SiC

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Grit size 60	80	120	150	Opt. RPM	Max. RPM		Description
		EAN 4007220							
Shank dia. 6 x 40 mm [S_d x L]									
20	10	102145	102176	102183	102206	19,000	38,100	10	F 2010/6 SiC ...
30	10	154588	154595	154601	154618	12,000	25,400	10	F 3010/6 SiC ...
	15	102213	102220	102268	102275	12,000	25,400	10	F 3015/6 SiC ...
	20	102299	102343	102367	102398	12,000	25,400	10	F 3020/6 SiC ...
40	20	102411	102442	102459	102480	9,600	19,100	10	F 4020/6 SiC ...
50	30	102510	102572	102626	102633	7,000	15,200	10	F 5030/6 SiC ...
60	15	102657	102664	102701	102718	6,300	12,700	10	F 6015/6 SiC ...
	30	155943	155950	155967	155974	6,300	12,700	10	F 6030/6 SiC ...

Mounted flap wheel set

FSO



Set of different mounted flap wheels in the aluminium oxide A type with a shank diameter of 6 mm.

Contents:
5 pcs. each of mounted flap wheels:
- F 4015/6 A 80
- F 4015/6 A 120
- F 5015/6 A 60
- F 5015/6 A 80
- F 6030/6 A 60
- F 6040/6 A 80
- F 6040/6 A 150
- F 8030/6 A 60

Advantages:
- Getting to know and testing the comprehensive range.
- Coordinated selection of the most common versions.
- Promotional display box.

Abrasive:
Aluminium oxide A

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

L x B x H [mm]	EAN 4007220		Description
240 x 145 x 240	156087	1	FSO 5400



Flap tools
Unmounted flap wheels

On unmounted flap wheels, the flaps made of coated abrasive are arranged radially around the tool axis in a fan-type structure.
Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 5429, unmounted flap wheels are designated as "flap wheels".

Factors that influence working results:

- **Tool wear and thermal load:**
  Tool wear and the thermal load of the workpiece are reduced by decreasing the contact pressure and peripheral speed, and adding grinding oil.
- **Stock removal:**
  Stock removal rate should be increased by using a coarser granulation and not by increasing the contact pressure. This avoids unnecessary tool wear and prevents the thermal load of the workpiece.
- **Surface roughness:**
  Increasing the cutting speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Consistently high stock removal throughout the entire tool life as new, aggressive abrasive material is constantly freed up.
- Face-down use very close to edges and in corners is possible thanks to the special clamping system.

Applications:

- Levelling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–30 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.
- For best performance, use a tool drive with 1,000–1,500 watts.

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**469040**
  FR 10030/25,4 A **40**
- **Ordering example explanation:**
  FR = Unmounted flap wheels
  10030 = Outer diameter D x width T [mm]
  25,4 = Centre hole diameter H [mm]
  A = Abrasive
  40 = Grit size

Safety notes:

- Unmounted flap wheels are generally to be used with the matching clamping flanges.
- The maximum permitted peripheral speed is defined as follows:
  - Unmounted flap wheels = 50 m/s
  - Unmounted flap wheels for angle grinders = 80 m/s
  - Flap drums = 32 m/s
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

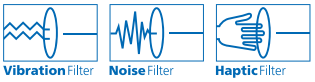


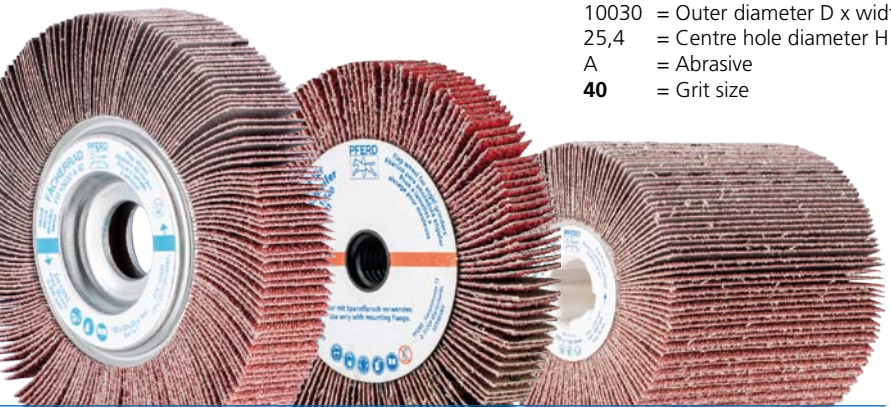
Accessories:

- Arbors with clamping flange
- Reducing flanges for unmounted flap wheels

PFERDVALUE:

PFERDERGONOMICS recommends unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.





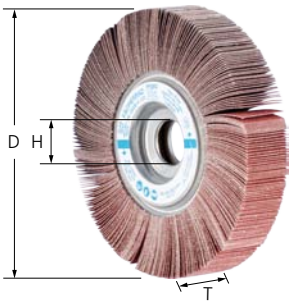
Recommended rotational speed range

Example:
FR 16550/25,4 A 80
Cutting speed: 15–30 m/s
Rotational speed: 1,700–3,400 RPM

Tool dia. [mm]	Cutting speed [m/s]						
	15	20	25	30	40	50	80
	Rotational speeds [RPM]						
100	2,800	3,800	4,700	5,700	7,600	9,500	15,200
115	2,400	3,300	4,100	4,900	6,600	8,300	13,200
125	2,200	3,000	3,800	4,500	6,100	7,600	12,200
150	1,900	2,500	3,100	3,800	5,000	6,300	10,100
165	1,700	2,300	2,800	3,400	4,600	5,700	9,200
200	1,400	1,900	2,300	2,800	3,800	4,700	7,600
250	1,100	1,500	1,900	2,200	3,000	3,800	6,100

Aluminium oxide A type

For universal applications from coarse to fine grinding.



Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Matching arbor for a diameter of 100, 150 and 165 mm:
  FR/VR 12/25,4 (EAN 4007220479643)
- Matching arbor for a diameter of 200 mm and 250 mm:
  FR/VR 12/44,0 (EAN 4007220479650)
- Please complete the description with the desired grit size.

PFERDVALUE:

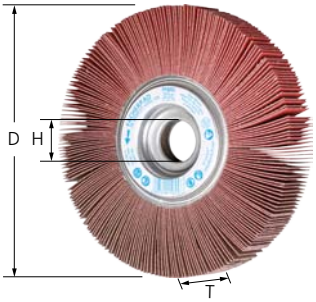


D [mm]	T [mm]	H [mm]	Grit size							Opt. RPM	Max. RPM		Description
			40	60	80	120	150	240	320				
			EAN 4007220										
100	30	25.4	469040	469057	469071	469095	-	-	-	5,500	9,500	2	FR 10030/25,4 A ...
	50	25.4	469187	469194	469224	469231	-	-	-	5,500	9,500	2	FR 10050/25,4 A ...
150	30	25.4	296851	296868	296875	296882	296899	-	-	3,500	6,300	2	FR 15030/25,4 A ...
	50	25.4	296905	296912	296929	296936	296943	469699	-	3,500	6,300	2	FR 15050/25,4 A ...
165	30	25.4	470091	470107	470114	470121	470138	469941	-	3,200	5,700	2	FR 16530/25,4 A ...
	50	25.4	469767	469781	469804	469811	469835	469842	469859	3,200	5,700	2	FR 16550/25,4 A ...
200	30	44	-	469606	469613	469637	-	469675	-	2,600	4,700	2	FR 20030/44,0 A ...
	50	44	-	469262	469286	469309	469323	469347	-	2,600	4,700	2	FR 20050/44,0 A ...
250	50	44	-	469064	469088	469101	469132	469156	469170	2,100	3,800	1	FR 25050/44,0 A ...

Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.



Abrasive:
Ceramic oxide grain CO-COOL

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Matching arbor for a diameter of 150 and 165 mm:
  FR/VR 12/25,4 (EAN 4007220479643)
- Please complete the description with the desired grit size.

PFERDVALUE:



D [mm]	T [mm]	H [mm]	Grit size				Opt. RPM	Max. RPM		Description
			40	60	80	120				
			EAN 4007220							
150	30	25.4	104859	104873	104880	104903	3,500	6,300	2	FR 15030/25,4 CO-COOL ...
	50	25.4	105467	105474	105481	105498	3,500	6,300	2	FR 15050/25,4 CO-COOL ...
165	30	25.4	105504	105511	105528	105535	3,200	5,700	2	FR 16530/25,4 CO-COOL ...
	50	25.4	105542	105559	105566	105573	3,200	5,700	2	FR 16550/25,4 CO-COOL ...



SET FR

Set with high-output electric straight grinder and PFERD tools for cleaning, brush matting and very fine grinding of medium-sized and large surfaces, in particular on stainless steel (INOX) components. Ideal for universal grinding work, in particular during assembly work.

Contents:
1 pc. each of:
- Electric straight grinder UGER 15/60 SI with electronic rotational speed control (2,800–5,900 RPM)
- Collet with diameter 6, 8 and 12 mm
- Unmounted flap wheel FR 15030 A-COOL 60
- Unmounted flap wheel FR 15030 A-COOL 120
- POLINOX mounted flap wheel PNL 15050 A 100
- Arbor FR/VR 12/25,4 100-165
- Arbor PCLB 8/13/26

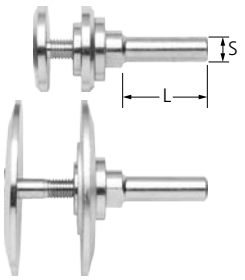
2 pcs. each of:
- POLICLEAN wheels PCLS 15013/13

Advantages:
- Optimal, stepless rotational speed regulation for the use of unmounted flap wheels and POLINOX wheels.
- Coordinated selection of the most common versions.

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

D [mm]	L x B x H [mm]	EAN 4007220		Description
150	587 x 285 x 162	777350	1	SET FR 15030 UGER 15/60 230 V

Arbors FR/VR



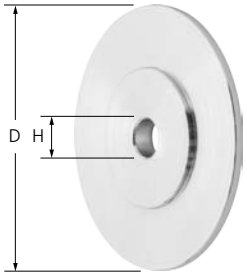
Type with clamping flange

For mounting PFERD unmounted flap wheels.
The clamping flanges are designed to lie countersunk in the tool.

Advantages:
- Can be used face-down very close to edges and in angles thanks to special clamping system.

Ordering notes:
- Included in delivery: Arbor, clamping diameter of 12 mm, 2 flanges and matching screws (for different unmounted flap wheel widths).
- We manufacture arbors with morse cones on request.

Suitable for tool dia. [mm]	Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
100, 150, 165	25.4	12	40	25–50	479643	1	FR/VR 12/25,4 100-165
200, 250	44	12	40	25–50	479650	1	FR/VR 12/44,0 200-250



Reducing flanges for unmounted flap wheels

For mounting unmounted flap wheels and POLINOX unmounted flap wheels on drive spindles.
The clamping flanges are designed to lie countersunk in the tool.

Advantages:
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles thanks to special clamping system.

Ordering notes:
- Included in delivery: 1 pair

Suitable for tool dia. [mm]	D [mm]	H [mm]	Max. H [mm]	EAN 4007220		Description
150, 165	40	12	22.2	509876	1	RF FR 150-165 Bo. 12-22,2
200, 250	83	12	40	498460	1	RF FR 200-250 Bo. 12-40

Aluminium oxide A type



The ideal tool for use on angle grinders in assembly shop operations.
For universal applications from coarse to fine grinding.

Advantages:
- Can be mounted directly on the angle grinder without additional clamping devices.

Abrasive:
Aluminium oxide A

Recommendations for use:
- For the best results, use at a recommended cutting speed of 40–50 m/s.

Matching tool drives:
angle grinder, cordless angle grinder

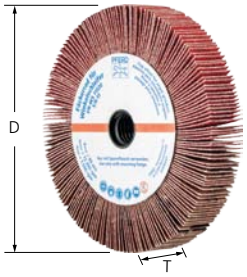
Ordering notes:
- Please complete the description with the desired grit size.

Safety notes:
- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Thread	Grit size							Opt. RPM	Max. RPM		Description
			40	60	80	120	180	240	320				
			EAN 4007220										
115	20	M14	752364	752388	752395	752401	023617	023624	023631	7,500	13,300	2	FR WS 11520 M14 A ...
		5/8-11	759417	759424	759431	759448	023679	023686	023693	7,500	13,300	2	FR WS 11520 5/8-11 A ...
125	20	M14	752418	752425	752432	752449	023648	023655	023662	6,850	12,200	2	FR WS 12520 M14 A ...
		5/8-11	847688	847701	847718	847725	023709	023716	023723	6,850	12,200	2	FR WS 12520 5/8-11 A ...

Ceramic oxide grain CO-COOL type



The ideal tool for use on angle grinders in assembly shop operations.
For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Advantages:
- Can be mounted directly on the angle grinder without additional clamping devices.

Abrasive:
Ceramic oxide grain CO-COOL

Recommendations for use:
- For the best results, use at a recommended cutting speed of 40–50 m/s.

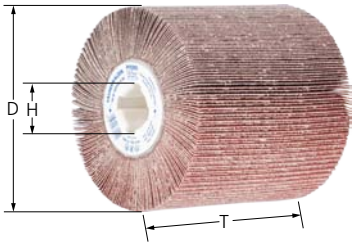
Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired grit size.

Safety notes:
- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Thread	Grit size				Opt. RPM	Max. RPM		Description
			40	60	80	120				
			EAN 4007220							
115	20	M14	025611	025635	025642	025659	7,500	13,300	2	FR WS 11520 M14 CO-COOL ...
		5/8-11	025697	025703	025710	025727	7,500	13,300	2	FR WS 11520 5/8-11 CO-COOL ...
125	20	M14	025628	025666	025673	025680	6,850	12,200	2	FR WS 12520 M14 CO-COOL ...
		5/8-11	025734	025741	025765	025789	6,850	12,200	2	FR WS 12520 5/8-11 CO-COOL ...



FR-W type

Can be used for universal work on medium-sized and large metallic surfaces, e.g. fine grinding work on large radii in container, kitchen and apparatus construction, and achieving homogeneous finishes (grinding patterns) on large surfaces and contours in manual applications.

Suitable for all conventional keyway systems.

Abrasive:
Aluminium oxide A

Recommendations for use:
- For the best results, use at a recommended cutting speed of 15–30 m/s.

Matching tool drives:
drum grinders

Ordering notes:
- The centre hole diameter of 19 mm with 4 wedge keyways fits on all conventional drum drives.
- Other drum tools can be found on pages 116–117 of this catalogue and in catalogue section 8.
- Please complete the description with the desired grit size.

PFERDVALUE:

Vibration Filter | Noise Filter | Haptic Filter

D [mm]	T [mm]	H [mm]	Grit size						Opt. RPM	Max. RPM		Description
			40	60	80	120	150	180				
			EAN 4007220									
100	100	19	770498	770504	770511	770528	770535	770542	3,800	6,100	1	FR-W 100100 A ...

Drums, set FR-W



SET FR-W

Set with high-output electric grinding drum drive and PFERD tools for cleaning, brush matting and very fine grinding of large surfaces on stainless steel (INOX) components.

Contents:
1 pc. each of:
- Electric grinding drum drive UWER 15/40 A-SI D19 with electronic rotational speed control (900–3,500 RPM)
- Flap drum FR-W 100100 A 80
- POLINOX grinding drum PNL-W 100100 A 180
- Three empty storage compartments provide space for further drum tools from the PFERD range.

Advantages:
- Optimal, stepless rotational speed regulation for the use of unmounted flap wheels and POLINOX drums.
- Coordinated selection of the most common versions.

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.
- Different types of wheel brushes for burnishing machines can be found in catalogue section 8.

D [mm]	L x B x H [mm]	EAN 4007220		Description
100	594 x 561 x 161	777299	1	SET FR-W 100100 UWER 15/40 230 V



POLIFLAP tools are ideal for blending and restoring surface textures, fine grinding of radii, contours, curved areas or large surfaces.

Safety notes:

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

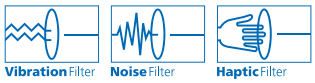


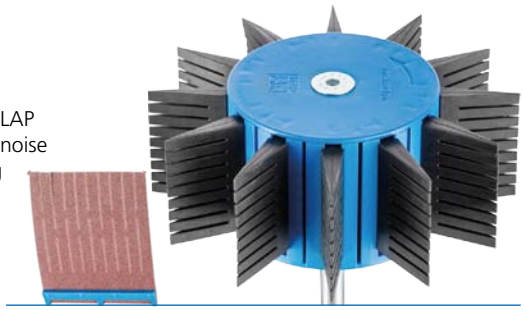
Accessories:

- POLIFLAP abrasive flaps
- POLIFLAP rubber flaps

PFERDVALUE:

PFERDERGONOMICS recommends POLIFLAP tools to sustainably reduce vibration and noise levels during use and to improve working comfort.

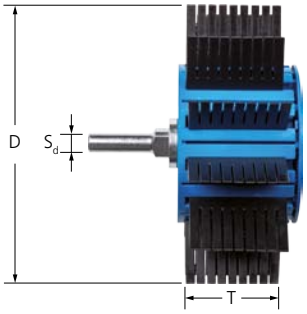




POLIFLAP tools

Grinding wheel PFL

The grinding wheel consists of a shank-mounted support and rubber flaps. It must be completed with appropriate abrasive flaps.
The combination and arrangement of the abrasive and rubber flaps results in a highly flexible tool.



Advantages:
- Optimal harmonization of different surface structures.
- Creates a consistently high surface quality over the entire tool life as new, sharp abrasive is steadily released.
- Comfortable to use thanks to particularly lightweight design.

Recommendations for use:
- For optimum results on stainless steel (INOX), use at a rotational speed between 1,400–1,700 RPM.
- In the event of excessive wear, we recommend replacing the flaps early.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Supplied without abrasive flaps. Please order abrasive flaps separately in the desired grit size.

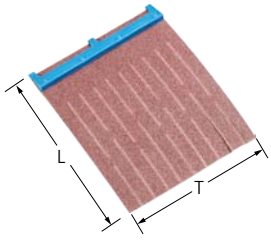
PFERDVALUE:



D [mm]	T [mm]	S_d [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
170	60	12	725405	1,500	3,500	1	PFL 17060/12

Abrasive flaps PFL-SL

Abrasive flaps suitable for POLIFLAP grinding wheels, for achieving visual effects ranging from coarse to very fine.

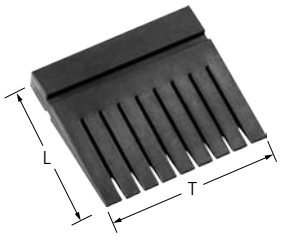


Advantages:
- Comfortable to use as easy to replace once worn.

Abrasive:
Aluminium oxide A

Ordering notes:
- The packaging unit corresponds to a complete POLIFLAP grinding wheel.
- Please complete the description with the desired grit size.

L [mm]	T [mm]	Grit size									Description
		60	80	100	120	150	180	220	320		
		EAN 4007220									
75	60	725276	725283	725290	725306	725313	725320	725337	725344	12	PFL-SL A ...



Rubber flaps PFL-GL

Rubber flaps to match the POLIFLAP grinding wheel. They lie between the abrasive flaps, and support the abrasive effect and the flexibility of the tool.

Advantages:
- Comfortable to use as easy to replace once worn.

Ordering notes:
- The packaging unit corresponds to a complete POLIFLAP grinding wheel.

L [mm]	T [mm]	EAN 4007220		Description
50	55	725412	12	PFL-GL

POLIFLAP, set PFL



SET PFL

Set with high-output electric straight grinder and PFERD tools for brush matting and for pattern blending on medium-sized and large surfaces on stainless steel (INOX) components.

Contents:
1 pc. each of:
- Electric straight grinder UGER 15/30 SI with electronic rotational speed control (750–3,000 RPM)
- Collet with diameter 6, 8 and 12 mm
- Hexagon socket wrench, 6 mm
- POLIFLAP grinding wheel PFL 17060/12 with abrasive flaps PFL-SL (grit sizes A 60, A 80, A 100, A 120, A 150, A 180, A 220, A 320)
- POLINOX mounted flap wheel PNG 10050/6 SiC 180
- Poliflex fine grinding point PF ZY 10030/8 CU 16 PU-STRUC

2 pcs. each of:
- Single-head spanner SW 22

Advantages:
- Optimal, stepless rotational speed regulation for the use of POLIFLAP tools.
- Coordinated selection of the most common versions.

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

D [mm]	L x B x H [mm]	EAN 4007220		Description
170	594 x 561 x 161	777343	1	SET PFL 17060 UGER 15/30 SI 230 V



Overlap slotted discs are ideally suited to side grinding.

Safety notes:

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

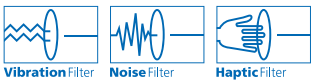


Accessories:

- Arbors for overlap slotted discs

PFERDVALUE:

PFERDERGONOMICS recommends overlap slotted discs to sustainably reduce vibration and noise levels during use and to improve working comfort.





Overlap slotted discs KS

KS type

Special tool for side grinding in grooves, fillets and slots. They are mounted via a central threaded hub.



Advantages:
- Hard-to-reach areas can be accessed as the tool provides abrasive action on its top and bottom sides.
- High economic efficiency as the tool can be changed quickly.

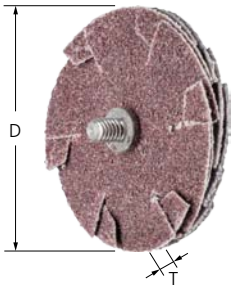
Abrasive:
Aluminium oxide A

Recommendations for use:
- Hold the tool at an angle to grind with both disc sides.

Ordering notes:
- Please order the matching arbor separately.

PFERDVALUE:





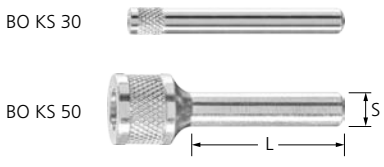
D [mm]	T [mm]	Grit size	No. of layers	EAN 4007220	Opt. RPM	Max. RPM	Suitable arbors		Description
30	5	80	4	152706	6,500	12,000	BO KS 30	20	KS 30-4 A 80
50	5	80	4	152768	4,000	8,000	BO KS 50	20	KS 50-4 A 80

Arbors for overlap slotted discs BO KS

BO KS type

Matching arbor for overlap slotted discs.

Advantages:
- Reduced set-up work as the overlap slotted discs can be changed without unclamping the arbor from the collet.



Suitable for	S [mm]	L [mm]	Thread	EAN 4007220		Description
KS 30-4 A 80	6	40	1/8 BSW	152164	1	BO KS 30
KS 50-4 A 80	6	40	1/4–28 UNF	152157	1	BO KS 50

Flap tools
General information – POLISTAR

POLISTAR flexible tools have been especially developed for work on the inner surfaces of holes and pipes.

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Most effective work on small inner diameters, particularly in the range of 7–40 mm, due to tool dimensions.

Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s.
- POLISTAR products can be stacked in several layers. Arrange so that the layers are offset to ensure that the abrasive is applied as effectively as possible.
  - PST 20/1,6 for centre hole dia. 7–15 mm
  - PST 30/1,6 for centre hole dia. 10–20 mm
  - PST 40/3 for centre hole dia. 15–25 mm
  - PST 50/3 for centre hole dia. 20–40 mm

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- Please order arbors separately.
- POLISTAR products are supplied in sheets. Sheet contents:
  Dia. 20 and 30 mm = 25 pcs.
  Dia. 40 and 50 mm = 10 pcs

Safety notes:

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

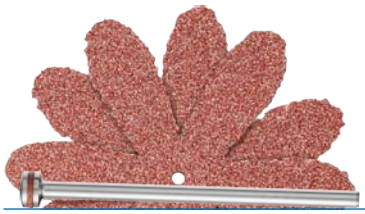
Accessories:

- Arbors for POLISTAR and POLISTAR-TUBE

PFERDVALUE:

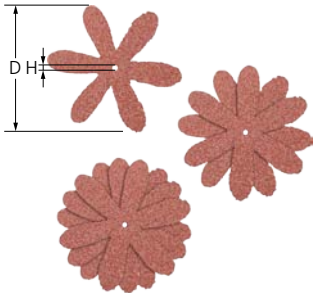
PFERDERGONOMICS recommends POLISTAR to sustainably reduce vibration and noise levels during use and to improve working comfort.

Vibration Filter | Noise Filter | Haptic Filter





POLISTAR



PST type

The flexible tools are particularly suitable for work on inner surfaces.

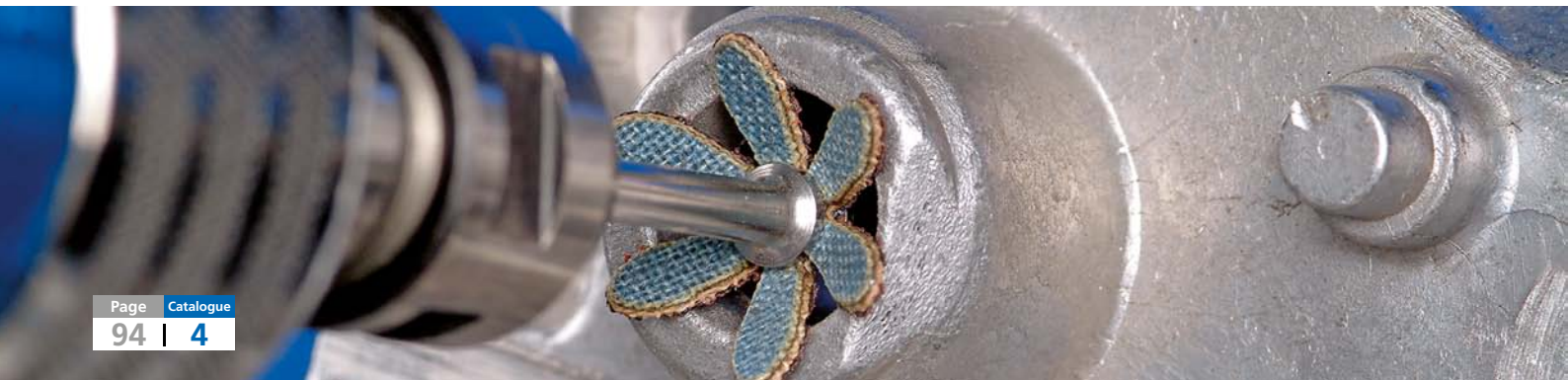
Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Vibration Filter | Noise Filter | Haptic Filter

D [mm]	H [mm]	Grit size 60	Grit size 80	Grit size 120	Opt. RPM	Max. RPM	Suitable arbors		Description
		EAN 4007220							
20	1.6	661345	661444	661451	15,000	38,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PST 20/1,6 A ...
30	1.6	661468	661482	661512	9,500	25,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PST 30/1,6 A ...
40	3	661543	661550	661567	7,200	19,000	BO 6/3 1-6	100	PST 40/3,0 A ...
50	3	661574	661581	661598	5,700	15,000	BO 6/3 1-6	100	PST 50/3,0 A ...



POLISTAR-TUBE are multi-layered tools that are riveted together. They are used especially for working on the inner surfaces of pipes and pipe bends.

They are used in combination with the matching flexible shafts from catalogue section 9:
- For PST-T dia. 50–80 mm – 4 PST-T DIN 10/M4
- For PST-T dia. 90–100 mm – 7 PST-T DIN 10/M5

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- For achieving very fine surface quality grades of up to R_a 0.2 µm.
- Prevention of corrosion formation on stainless steel (INOX) pipes thanks to use of stainless steel rivets.

Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s.
- Select the tool diameter based on the respective pipe's inner diameter:
  - PST-T dia. 50 mm for inner pipe dia. 35–40 mm
  - PST-T dia. 60 mm for inner pipe dia. 40–45 mm
  - PST-T dia. 70 mm for inner pipe dia. 45–50 mm
  - PST-T dia. 80 mm for inner pipe dia. 50–55 mm
  - PST-T dia. 90 mm for inner pipe dia. 55–60 mm
  - PST-T dia. 100 mm for inner pipe dia. 60–65 mm
- Select the appropriate grit size for the desired roughness value:
  - Grit size 60 = 1.0–1.3 µm R_a
  - Grit size 120 = 0.6–1.0 µm R_a
  - Grit size 180 = 0.4–0.6 µm R_a
  - Grit size 240 = 0.3–0.4 µm R_a
  - Grit size 320 = 0.2–0.3 µm R_a

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- Please order arbors separately.
- PST-T with a grit size of 60 are always supplied with 4 layers.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

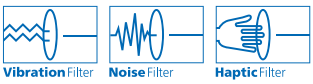


Accessories:

- Arbors for POLISTAR and POLISTAR-TUBE

PFERDVALUE:

PFERDERGONOMICS recommends POLISTAR-TUBE to sustainably reduce vibration and noise levels during use and to improve working comfort.





POLISTAR-TUBE

PST-T type

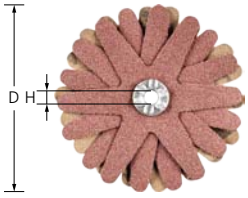
The flexible tools are ideal for use in pipes and pipe bends.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:



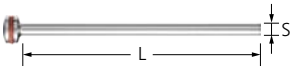


D [mm]	H [mm]	No. of layers [pcs.]	Grit size 60	120	180	240	320	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220									
50	4	6	834398	834404	834411	834435	834442	3,000	7,650	BO 6/4 0-10	10	PST-T 50/4 6 A ...
60	4	6	834596	834718	834725	834732	834749	2,500	6,350	BO 6/4 0-10	10	PST-T 60/4 6 A ...
70	4	6	834756	834763	834770	834787	834794	2,200	5,450	BO 6/4 0-10	10	PST-T 70/4 6 A ...
80	4	6	834800	834817	834824	834831	834848	1,900	4,750	BO 6/4 0-10	10	PST-T 80/4 6 A ...
90	5	8	834855	834862	834879	834886	834893	1,700	4,250	BO 6/5 0-10	10	PST-T 90/5 8 A ...
100	5	8	834909	834916	834923	834947	834954	1,500	3,820	BO 6/5 0-10	10	PST-T 100/5 8 A ...

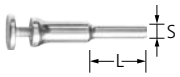


Flap tools
Arbor for POLISTAR and POLISTAR-TUBE

BO 2,3/1,6 1-5
BO 3/1,6 1-5



BO 6/3 1-6
BO 6/4 0-10
BO 6/5 0-10



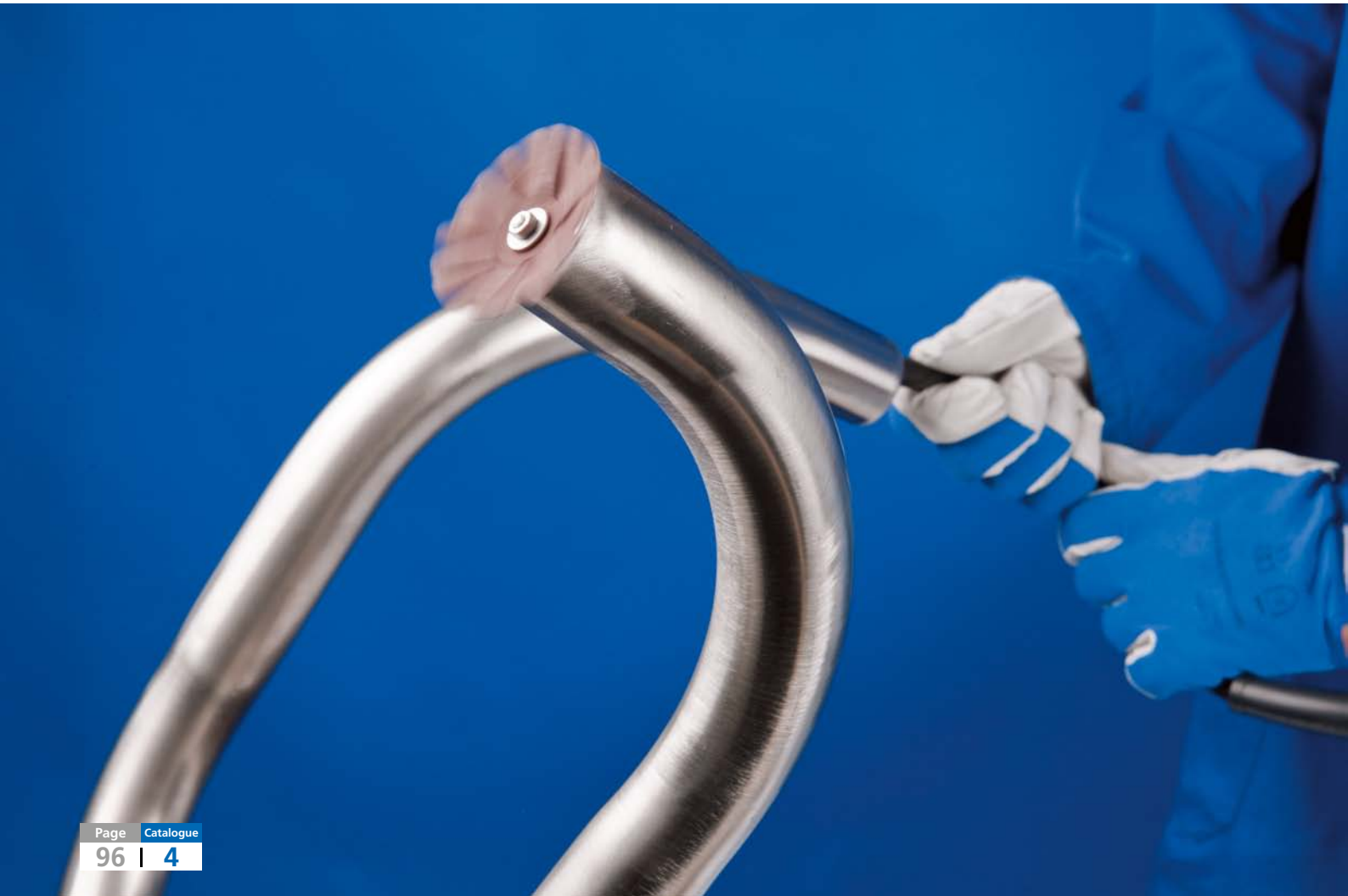
BO type

Matching arbor for POLISTAR and POLISTAR-TUBE.

Advantages:

- High economic efficiency as the tool can be changed quickly.

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
1.6	2.34	43	1–5	151570	10	BO 2,3/1,6 1-5
	3	43	1–5	151587	10	BO 3/1,6 1-5
3	6	40	1–6	505694	1	BO 6/3 1-6
4	6	25	0–10	834343	1	BO 6/4 0-10
5	6	25	0–10	834350	1	BO 6/5 0-10



Grinding tools for work on metallic and non-metallic workpieces are sub-divided into three groups:

- **Bonded abrasives**
  (e.g. grinding discs)
- **Flexible abrasives**
  (e.g. belts, discs, strips, foils) These tools are used for coarse, fine and very fine grinding, in addition to stock removal.
- **Non-woven abrasives**
  This group is primarily designed to realize special surface structures.

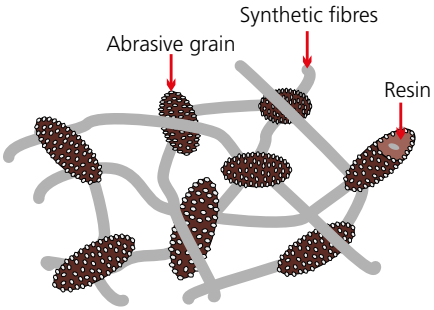
Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grain.

The non-woven fibre structure is impregnated or interspersed with resin and abrasive grain. The very loose connection between the individual fibres ensures a high level of flexibility and gives a strong spring-type effect to the non-woven material. It is flexible and supple, and leaves behind a very distinctive surface structure.

The satin-finished grinding result is unique and cannot be achieved with other abrasives. The consistent distribution of the abrasive grain in the non-woven structure guarantees a continuous supply of new, fresh and sharp abrasive grain throughout the entire grinding application.

Although non-woven abrasives have a completely differently structure to coated abrasives, the same abrasive materials are used for both groups of tools:

- Aluminium oxide (Al_2O_3) is very durable, features an extremely long tool life and has very high aggressiveness on hardened steel. The achieved surface finish is distinguished by its increased shine. Discolouration is prevented when working on aluminium.
- Silicon carbide (SiC) is even sharper, harder and cuts very easily. In no time at all, it produces a finer grinding pattern on the surfaces of many materials which remains slightly matt for a long time.



The user selects a specific grit size for conventionally bonded abrasives or coated abrasives. The designation system for non-woven abrasives is outlined in the following table:

Designation at PFERD	Comparable grit size [mesh]
Very coarse	50– 80
Coarse	80–100
Medium	100–180
Fine	180–220
Very fine	220–400



Use

The use of non-woven abrasives begins where other grinding tools reach their limits or no longer achieve the desired results. The elastic properties of the polyamide fibres and the positive effect of the non-woven abrasives result in finishing tools which produce outstanding results yet work gently.

Non-woven abrasives are water-tight, washable and very durable. They don't clog, leave no rust behind on surfaces and are non-conductive.

Non-woven abrasive can be used to outstanding effect for deburring, cleaning and for work on the surfaces of many metals, including aluminium, brass, copper, nickel, stainless steel (INOX) and titanium. It is also suitable for work on other materials which are difficult to grind, such as ceramic, glass and plastic. Non-woven abrasive can be used for wet or dry grinding.







Non-woven tools

Non-woven abrasives are suitable for manufacturing a wide range of different tools, such as hand pads, drums, discs, belts, points and mounted grinding wheels.

The abrasive properties of these tools are tailored to a variety of applications and represent outstanding solutions for numerous metal machining and processing tasks.

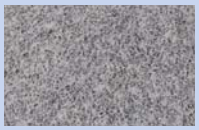
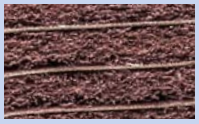
The PFERD range comprises:
- COMBICLICK/COMBIDISC non-woven discs VRW
- Non-woven shop rolls, hand pads
- POLINOX mounted flap wheels, grinding discs, grinding wheels and grinding drums (PNL, PNZ, PNR, PNG, PNST, PNK and PNER)

Additional types
Non-woven abrasive can also be manufactured with a fabric reinforcement. The non-woven abrasive material gains considerably higher aggressiveness and stability as a result.

Fabric-reinforced, non-woven abrasive is suitable for manufacturing discs and non-woven belts.

The PFERD range comprises:
- COMBICLICK/COMBIDISC non-woven discs VRH
- POLIVLIES flap discs and self-adhesive discs
- Short and long belts, non-woven type

PFERD designation

PNER		Thanks to different combinations of compaction, fibres, grain and the appropriate bond, this tool can be used for a wide range of surface finishing applications, from relatively coarse grinding to preparing the surface for polishing.
PNK		The non-woven abrasive is wound around a core and foamed up. The tools can be optimized for a variety of applications by implementing different foam, fibre, grain and bond combinations. The spectrum of application ranges from fine deburring through to preparations for polishing.
PNL		Made of radially arranged flaps of non-woven abrasive material. The flaps are very tightly packed, which achieves a longer tool life. The tool's main area of application is surface work.
PNZ		The non-woven abrasive is arranged in multiple radial flaps, with one abrasive cloth interlayer between each set of flaps. This flap combination facilitates greater stock removal and a coarser surface finish.
PNG		The non-woven abrasive comprises several very wavy strips of non-woven material wound around a core. The wavy structure of the non-woven material permits seamless brush matting of surfaces.
PNR		The non-woven abrasive is arranged in multiple (axial) disc layers. Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.
PNST		The non-woven abrasive is star-shaped and stacked in layers which are connected in the centre. It offers outstanding performance, specifically when used for tight work areas such as holes, recesses and hard-to-reach places.

POLINOX unitized wheels PNER and unitized discs PNER consist of multiple heavily compressed, non-woven layers, which are bonded together by a special grain/resin system.

This particular bond results in non-woven products with a very good surface finish, high stock removal rate and long tool life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys.



Four different types are available:

Type	Colour code	Properties
Soft	W	Soft variant with outstanding adaptability. At the same time, durability, abrasive performance and very high surface quality are all maintained. Ideally suited to machining contours.
Medium-soft	MW	Medium-soft variant with increased edge strength and extended tool life, for tough blending and polishing applications. Well suited to machining contours.
Medium-hard	MH	Medium-hard variant with increased edge strength and extended tool life, for tough deburring and cleaning applications.
Hard	H	Hard variant with very high stock removal rate, good edge strength and long tool life, for tough deburring and polishing applications.

Comparison table

PFERD PNER				3M	Standard Abrasives	Norton	BIBIELLE
Type	Colour code	Abrasive	Grain				
Soft	W	SiC	Fine	EXL 2S fine	532	UW1-2SF or Nex-2SF	BUH 2SF
		A	Coarse	EXL 2A medium	521	UW1-2AM or Nex-2AM	BUH 2AM
Medium-soft	MW	SiC	Fine	EXL 4S fine or SST 3S fine	632	UW1-4SF	BUH 3SF
		A	Fine	EXL 4A fine or SST 3A fine	631	UW1-4AF	-
Medium-hard	MH	A	Fine	Cut & polish 5A fine or SST 5A fine	731	UW1-6AF or Nex-6AF	-
Hard	H	A	Fine	Cut & polish 7A medium or 9A medium	821	UW1-8AM or Nex-8AM	BUH 6AM
		A	Coarse	Cut & polish 7A coarse or 9A coarse	811	UW1-8AC or Nex-8AC	BUH 8AC



Non-woven tools
General information – POLINOX unitized wheels and discs PNER

Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours thanks to free profiling.

Applications:

Cleaning
- Universal cleaning before painting.
- Removal of rust, scratches, coatings, heavy scaling, oxide layers of aluminium and heat discolouration.

Deburring
- Deburring of gear components, aircraft wing spars and turbine blade edges.
- Removal of heavy burrs, in addition to moderate blemishes and scratches.
- Edge breaking and rounding.

Blending
- Blending and finishing work on engine blade surfaces, turbine blades and rotor blades.
- Removal of smaller blemishes, scratches and joints on cast workpieces.

Polishing
- Polishing of fillet welds on turbine blades and aircraft parts.
- Polishing of soft metals before the coating process, and of hardened steel when repairing moulds and dies.
- Polishing and finishing of surgical instruments and implants.

Recommendations for use:

- Considerably reduce cutting speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use with a recommended cutting speed of 15–35 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Matching tool drives:

- Flexible shaft drives
- Straight grinders
- Bench grinders

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**355473**
  PNER-H 7506-6 A G
- **Ordering example explanation:**

PNER	= POLINOX unitized wheels
H	= Type
7506	= Outer diameter D x width T [mm]
6	= Centre hole diameter H [mm]
A	= Abrasive
G	= Grit size

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

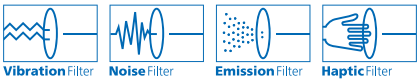


Accessories:

- Arbor for POLINOX unitized wheels

PFERDVALUE:

PFERDERGONOMICS recommends POLINOX unitized wheels and unitized discs PNER to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.





Recommended rotational speed range

Example:
PNER-H 7506-6 A G
Cutting speed: 25 m/s
Rotational speed: 6,300 RPM

Tool dia. [mm]	Cutting speed [m/s]						
	15	20	25	30	32	35	50
	Rotational speeds [RPM]						
25	11,400	15,200	19,000	22,900	24,400	26,700	38,100
50	5,700	7,600	9,500	11,400	12,200	13,300	19,000
75	3,800	5,000	6,300	7,600	8,100	8,900	12,700
100	2,800	3,800	4,700	5,700	6,100	6,600	9,500
115	2,400	3,300	4,100	4,900	5,300	5,800	8,300
125	2,200	3,000	3,800	4,500	4,800	5,300	7,600
150	1,900	2,500	3,100	3,800	4,000	4,400	6,300





PNER type

Type for straight grinders, flexible shafts and bench grinders:
Particularly suitable for work on smaller surfaces.

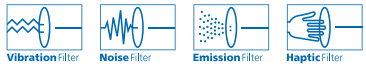
Type for speed-adjustable angle grinders and fillet weld grinders:
They are especially suitable for work on fillet welds and very hard-to-reach slots or indentations.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Recommendations for use:
- Grinding wheels with a diameter of 150 mm can also be used on bench grinders, for reworking surgical instruments, for example.

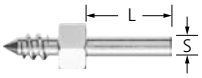
Ordering notes:
- An adapter is included with the 150 x 25 mm diameter grinding wheels, which allows the centre hole diameter to be reduced from 25.4 mm to 20 mm.
- Please complete the description with the desired hardness grade.

PFERDVALUE:

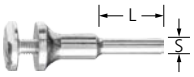




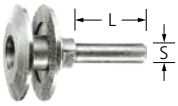
D [mm]	T [mm]	H [mm]	Grit size	Abra-sives	Type W (soft)	Type MW (me-dium-soft)	Type MH (me-dium-hard)	Type H (hard)	Opt. RPM	Max. RPM	Suitable arbors		Description
					EAN 4007220								
Type for straight grinders, flexible shafts and bench grinders													
25	25	6	coarse	A	-	-	-	440438	19,000	30,500	BO PNER 25 S6	10	PNER-... 2525-6 A G
			fine	A	-	-	440452	440445	19,000	30,500	BO PNER 25 S6	10	PNER-... 2525-6 A F
50	3	6	fine	A	-	-	-	505700	9,500	15,300	BO 6/6 3-10	10	PNER-... 5003-6 A F
75	3	6	fine	A	-	-	-	505717	6,400	10,200	BO 6/6 3-10	10	PNER-... 7503-6 A F
	6	6	coarse	A	476307	-	-	355473	6,400	10,200	BO 6/6 3-10	5	PNER-... 7506-6 A G
	6	6	fine	A	-	355534	355503	-	6,400	10,200	BO 6/6 3-10	5	PNER-... 7506-6 A F
	6	6	fine	SiC	355626	355558	-	-	6,400	10,200	BO 6/6 3-10	5	PNER-... 7506-6 SiC F
	13	6	coarse	A	476314	-	-	355480	6,400	10,200	BO 6/6 3-10	5	PNER-... 7513-6 A G
	13	6	fine	A	-	355565	355510	-	6,400	10,200	BO 6/6 3-10	5	PNER-... 7513-6 A F
	13	6	fine	SiC	476338	355589	-	-	6,400	10,200	BO 6/6 3-10	5	PNER-... 7513-6 SiC F
150	25	25.4	coarse	A	-	-	-	355497	3,200	5,100	BO 12/20 10-50	1	PNER-... 15025-25,4 A G
			fine	A	-	476291	355527	-	3,200	5,100	BO 12/20 10-50	1	PNER-... 15025-25,4 A F
			fine	SiC	355633	355602	-	-	3,200	5,100	BO 12/20 10-50	1	PNER-... 15025-25,4 SiC F
Type for angle grinders and fillet weld grinders													
125	6	22.23	coarse	A	-	-	-	833179	4,500	6,100	-	5	PNER-... 12506-22,2 A G
			fine	A	-	833148	833155	833162	4,500	6,100	-	5	PNER-... 12506-22,2 A F
			fine	SiC	-	833131	-	-	4,500	6,100	-	5	PNER-... 12506-22,2 SiC F
150	3	25.4	fine	A	-	-	-	895733	3,800	5,100	-	5	PNER-... 15003-25,4 A F
	3	25.4	fine	SiC	-	895719	895726	-	3,800	5,100	-	5	PNER-... 15003-25,4 SiC F
	6	25.4	fine	A	-	-	-	895764	3,800	5,100	-	5	PNER-... 15006-25,4 A F
	6	25.4	fine	SiC	895740	895757	-	-	3,800	5,100	-	5	PNER-... 15006-25,4 SiC F



BO PNER 25 S6



BO 6/6 3-10



BO 12/20 10-50


BO MK 1/20 10-50

Arbors BO

Matching arbor for POLINOX unitized wheels.

Advantages:
- High economic efficiency as the tool can be changed quickly.

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
6	6	25	-	440469	1	BO PNER 25 S6
			3–10	297650	1	BO 6/6 3-10
20	12	35	10–50	297674	1	BO 12/20 10-50
	-	-	10–50	297681	1	BO MK 1/20 10-50

POLINOX unitized discs PNER



PNER discs

POLINOX unitized discs are used for face-down grinding on speed-adjustable angle grinders. Especially well-suited to work on larger surfaces. The compressed, non-woven material is bonded to a glass-fabric base.

Abrasive:
Silicon carbide SiC

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter

D [mm]	T [mm]	H [mm]	Grit size	Type	Abrasives	EAN 4007220	Opt. RPM	Max. RPM		Description
115	13	22.23	fine	soft	SiC	824337	6,000	10,000	5	DISC PNER-W 115-22,2 SiC F
				medium-soft	SiC	824344	6,000	10,000	5	DISC PNER-MW 115-22,2 SiC F
				medium-hard	SiC	824351	6,000	10,000	5	DISC PNER-MH 115-22,2 SiC F
125	13	22.23	fine	soft	SiC	824368	5,400	10,000	5	DISC PNER-W 125-22,2 SiC F
				medium-soft	SiC	824375	5,400	10,000	5	DISC PNER-MW 125-22,2 SiC F
				medium-hard	SiC	824382	5,400	10,000	5	DISC PNER-MH 125-22,2 SiC F



SET PNER

Set with handy electric fillet weld grinder and PFERD tools for brushing, cleaning, weld dressing and very fine grinding of fillet welds and hard-to-reach places on stainless steel (INOX) components.



Contents:
1 pc. each of:
- Electric fillet weld grinder KNER 5/34 V-SI with electronic rotational speed control (1,400–3,200 RPM)
- POLINOX unitized wheels:
  - PNER-MW 15003-25,4 SiC F
  - PNER-MH 15003-25,4 SiC F
  - PNER-H 15003-25,4 A F
  - PNER-W 15006-25,4 SiC F
  - PNER-MW 15006-25,4 SiC F
  - PNER-H 15006-25,4 A F
- Dressing stone SE 702212 CU 46 M5V
- POLINOX discs:
  - PVR 15008-13 A 100
  - PVR 15008-13 A 280
- Wheel brush RBU 15016/12,0 SiC 80 1,00 incl. arbor hole adapter 22.2 mm

Advantages:
- Optimal, stepless rotational speed regulation for the use of different tools.
- Coordinated selection of the most common versions.

Recommendations for use:
- Please note the different recommended rotational speeds: POLINOX unitized wheels PNER = 2,000–3,800 RPM; POLINOX discs PVR = 1,500–3,100 RPM; wheel brush RBU = 2,400–3,900 RPM

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

PFERDVALUE:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

D [mm]	L x B x H [mm]	EAN 4007220		Description
150	587 x 285 x 162	936306	1	SET PNER 15003/06 KNER 5/34 230 V



Non-woven tools
General information – POLINOX convolute wheels PNK



POLINOX convolute wheels PNK consist of spiral-shaped, non-woven abrasive which is wound around a core and foamed up. The foam supports the non-woven component and positively impacts its tool life and abrasive performance.

This particular bond results in non-woven wheels with a very good surface finish, high stock removal rate and long tool life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys. The wheels can be used on automated appliances and bench grinders, in addition to portable tool drives such as straight grinders. By dressing the wheels, they can also be adapted to the geometry of special workpieces.

Five different types are available:

Type	Colour code	Properties
Soft	W	Soft variant with very good abrasive performance on contours. Very good for blending surfaces.
Medium-soft	MW	Medium-soft variant with increased flexibility and extended tool life for tough blending applications and for light deburring and polishing work. Well suited to machining contours.
Medium-hard	MH	Medium-hard variant with increased edge strength and extended tool life, for tough deburring applications and other deburring, blending and cleaning work.
Hard	H	Hard variant with very high stock removal rate, good edge strength and long tool life, for moderate to heavy-duty deburring and polishing applications.
Extra-hard	EH	Extra-hard variant with very high edge strength for demanding deburring work.

Comparison table

PFERD PNK				3M	Standard Abrasives	Norton	BIBIELLE
Type	Colour code	Abrasive	Grain				
Soft	W	A	Coarse	CP-WL 5AM	MF CV 5AM	MF CF 5AM	BCW-MF 5AM
Medium-soft	MW	SiC	Fine	LDW 7SF	LDW 7SF	Series 2000 7SF	BCW-DB 7SF
Medium-hard	MH	SiC	Fine	EXL Deburring 8SF	Deburring 8SF	Series 1000 8SF	BCW-DB 8SF
		A	Coarse	EXL Deburring 8AM	GP Plus 8AM	Series 1000 8AM	BCW-DB 8AM
Hard	H	SiC	Fine	Deburring 9SF	EXL Deburring 9SF	Series 1000 9SF	BCW-DB 9SF
Extra-hard	EH	SiC	Fine	XP-WL 10SF	GP Plus 10SF	Series 4000 9SF	BCW-DB 9SF-R



Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours thanks to free profiling.

Abrasive:

- Aluminium oxide A
- Silicon carbide SiC

Applications:

- Rounding of edges.
- Fine grinding of implants.
- Matt finishing of flat surfaces.
- Removing joints on cast and forged parts.
- Weld dressing of intersections on turbine blades.
- Polishing moulds and dies.
- Removal of processing traces on surgical instruments.

Recommendations for use:

- Considerably reduce cutting speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use with a recommended cutting speed of 20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Matching tool drives:

- Flexible shaft drives
- Straight grinders
- Bench grinders

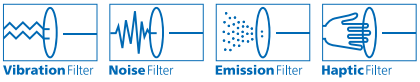
Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The wound construction of the tool requires that the indicated tool running direction is strictly adhered to. Non-compliance with the tool running direction will lead to destruction of the tool, and carries an increased risk of accidents.



PFERDVALUE:

PFERDERGONOMICS recommends POLINOX convolute wheels PNK to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.

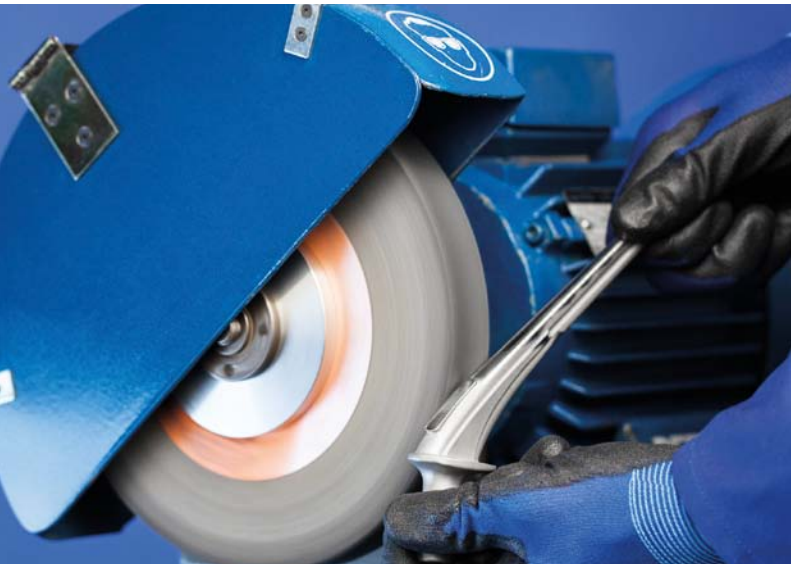




Recommended rotational speed range

Example:
PNK-MW 15013-25.4 SiC F
Cutting speed: 20 m/s
Rotational speed: 2,500 RPM

Tool dia. [mm]	Cutting speed [m/s]				
	15	20	25	30	40
	Rotational speeds [RPM]				
150	1,900	2,500	3,100	3,800	5,000
200	1,400	1,900	2,300	2,800	3,800
250	1,100	1,500	1,900	2,200	3,000







PNK type

Varied application options, for example:
- Rounding of edges
- Fine grinding of implants
- Weld dressing of intersections on turbine blades
- Removal of processing traces on surgical instruments

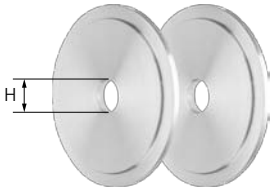
They create matt surface finishes.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

PFERDVALUE:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

D [mm]	T [mm]	H [mm]	Grit size	Type	Abrasives	EAN 4007220	Opt. RPM	Max. RPM		Description
150	13	25.4	fine	medium-soft	SiC	841846	2,500	5,100	1	PNK-MW 15013-25,4 SiC F
	13	25.4	fine	medium-hard	SiC	841860	2,500	5,100	1	PNK-MH 15013-25,4 SiC F
	13	25.4	coarse	medium-hard	A	841853	2,500	5,100	1	PNK-MH 15013-25,4 A G
	13	25.4	fine	hard	SiC	841877	2,500	5,100	1	PNK-H 15013-25,4 SiC F
	13	25.4	fine	extra-hard	SiC	091357	2,500	5,100	1	PNK-EH 15013-25,4 SiC F
	25	25.4	coarse	soft	A	896501	2,500	5,100	1	PNK-W 15025-25,4 A G
	25	25.4	fine	medium-soft	SiC	841884	2,500	5,100	1	PNK-MW 15025-25,4 SiC F
	25	25.4	fine	medium-hard	SiC	841907	2,500	5,100	1	PNK-MH 15025-25,4 SiC F
	25	25.4	coarse	medium-hard	A	841891	2,500	5,100	1	PNK-MH 15025-25,4 A G
	25	25.4	fine	hard	SiC	841914	2,500	5,100	1	PNK-H 15025-25,4 SiC F
	25	25.4	fine	extra-hard	SiC	091395	2,500	5,100	1	PNK-EH 15025-25,4 SiC F
200	13	76.2	fine	medium-soft	SiC	841921	1,900	3,850	1	PNK-MW 20013-76,2 SiC F
	13	76.2	fine	medium-hard	SiC	841945	1,900	3,850	1	PNK-MH 20013-76,2 SiC F
	13	76.2	coarse	medium-hard	A	841938	1,900	3,850	1	PNK-MH 20013-76,2 A G
	13	76.2	fine	hard	SiC	841952	1,900	3,850	1	PNK-H 20013-76,2 SiC F
	13	76.2	fine	extra-hard	SiC	067819	1,900	3,850	1	PNK-EH 20013-76,2 SiC F
	25	76.2	coarse	soft	A	091333	1,900	3,850	1	PNK-W 20025-76,2 A G
	25	76.2	fine	medium-soft	SiC	841969	1,900	3,850	1	PNK-MW 20025-76,2 SiC F
	25	76.2	fine	medium-hard	SiC	841983	1,900	3,850	1	PNK-MH 20025-76,2 SiC F
	25	76.2	coarse	medium-hard	A	841976	1,900	3,850	1	PNK-MH 20025-76,2 A G
	25	76.2	fine	hard	SiC	841990	1,900	3,850	1	PNK-H 20025-76,2 SiC F
	25	76.2	fine	extra-hard	SiC	067765	1,900	3,850	1	PNK-EH 20025-76,2 SiC F
	50	76.2	coarse	soft	A	896525	1,900	3,850	1	PNK-W 20050-76,2 A G
	50	76.2	fine	medium-soft	SiC	842003	1,900	3,850	1	PNK-MW 20050-76,2 SiC F
	50	76.2	fine	medium-hard	SiC	842027	1,900	3,850	1	PNK-MH 20050-76,2 SiC F
	50	76.2	coarse	medium-hard	A	842010	1,900	3,850	1	PNK-MH 20050-76,2 A G
	50	76.2	fine	hard	SiC	842034	1,900	3,850	1	PNK-H 20050-76,2 SiC F
	50	76.2	fine	extra-hard	SiC	067758	1,900	3,850	1	PNK-EH 20050-76,2 SiC F

Clamping flanges for POLINOX convolute wheels PNK



RF PNK

For mounting POLINOX convolute wheels PNK with a diameter of 200 mm on stationary machines such as double grinding machines (bench grinders).

Advantages:
- High accuracy of fit.
- Hole can be expanded as desired.

Ordering notes:
- Included in delivery: 1 pair

Suitable for centre hole dia. [mm]	H [mm]	EAN 4007220		Description
76.2	16.1	880623	1	RF PNK 200 Bo. 16,1
	25.4	880630	1	RF PNK 200 Bo. 25,4
	31.8	880647	1	RF PNK 200 Bo. 31,8

POLINOX mounted and unmounted grinding wheels and cross buffs consist of non-woven polyamide abrasive, into which abrasive grain is integrated.

The wide range of hardness grades and different tool designs allow a variety of surface structures and roughness levels to be achieved.

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool grinding and low thermal load of the workpiece.
- No tool clogging due to open structure and high flexibility of the non-woven material.

Recommendations for use:

- For best performance, use with a recommended cutting speed of 10–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**157060**
  PNL 4020/6 A **100**
- **Ordering example explanation:**
  PNL = POLINOX mounted grinding wheel
  4020 = Outer diameter D x width T [mm]
  6 = Shank diameter S_d [mm]
  A = Abrasive
  100 = Grit size

Accessories:

- Arbors for POLINOX cross buffs and unmounted flap wheels

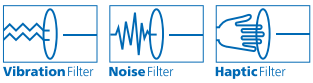
Safety notes:

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



PFERDVALUE:

PFERDERGONOMICS recommends POLINOX mounted and unmounted grinding wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



Recommended rotational speed range

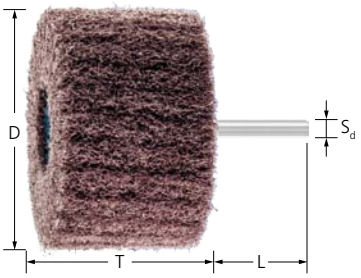
Example:
PNL 6050/6 A 100
Cutting speed: 15 m/s
Rotational speed: 4,700 RPM

Tool dia. [mm]	Cutting speed [m/s]				
	10	15	20	30	32
	Rotational speeds [RPM]				
30	6,300	9,500	12,700	19,000	20,300
40	4,700	7,100	9,500	14,300	15,200
50	3,800	5,700	7,600	11,400	12,200
60	3,100	4,700	6,300	9,500	10,100
100	1,900	2,800	3,800	5,700	6,100
125	1,500	2,200	3,000	4,500	4,800
150	1,200	1,900	2,500	3,800	4,000
200	900	1,400	1,900	2,800	3,000









PNL type

Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.

The tool is particularly used for surface work.

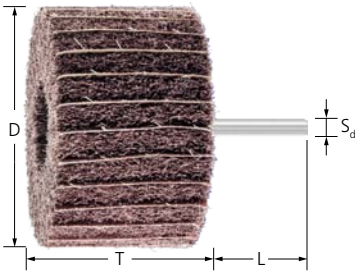
Abrasive:
Aluminium oxide A
Silicon carbide SiC

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	S_d [mm]	L [mm]	Grit size 100	Grit size 180	Grit size 280	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Aluminium oxide A										
30	25	6	40	087824	087831	087923	10,000	20,000	10	PNL 3025/6 A ...
40	20	6	40	157060	157077	157084	7,500	15,000	10	PNL 4020/6 A ...
50	30	6	40	157107	157114	157121	6,000	12,000	10	PNL 5030/6 A ...
60	25	6	40	892879	892886	892893	5,000	10,000	10	PNL 6025/6 A ...
	50	6	40	157213	157220	157237	5,000	10,000	10	PNL 6050/6 A ...
80	25	6	40	892978	892992	893005	4,000	7,500	10	PNL 8025/6 A ...
	50	6	40	157183	157190	157206	4,000	7,500	10	PNL 8050/6 A ...
Silicon carbide (SiC)										
40	20	6	40	803455	293669	293676	7,500	15,000	10	PNL 4020/6 SiC ...
50	30	6	40	803493	293683	293690	6,000	12,000	10	PNL 5030/6 SiC ...
60	50	6	40	803509	293706	293713	5,000	10,000	10	PNL 6050/6 SiC ...
80	50	6	40	803516	293720	293737	4,000	7,500	10	PNL 8050/6 SiC ...



PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers.

This flap structure facilitates improved stock removal and achieves a coarser surface finish.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	S_d [mm]	L [mm]	Grit size 100	Grit size 180	Opt. RPM	Max. RPM		Description
				EAN 4007220					
Aluminium oxide A									
30	25	6	40	087930	088067	10,000	20,000	10	PNZ 3025/6 A ...
40	20	6	40	157053	294697	7,500	15,000	10	PNZ 4020/6 A ...
50	30	6	40	803158	803165	6,000	12,000	10	PNZ 5030/6 A ...
60	25	6	40	892909	892916	5,000	10,000	10	PNZ 6025/6 A ...
	50	6	40	157138	294703	5,000	10,000	10	PNZ 6050/6 A ...
80	25	6	40	893012	893029	4,000	7,500	10	PNZ 8025/6 A ...
	50	6	40	157176	294710	4,000	7,500	10	PNZ 8050/6 A ...
100	50	6	40	294666	294673	3,000	6,000	5	PNZ 10050/6 A ...
Silicon carbide (SiC)									
80	50	6	40	617571	617588	4,000	7,500	10	PNZ 8050/6 SiC ...

PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.

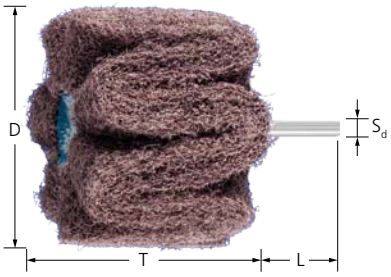
The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

Abrasive:
Aluminium oxide A
Silicon carbide SiC

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter



D [mm]	T [mm]	S_d [mm]	L [mm]	Grit size 100	Grit size 180	Grit size 280	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Aluminium oxide A										
80	50	6	40	737989	737996	738009	4,000	7,500	10	PNG 8050/6 A ...
100	50	6	40	499580	499597	499603	3,000	6,000	5	PNG 10050/6 A ...
Silicon carbide (SiC)										
80	50	6	40	738016	738023	803639	4,000	7,500	10	PNG 8050/6 SiC ...
100	50	6	40	617595	617601	803646	3,000	6,000	5	PNG 10050/6 SiC ...

PNR type

The non-woven abrasive material is arranged in multiple (axial) disc layers.

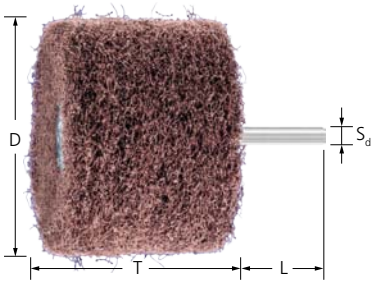
Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.

Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder

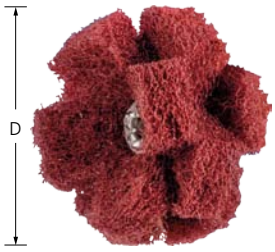
Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter



D [mm]	T [mm]	S_d [mm]	L [mm]	Grit size 100	Grit size 180	Grit size 280	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Shank dia. 2.35 mm										
25	15	2.35	40	034705	034712	034729	7,600	12,300	10	PNR 2515/2,35 A ...
Shank dia. 3 mm										
25	15	3	40	034736	034743	034750	7,600	12,300	10	PNR 2515/3 A ...
30	20	3	40	034767	034774	034781	6,500	10,200	10	PNR 3020/3 A ...
Shank dia. 6 mm										
60	50	6	40	157145	157152	157169	5,000	10,000	10	PNR 6050/6 A ...
80	50	6	40	157244	157251	157268	4,000	7,500	10	PNR 8050/6 A ...





PNST type

Suitable for cleaning, deburring and fine grinding of inner surfaces and contours.
Particularly suitable for hard-to-reach places such as drilled holes and indentations.

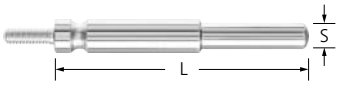
Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	No. of layers [pcs.]	Grit size 80	Grit size 100	Grit size 280	Opt. RPM	Max. RPM		Description
		EAN 4007220						
19	2	-	899199	899205	15,000	25,100	20	PNST 19-2 A ...
25	2	899212	441138	441145	10,000	19,100	20	PNST 25-2 A ...
38	3	899229	441152	441169	7,500	12,600	20	PNST 38-3 A ...
50	2	899410	899427	899434	5,500	9,500	20	PNST 50-2 A ...



BO PNST

Arbors for POLINOX cross buffs. Both arbors are of different lengths, thus allowing holes or cut-outs of different depths to be reached.

Advantages:
- High economic efficiency as the tool can be changed quickly.

S [mm]	L [mm]	Thread	Mounting length [mm]	EAN 4007220		Description
6	75	8–32 UNC	30	440988	1	BO PNST 6-75
	125	8–32 UNC	30	440995	1	BO PNST 6-125

POLINOX, set PNL/Z/R



SET PNL/Z/R

Set with high-output electric straight grinder and PFERD tools for cleaning, brush matting and very fine grinding of small and medium-sized surfaces on stainless steel (INOX) components.

Contents:
- Electric straight grinder UGER 5/90 SI with electronic rotational speed control (4,000–9,000 RPM)
- 2 different mounted flap wheels
- 10 POLINOX mounted grinding wheels in different types and grit sizes
- POLIFAN flap disc PFC 115 A-COOL 60 SG INOX+ALU

Advantages:
- Optimal, stepless rotational speed regulation for the use of different tools.
- Coordinated selection of the most common versions.

Ordering notes:
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	EAN 4007220		Description
60	323274	1	SET PNL/Z/R 6050 UGER 5/90 230 V

PNL type

Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.

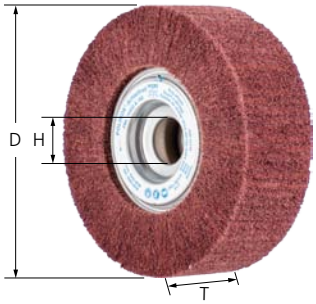
This tool is mainly used for work on large surfaces.

Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder, bench grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter Noise Filter Haptic Filter



D [mm]	T [mm]	H [mm]	Grit size 100	180	280	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220							
150	50	25.4	479667	479674	479681	2,000	4,000	FR/VR 12/25,4	1	PNL 15050/25,4 A ...
200	50	44	479698	479704	479711	1,500	3,000	FR/VR 12/44,0	1	PNL 20050/44 A ...

PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers.
This flap structure facilitates improved stock removal and achieves a coarser surface finish.

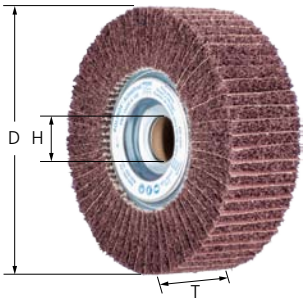
This tool is mainly used for work on large surfaces.

Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder, bench grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

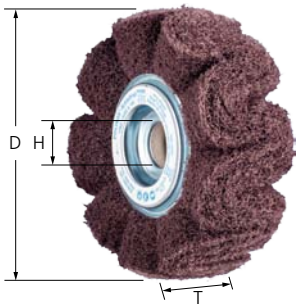
PFERDVALUE:
Vibration Filter Noise Filter Haptic Filter



D [mm]	T [mm]	H [mm]	Grit size 100	180	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
150	50	25.4	479728	479735	2,000	4,000	FR/VR 12/25,4	1	PNZ 15050/25,4 A ...
200	50	44	479759	479766	1,500	3,000	FR/VR 12/44,0	1	PNZ 20050/44 A ...







PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.

The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

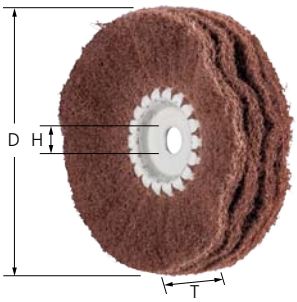
Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder, bench grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

PFERDVALUE:

D [mm]	T [mm]	H [mm]	Grit size 100	Grit size 180	Grit size 280	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220							
150	50	25.4	479780	479797	479803	2,000	4,000	FR/VR 12/25,4	1	PNG 15050/25,4 A ...
200	50	44	479810	479827	479834	1,500	3,000	FR/VR 12/44,0	1	PNG 20050/44 A ...



PNR type

Made of several slightly wavily arranged strips of non-woven abrasive material, wound around a metal core.

The open arrangement and high flexibility of the non-woven abrasive material enables exceptional adaptation to contours. Suitable for seamless brush matting of surfaces, profiles and pipes.

Abrasive:
Aluminium oxide A

Matching tool drives:
flexible shaft drive, straight grinder, bench grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

PFERDVALUE:

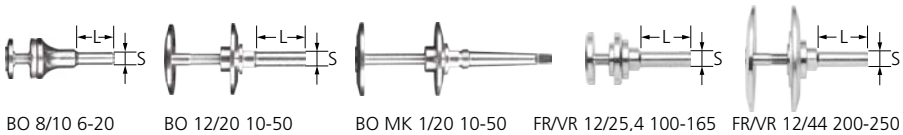
D [mm]	T [mm]	H [mm]	Grit size 180	Grit size 280	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
100	35	10	293546	293560	2,500	5,500	BO 8/10 6-20	1	PNR 10035/10 A ...
150	40	20	293577	293584	2,000	4,000	BO 12/20 10-50, BO MK 1/20 10-50	1	PNR 15040/20 A ...



Arbors

Matching arbor for POLINOX unmounted grinding wheels.

Advantages:
- High economic efficiency as the tool can be changed quickly.



BO 8/10 6-20 | BO 12/20 10-50 | BO MK 1/20 10-50 | FR/VR 12/25,4 100-165 | FR/VR 12/44 200-250

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
10	8	30	6–20	297667	1	BO 8/10 6-20
20	12	35	10–50	297674	1	BO 12/20 10-50
	-	-	10–50	297681	1	BO MK 1/20 10-50
25.4	12	40	25–50	479643	1	FR/VR 12/25,4 100-165
44	12	40	25–50	479650	1	FR/VR 12/44,0 200-250

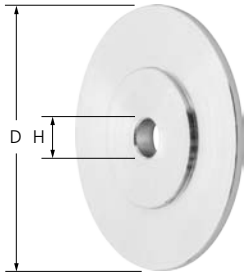
Reducing flanges for POLINOX grinding wheels FR

RF FR

For mounting unmounted flap wheels and POLINOX unmounted grinding wheels on drive spindles.
The clamping flanges are designed to lie countersunk in the tool.

Advantages:
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles thanks to special clamping system.

Ordering notes:
- Included in delivery: 1 pair



Suitable for tool dia. [mm]	D [mm]	H [mm]	Max. H [mm]	EAN 4007220		Description
150	40	12	22.2	509876	1	RF FR 150-165 Bo. 12-22,2
200	83	12	40	498460	1	RF FR 200-250 Bo. 12-40

POLINOX unmounted grinding wheels with thread

PNL type

Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.
The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

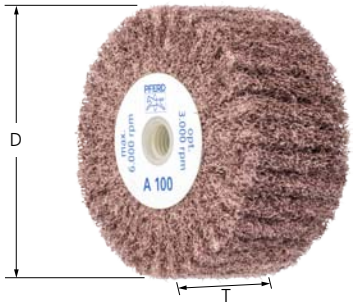
Abrasive:
Aluminium oxide A

Matching tool drives:
angle grinder, cordless angle grinder

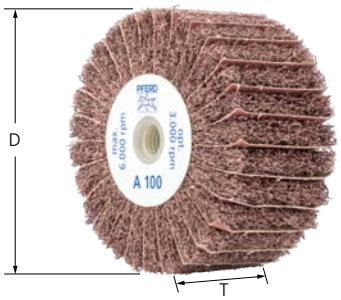
Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:





D [mm]	T [mm]	Thread	Grit size			Opt. RPM	Max. RPM		Description
			100	180	280				
			EAN 4007220						
100	50	M14	003329	003336	003343	3,000	6,000	5	PNL 10050 M14 A ...
		5/8-11	003367	003374	003381	3,000	6,000	5	PNL 10050 5/8-11 A ...



PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. This flap structure facilitates improved stock removal and achieves a coarser surface finish.

The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

Abrasive:
Aluminium oxide A

Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Thread	Grit size		Opt. RPM	Max. RPM		Description
			100	180				
			EAN 4007220					
100	50	M14	003411	003428	3,000	6,000	5	PNZ 10050 M14 A ...
		5/8-11	003398	003404	3,000	6,000	5	PNZ 10050 5/8-11 A ...



PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

Abrasive:
Aluminium oxide A

Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

D [mm]	T [mm]	Thread	Grit size			Opt. RPM	Max. RPM		Description
			100	180	280				
			EAN 4007220						
100	50	M14	003268	003275	003282	3,000	6,000	5	PNG 10050 M14 A ...
		5/8-11	003299	003305	003312	3,000	6,000	5	PNG 10050 5/8-11 A ...
125	50	M14	002643	002650	002667	2,300	3,800	2	PNG 12550 M14 A ...
		5/8-11	002674	002681	002698	2,300	3,800	2	PNG 12550 5/8-11 A ...







PNL type



The non-woven abrasive flaps are stuck to a glass-fabric backing pad, meaning that the discs can be used face-down. A long tool life is achieved through the dense packing of the flaps.

The tool is designed for working on large surfaces with speed-adjustable angle grinders.

Abrasive:
Aluminium oxide A

Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Vibration Filter Noise Filter Haptic Filter

D [mm]	T [mm]	H [mm]	Grit size			Opt. RPM	Max. RPM		Description
			100	180	280				
			EAN 4007220						
115	20	22.23	104224	104231	104248	2,500	5,300	5	PNL 115-22,23 A ...
125	20	22.23	104286	104293	104309	2,300	4,850	5	PNL 125-22,23 A ...

PNZ type



The non-woven and abrasive-cloth flaps are stuck to a glass-fabric backing pad, meaning that the discs can be used face-down on large surfaces. A long tool life is achieved through the dense packing of the flaps.

The tool is designed for working on large surfaces with speed-adjustable angle grinders.

Abrasive:
Aluminium oxide A

Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Vibration Filter Noise Filter Haptic Filter

D [mm]	T [mm]	H [mm]	Grit size		Opt. RPM	Max. RPM		Description
			100	180				
			EAN 4007220					
115	20	22.23	104316	104323	2,500	5,300	5	PNZ 115-22,23 A ...
125	20	22.23	104330	104347	2,300	4,850	5	PNZ 125-22,23 A ...

POLINOX grinding drums are especially suited to work on flat surfaces.

Advantages:

- Long tool life due to tightly packed flaps.
- Cool grinding and low thermal load of the workpiece.
- No tool clogging due to open structure and high flexibility of the non-woven material.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Roughening
- Deburring
- Surface work
- Cleaning
- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

Matching tool drives:

- Drum grinders

Ordering notes:

- The 19 mm centre hole diameter with 4 keyways fits all conventional drum grinders.
- Additional drum tools can be found on pages 90, 134 as well as in catalogue section 8.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**593523**
  PNL-W 100100 A **100**
- **Ordering example explanation:**
  PNL-W = POLINOX grinding drums
  100100 = Outer diameter D x width T [mm]
  A = Abrasive
  100 = Grit size

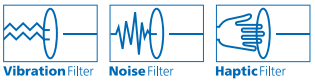
Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



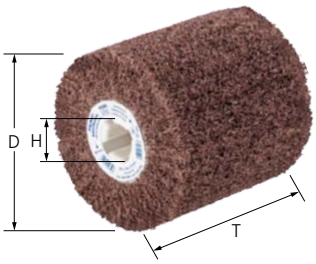
PFERDVALUE:

PFERDERGONOMICS recommends POLINOX grinding drums to sustainably reduce vibration and noise levels during use and to improve working comfort.





POLINOX grinding drums



PNL-W type

Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.

Abrasive:
Aluminium oxide A

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

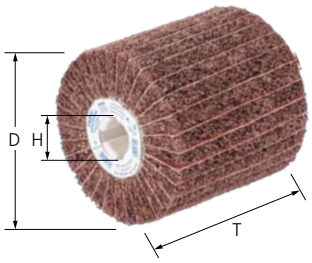


D [mm]	T [mm]	H [mm]	Grit size 80	100	180	280	Opt. RPM	Max. RPM		Description
			EAN 4007220							
100	100	19	855904	593523	593530	593547	2,500	4,800	1	PNL-W 100100 A ...



PNZ-W type

Made of radially arranged flaps of non-woven abrasive material. There is also abrasive cloth situated between the flaps. The flap structure facilitates improved stock removal and achieves a coarser surface finish.



Abrasive:
Aluminium oxide A

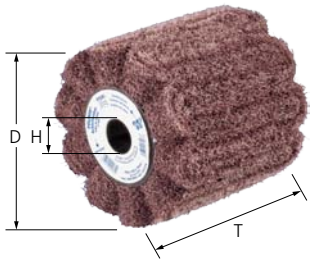
PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	H [mm]	Grit size			Opt. RPM	Max. RPM		Description
			60	80	120				
			EAN 4007220						
100	100	19	593554	593561	593578	2,500	4,800	1	PNZ-W 100100 A ...

PNG-W type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.
The wavy structure of the non-woven abrasive material permits seamless brush matting of large surfaces.



Abrasive:
Aluminium oxide A

PFERDVALUE:
Vibration Filter · Noise Filter · Haptic Filter

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	H [mm]	Grit size			Opt. RPM	Max. RPM		Description
			100	180	280				
			EAN 4007220						
100	100	19	002612	002629	002636	2,500	4,800	1	PNG-W 100100 A ...





POLINOX discs are suited to flexible work on complicated tool contours, and are used in peripheral grinding applications.

Advantages:

- Optimum adaptation to contours thanks to high flexibility with a very long tool life.
- Accessing hard-to-reach places such as deep slots or recesses.
- No tool clogging due to open structure and high flexibility of the non-woven material.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Roughening
- Levelling
- Surface work
- Cleaning
- Removing heat discolouration
- Removing paint
- Derusting
- Removing oxide layers
- Work on weld seams
- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Ordering notes:

- Please order arbors separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**505847**
  PVR 15008-13 A **100**
- **Ordering example explanation:**
  PVR = POLINOX discs
  15008 = Outer diameter D x width T [mm]
  13 = Centre hole diameter H [mm]
  A = Abrasive
  100 = Grit size

Accessories:

- Arbors for POLINOX discs

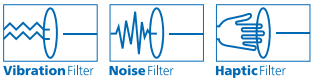
Safety notes:

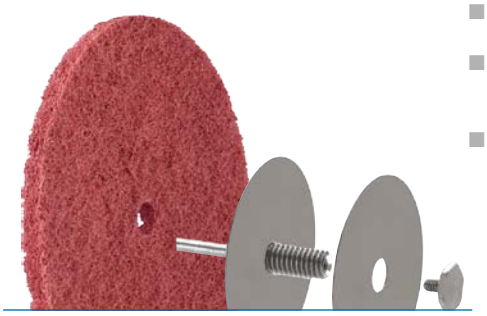
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



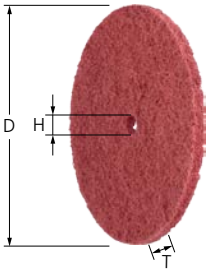
PFERDVALUE:

PFERDERGONOMICS recommends POLINOX discs to sustainably reduce vibration and noise levels during use and to improve working comfort.





POLINOX discs



PVR

POLINOX discs are suited to flexible work on complicated tool contours, and are used in peripheral grinding applications.

Abrasive:
Aluminium oxide A

Recommendations for use:
- Clamp up to three discs behind one another to increase the usage width.
- For the best results, use at a recommended cutting speed of 10–25 m/s.

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

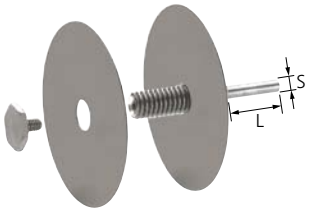
PFERDVALUE:



D [mm]	T [mm]	H [mm]	Grit size 100	Grit size 280	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
50	10	6	955796	955802	3,500–9,500	12,250	BO 6/6 3-10	10	PVR 5008-6 A ...
75	10	6	955819	955826	2,500–6,400	8,150	BO 6/6 3-10	10	PVR 7508-6 A ...
100	10	13	955833	955840	1,900–4,700	6,150	PVR 6/13 1-25	10	PVR 10008-13 A ...
125	10	13	955857	955864	1,500–3,800	4,900	PVR 6/13 1-25	10	PVR 12508-13 A ...
150	10	13	505847	505861	1,300–3,100	4,100	PVR 6/13 1-25	10	PVR 15008-13 A ...

PVR

Arbors for POLINOX discs.



Advantages:
- High economic efficiency as the tool can be changed quickly.

Recommendations for use:
- Preset the clamping depth via the hexagonal nut on the shank side of the arbor.
- Use the supplied side discs with a diameter of 50 and 80 mm in order to vary the lateral flexibility.
- To simplify the changeover, slacken the mounting screw on the front. When doing so, leave the arbor clamped in the tool drive.

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
13	6	35	1–25	505878	1	PVR 6/13 1-25

ADB

The self-adhesive masking tape is used to preserve the clear separation between different grinding patterns in adjacent areas. The masking tape protects surfaces which have already been worked on, or which are not supposed to be worked on.



Advantages:
- ADB 20: High elasticity and tear strength.
- ADB 50 INOX: Reusable and extremely high durability.
- High edge stability.

Materials that can be worked:
aluminium, stainless steel (INOX)

Recommendations for use:
- ADB 20: Use only during finish machining with soft, flexible tools, e.g. non-woven tools.
- To avoid its inadvertent removal, ensure that the masking tape is only loaded in the running direction of the tool.

L [m]	T [mm]	EAN 4007220		Description
25	20	726372	1	ADB 20
3	50	025352	1	ADB 50 INOX





POLINOX discs for marbling tool holders are special tools designed for marbling surfaces.

Advantages:

- Water- and oil-tight.

Materials that can be worked:

- Can be used on nearly all materials.



Matching tool drives:

- Flexible shaft drives
- Power drills
- Column drills
- Straight grinders

Ordering notes:

- Please order marbling tool holders separately.
- **Ordering example:**
  EAN 400722015**6964**
  MKRK 40 A **100**
- **Ordering example explanation:**
  MKRK = Marbling discs
  40 = Outer diameter D_1 [mm]
  A = Abrasive
  100 = Grit size

Safety notes:

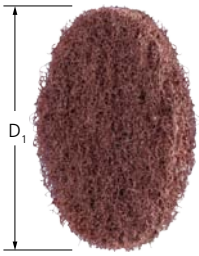
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



PFERDVALUE:

PFERDERGONOMICS recommends POLINOX discs for marbling tool holders to sustainably reduce vibration and noise levels during use and to improve working comfort.





POLINOX discs for marbling tool holder MKRK

Special tools for marbling surfaces.

Advantages:
- Highly flexible, enabling optimal adjustment to the contour.
- High economic efficiency due to high abrasive performance and tool life.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

Abrasive:
Aluminium oxide A

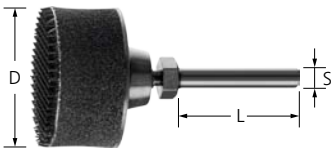
Recommendations for use:
- POLINOX discs for marbling tool holders must be used with the matching marbling tool holder.

Ordering notes:
- Please order marbling tool holders separately.
- Please complete the description with the desired grit size.

PFERDVALUE:



D_1 [mm]	Grit size			Opt. RPM	Suitable arbors		Description
	100	180	280				
	EAN 4007220						
40	156964	156971	156988	600–1,400	MK 6/40/6	100	MKRK 40 A ...
50	156995	157008	157015	600–1,400	MK 6/50/6	100	MKRK 50 A ...
60	157022	157039	157046	600–1,400	MK 6/60/6	100	MKRK 60 A ...



POLINOX marbling tool holders MK

POLINOX marbling tool holders for marbling discs. A highly elastic intermediate layer carries the Velcro fastening system.

Advantages:
- Highly flexible, enabling optimal adjustment to the contour.
- High economic efficiency due to high abrasive performance and tool life.

D [mm]	S [mm]	L [mm]	Suitable tool	EAN 4007220	Max. RPM		Description
40	6	40	MKRK 40	156933	4,700	1	MK 6/40/6
50	6	40	MKRK 50	156940	3,800	1	MK 6/50/6
60	6	40	MKRK 60	156957	3,200	1	MK 6/60/6

PFERD supplies POLIVLIES flap discs and self-adhesive discs in various grit sizes, diameters and types. These are particularly suited to work on large surfaces made from stainless steel (INOX).

Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- Creates a consistently high surface quality throughout the entire tool life as new, sharp abrasive material is constantly freed up.
- Optimum adaptation to contours thanks to high flexibility.

Materials that can be worked:

- Can be used on nearly all materials.

Matching tool drives:

- Angle grinders
- Cordless angle grinders

Ordering notes:

- When ordering, please state the EAN or the full description. Please complete the description with the desired grit size.
- **Ordering example:**
  EAN 4007220**748343**
  PVL 115 A **180 M**
- **Ordering example explanation:**
  PVL = POLIVLIES flap discs
  115 = Outer diameter D [mm]
  A = Abrasive
  180 M = Grit size

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.





Flap discs PVL

For universal coarse to fine grinding applications in industry and professional trades.



Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 30–35 m/s.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	H [mm]	Grit size			Opt. RPM	Max. RPM		Description
			100 G	180 M	240 F				
			EAN 4007220						
115	18	22.23	748336	748343	748350	5,000–5,800	13,300	5	PVL 115 A ...
125	18	22.23	748367	748374	748381	4,600–5,300	12,200	5	PVL 125 A ...

Flap discs PVZ

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.



Abrasive:
Abrasive flap: Ceramic oxide grain CO-COOL
Non-woven material: Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 30–35 m/s.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	H [mm]	Grit size			Opt. RPM	Max. RPM		Description
			CO-COOL 60 / A 100 G	CO-COOL 80 / A 180 M	CO-COOL 120 / A 240 F				
			EAN 4007220						
115	18	22.23	106334	106341	106358	5,000–5,800	13,300	5	PVZ 115 CO-COOL ...
125	18	22.23	106365	106372	106389	4,600–5,300	12,200	5	PVZ 125 CO-COOL ...



Self-adhesive discs PVKR

POLIVLIES self-adhesive discs are suited to grinding larger surfaces. The flexible system comprising a POLIVLIES self-adhesive disc and the associated POLIVLIES self-adhesive disc holder enables use on contours. The pre-punched holes mean that they can be ideally centred on and used with various backing pads.

Abrasive:
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

Recommendations for use:
- For the best results, use at a recommended cutting speed of 15–20 m/s.
- Use with POLIVLIES self-adhesive disc holder.
- Break out the pre-punched centring hole if required.

Ordering notes:
- Please order POLIVLIES self-adhesive disc holders separately.
- Please complete the description with the desired grit size.

D_1 [mm]	Grit size			Opt. RPM	Max. RPM	Suitable arbors		Description
	100 G	180 M	240 F					
	EAN 4007220							
115	354230	297469	354254	3,300	5,300	PVKRH 115	10	PVKR 115 A ...
125	354261	297452	354278	3,000	4,850	PVKRH 125	10	PVKR 125 A ...
180	354285	354292	354308	2,200	3,500	PVKRH 180	10	PVKR 180 A ...

Self-adhesive disc holders PVKRH



Self-adhesive disc holders PVKRH

Arbors for POLIVLIES self-adhesive discs.

Advantages:
- High economic efficiency as the tool can be changed quickly.
- Enables surface finishing without visible transitions.
- PVKRH-22: Enables faster central clamping.

D [mm]	Thread	EAN 4007220	Max. RPM		Description
Without centring pin					
115	M14	316962	5,300	1	PVKRH 115 M14
125	M14	316979	4,850	1	PVKRH 125 M14
180	M14	354223	3,500	1	PVKRH 180 M14
With centring pin					
115	M14	095713	5,300	1	PVKRH 115-22 M14
125	M14	095775	4,850	1	PVKRH 125-22 M14
180	M14	095782	3,500	1	PVKRH 180-22 M14





POLICLEAN is a coarsely structured, abrasive, non-woven cleaning fabric that was developed from a special combination of synthetic fibres and abrasive grain.

The comprehensive range of POLICLEAN tools contains:
- POLICLEAN wheels
- POLICLEAN mounted tools
- COMBIDISC POLICLEAN discs (see COMBIDISC tools, page 38)
- POLICLEAN discs

Advantages:

- High flexibility and open structure mean ideal adaptation to contours and no clogging of the tool itself.
- The standard type (black) achieves finer surface finishes and is more flexible.
- The PLUS type (blue) exhibits considerably higher stock removal rates with a very long tool life, and is also very aggressive.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Roughening
- Surface work
- Cleaning
- Removing heat discolouration
- Removing paint
- Derusting
- Descaling
- Removing oxide layers

Abrasive:

- Standard (black) = Silicon carbide SiC
- PLUS (blue) = Aluminium oxide A

Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

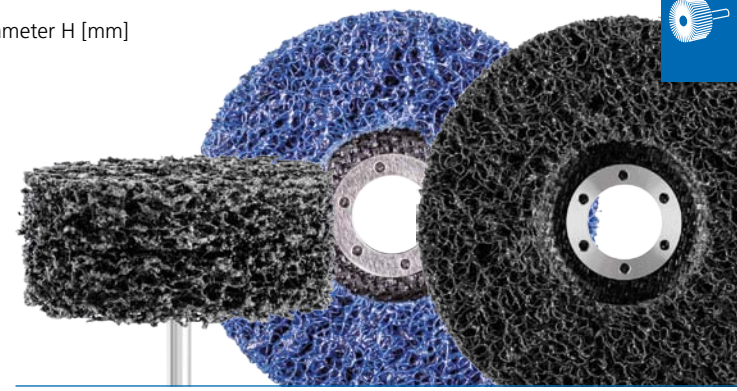
Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**471470**
  PCLS 7513/6
- **Ordering example explanation:**
  PCLS = POLICLEAN wheels
  75 = Outer diameter D [mm]
  13 = Width T [mm]
  6 = Centre hole diameter H [mm]

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.





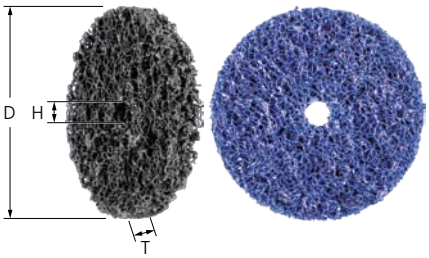
Recommended rotational speed range

Example:
PCLS 7513/6
Cutting speed: 15–20 m/s
Rotational speed: 3,800–5,000 RPM

Tool dia. [mm]	Cutting speed [m/s]				
	10	15	20	30	40
	Rotational speeds [RPM]				
75	2,500	3,800	5,000	7,600	10,100
100	1,900	2,800	3,800	5,700	7,600
115	1,600	2,400	3,300	4,900	6,600
125	1,500	2,200	3,000	4,500	6,100
150	1,200	1,900	2,500	3,800	5,000







POLICLEAN wheels PCLS, POLICLEAN wheels PCLS PLUS

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.

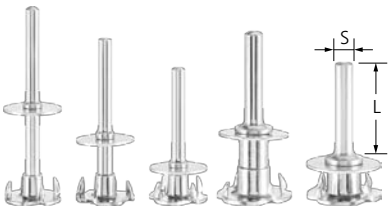
POLICLEAN PLUS discs exhibit a higher stock removal rate with a very long tool life.

Recommendations for use:
- For work on larger surfaces, pack several POLICLEAN wheels with the appropriate arbor.

Matching tool drives:
flexible shaft drive, power drill, straight grinder

Ordering notes:
- Please order the matching arbor separately.

D [mm]	T [mm]	H [mm]	EAN 4007220	Opt. RPM	Max. RPM	Suitable arbors		Description
PCLS type (black)								
75	13	6	471470	4,000–5,100	10,000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	PCLS 7513/6
100	13	13	471487	3,000–3,800	7,500	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	PCLS 10013/13
150	13	13	471494	2,000–2,500	5,100	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	PCLS 15013/13
PCLS PLUS type (blue)								
75	13	6	069257	4,000–5,100	10,000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	PCLS PLUS 7513/6
100	13	13	069264	3,000–3,800	7,500	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	PCLS PLUS 10013/13
150	13	13	069271	2,000–2,500	5,100	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	PCLS PLUS 15013/13



POLICLEAN arbors PCLB

Arbors for POLICLEAN wheels. The different variants provide space for 1, 2 or 3 wheels.

Advantages:
- High economic efficiency as the tool can be changed quickly.

Recommendations for use:
- When replacing the wheels, leave the arbor clamped in the tool drive.

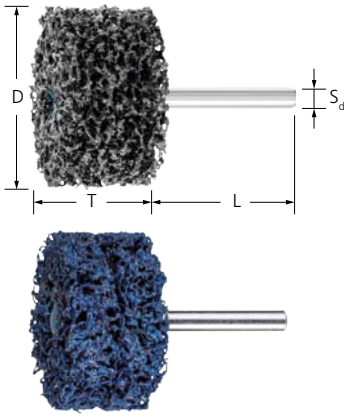
Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Suitable tool	EAN 4007220	Packaging		Description
6	6	40	PCLS 7513/6	471562	1 wheel	1	PCLB 6/6/13
				471579	2 wheels	1	PCLB 6/6/26
				471586	3 wheels	1	PCLB 6/6/39
13	6	40	PCLS 10013/13, PCLS 15013/13	532928	1 wheel	1	PCLB 6/13/13
	6	40	PCLS 10013/13, PCLS 15013/13	532935	2 wheels	1	PCLB 6/13/26
	8	40	PCLS 10013/13, PCLS 15013/13	471593	1 wheel	1	PCLB 8/13/13
	8	40	PCLS 10013/13, PCLS 15013/13	471609	2 wheels	1	PCLB 8/13/26

POLICLEAN mounted tools PCLZY, POLICLEAN mounted tools PCLZY PLUS

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.



Matching tool drives:
flexible shaft drive, power drill, straight grinder



D [mm]	T [mm]	S_d [mm]	L [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
PCLZY type (black)								
50	13	6	40	661321	6,000–7,000	15,000	5	PCLZY 5013/6
	26	6	40	661369	6,000–7,000	15,000	5	PCLZY 5026/6
75	13	6	40	661376	4,000–5,100	10,000	5	PCLZY 7513/6
	26	6	40	661383	4,000–5,100	10,000	5	PCLZY 7526/6
100	13	6	40	661406	3,000–3,800	7,500	5	PCLZY 10013/6
PCLZY PLUS type (blue)								
50	13	6	40	098547	6,000–7,000	15,000	5	PCLZY PLUS 5013/6
	26	6	40	098639	6,000–7,000	15,000	5	PCLZY PLUS 5026/6
75	13	6	40	098905	4,000–5,100	10,000	5	PCLZY PLUS 7513/6
	26	6	40	101025	4,000–5,100	10,000	5	PCLZY PLUS 7526/6
100	13	6	40	101032	3,000–3,800	7,500	5	PCLZY PLUS 10013/6

POLICLEAN discs PCLD, POLICLEAN discs PCLD PLUS

The non-woven cleaning material is glued onto a glass-fabric base. This makes POLICLEAN discs suitable for use in face-down grinding.

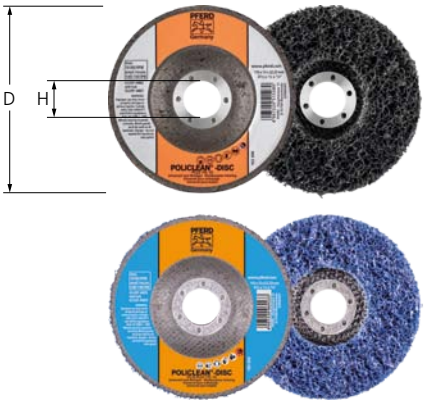
For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues.

POLICLEAN PLUS DISCS exhibit a high stock removal rate with a very long tool life.



Recommendations for use:
- Preferably for use on slow-running angle grinders.
- For the best results, use at a recommended cutting speed of 30–35 m/s.

Matching tool drives:
angle grinder, cordless angle grinder



D [mm]	T [mm]	H [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
PCLD type (black)							
115	13	22.23	515280	5,000–7,000	10,000	5	PCLD 115-13
125	13	22.23	515297	5,000–7,000	10,000	5	PCLD 125-13
PCLD PLUS type (blue)							
100	13	16	069202	5,000–7,000	10,000	5	PCLD PLUS 100-13
115	13	22.23	069233	5,000–7,000	10,000	5	PCLD PLUS 115-13
125	13	22.23	069240	5,000–7,000	10,000	5	PCLD PLUS 125-13

Poliflex tools
General information

Poliflex fine grinding tools are manufactured with high shape accuracy, outstandingly consistent quality and tight dimensional tolerances.

They are ideally suited to fine grinding, structuring and preparations for polishing work, and are very frequently used for tool- and mould-making applications.

Advantages:

- For achieving very good surface quality standards.
- High profitability thanks to long tool life and high stock removal rate.
- Outstanding working comfort thanks to precise concentricity.

Applications:

- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

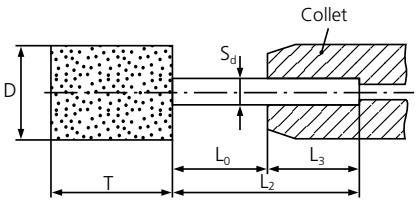
Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.



Explanation of the code system according to EN 12413:

D	= Grinding point outer diameter
T	= Grinding point width
S_d	= Shank diameter
L_0	= Unsupported shank length
L_2	= Shank length
L_3	= Clamping length of shank



Recommended rotational speed range

Example:
PF KU 15/6 AR 120 GR
Tool dia.: 15 mm
Cutting speed: 15 m/s
Rotational speed: 19,000 RPM

Tool dia. [mm]	Cutting speed [m/s]						
	10	12	15	20	25	30	50
	Rotational speeds [RPM]						
4	47,700	57,200	71,600	95,400	119,300	143,200	238,700
6	31,800	38,100	47,700	63,600	79,500	95,400	159,100
8	23,800	28,600	35,800	47,700	59,600	71,600	119,300
10	19,000	22,900	28,600	38,100	47,700	57,200	95,400
12	15,900	19,000	23,800	31,800	39,700	47,700	79,500
15	12,700	15,200	19,000	25,400	31,800	38,100	63,600
20	9,500	11,400	14,300	19,000	23,800	28,600	47,700
25	7,600	9,100	11,400	15,200	19,000	22,900	38,100
30	6,300	7,600	9,500	12,700	15,900	19,000	31,800
32	5,900	7,100	8,900	11,900	14,900	17,900	29,800
40	4,700	5,700	7,100	9,500	11,900	14,300	23,800
50	3,800	4,500	5,700	7,600	9,500	11,400	19,000
60	3,100	3,800	4,700	6,300	7,900	9,500	15,900
75	2,500	3,000	3,800	5,000	6,300	7,600	12,700
100	1,900	2,200	2,800	3,800	4,700	5,700	9,500
125	1,500	1,800	2,200	3,000	3,800	4,500	7,600
150	1,200	1,500	1,900	2,500	3,100	3,800	6,300



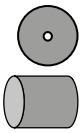




PF ZY 2030 6 AR 120 GR
❶ ❷ ❸ ❹ ❺ ❻ ❼

❶ Product code
PF = Abbreviation of Poliflex

❷ Shapes

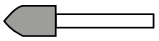

SC = Wheel

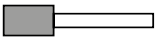
W = Roller

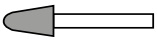

LI = Lens

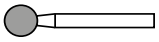

SP = Pointed tree

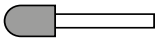

ZY = Cylindrical


KE = Conical with radius end


KU = Ball


WR = Cylindrical with radius end





❸ Dimensions
Grinding point outer diameter D x grinding point width T [mm]
20 mm x 30 mm = 2030

❹ Mounting options

Poliflex fine grinding points
Shank diameter S_d x shank length L_2 [mm]
3 mm x 30 mm
6 mm x 40 mm
8 mm x 40 mm

Poliflex fine grinding wheels
Depending on the respective wheel dimension, the centre hole diameters are either 2, 3, 6, 10 or 20 mm.

Poliflex marbling tools
Female thread M8

❺ Abrasive
In general, two grain types are used, with internationally defined designations according to ISO 525:
A = Aluminium oxide (Al_2O_3)
C = Silicon carbide (SiC)

The following abbreviations are used in order to specify the grain mixture more precisely, beyond ISO 525:

AW	= Aluminium oxide, white	CN	= Silicon carbide, green	ANCN	= Mixture of AN + CN
AR	= Aluminium oxide, pink	CU	= Silicon carbide, grey		
AN	= Aluminium oxide, standard	AWCN	= Mixture of AW + CN		

❻ Grit sizes according to ISO 525 and ISO 8486
The grit sizes used in PFERD fine grinding points are determined by the shape and diameter of the fine grinding point.

❼ Bond
The following bonds are available:

PUR	= Polyurethane (soft, medium-hard)	PU-STRUC	= Polyurethane	TX	= Textile
GR	= Rubber	GHR	= Rubber, hard		
LR	= Leather	LHR	= Leather, hard		



Safety notes:
The following maximum operating speeds are permitted for Poliflex fine grinding tools:

PUR	**15 m/s**
GR	**15 m/s**
LR	**30 m/s**
TX	**30 m/s**
PUR-STRUC	**15 m/s**
GHR	**30 m/s**
LHR	**50 m/s**

The maximum rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use.

Regardless of the shank length, the clamping length (L_3) of the shank must be at least 10 mm.

The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:
- Shape and dimensions of the grinding point
- Diameter of the steel shank S_d
- Unsupported shank length L_0

Each packaging unit of PFERD fine grinding points comes with rotational speed specifications for the unsupported shank length (L_0) of that wheel. Proper concentric accuracy and correct clamping of the tool drive must also be ensured.

Tables with the maximum permitted rotational speeds for the entire range of Poliflex fine grinding points are available on request.



Poliflex tools
The fast way to the best tool

To make it easier to choose the right Poliflex fine grinding tool, we have designed our range around material groups, main areas of application and special operational requirements.

The overview shows which variations of abrasives and bonds are recommended for the various materials with a view to the tasks at hand.

The differentiation of the selection criteria in terms of material, application and surface finish are necessary to find the best tool. The tool bond and grain mixture have a decisive impact on the abrasive performance, tool life and aggressiveness of the tools. What's more, they also determine the look of the surface.

How do you find the best Poliflex fine grinding tool?
❶ Material
The material of the component to be machined is generally known in advance. The various material groups are colour-coded and form the starting point for choosing the most appropriate fine grinding tool.

❶ Material group ▼			❷ Application ▼	Bond ▶ Abrasive (grain mixtures) ▶ ❹ Designation/ bond ▶ Recommended cutting speed ▶ ❸ Surface finish ▼
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels, cast steel	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, alloyed cast steel	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
			General use	Structured surface
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys (high Si content)	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high dimensional stability	Matt surface
				Shiny surface
● = Highly suitable	❍ = Suitable			❺ Catalogue page ▶

❷ Application
After the material, the application must be selected:
■ General use ■ Surface grinding ■ Edge grinding

❸ Desired surface finish
Next, the desired work result must be selected:
■ Matt surface ■ Shiny surface ■ Structured surface

❹ Tool bond
After determining the application and the desired surface finish, the appropriate bond can be selected from the options in the right-hand side of the overview. The "highly suitable" bond is indicated by a solid black dot (●). Further "suitable" bonds are indicated by an open dot (❍).

❺ Reference to catalogue page
Further information about the selected bond, tool shapes and dimensions, and grit sizes can be found on the corresponding catalogue pages stated in the table.

Polyurethane bond			Elastomer bond				Resinoid bond
CN			AR	ANCN	AW	AWCN	AN
							
PUR							
W (soft)	MH (medium-hard)	STRUC	GR	GHR	LR	LHR	TX
10–12 m/s	10–15 m/s	5–10 m/s	10–12 m/s	20–25 m/s	15–20 m/s	30–40 m/s	20–25 m/s
❍	●		❍				
			●		❍		
	❍		❍				●
				●		❍	
❍	●		❍				
			❍		●		
	❍						●
				❍		●	
●	❍						
			●		❍		
	❍						●
				●	❍		
❍	❍	●					
●	❍						❍
			❍		●		
				❍			●
			❍		●		
	❍						●
			❍	●			
				❍			●
				❍		●	
	❍						●
			●	❍			
	❍			❍			●
				❍		●	
130–131	130–131	133–134	135–137	135–137	138–139	138–139	140–142

Poliflex tools
PUR bond



Poliflex fine grinding tools with the PUR bond are manufactured with green silicon carbide (SiC). The PUR bond is a very soft bond which is available in two hardness grades (PUR-W, PUR-MH). It is homogeneously interspersed with abrasive grain.

Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool, very soft grinding thanks to open structure and elastic bond.
- For achieving a fine, matt surface finish.

Abrasive:

- Silicon carbide SiC

Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 10–15 m/s.

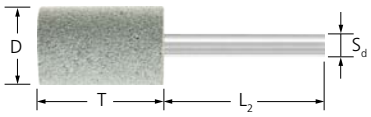
Ordering notes:

- When ordering, please state the EAN or the full description.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.





Poliflex fine grinding points PF ZY PUR

Fine grinding point in cylindrical shape, for fine grinding of small surfaces.



Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size 80	Grit size 150	Grit size 220	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Shank dia. 3 mm PUR-W										
8	12	3	30	535004	535028	-	24,000	35,800	10	PF ZY 0812/3 CN ... PUR-W
Shank dia. 6 mm PUR-W										
10	25	6	40	535042	535073	-	19,000	28,600	10	PF ZY 1025/6 CN ... PUR-W
15	30	6	40	535141	535165	-	12,500	19,000	10	PF ZY 1530/6 CN ... PUR-W
20	30	6	40	535233	535257	-	9,500	14,300	10	PF ZY 2030/6 CN ... PUR-W
25	30	6	40	297841	297865	-	7,500	11,400	10	PF ZY 2530/6 CN ... PUR-W
Shank dia. 3 mm PUR-MH										
8	12	3	30	-	535011	535035	24,000	35,800	10	PF ZY 0812/3 CN ... PUR-MH
Shank diameter of 6 mm PUR-MH										
10	25	6	40	-	535059	535080	19,000	28,600	10	PF ZY 1025/6 CN ... PUR-MH
15	30	6	40	535134	535158	535172	12,500	19,000	10	PF ZY 1530/6 CN ... PUR-MH
20	30	6	40	535325	535240	-	9,500	14,300	10	PF ZY 2030/6 CN ... PUR-MH
32	32	6	40	535288	535295	-	6,000	8,900	5	PF ZY 3232/6 CN ... PUR-MH

Poliflex discs PFD PUR

For fine face-down grinding on large surfaces.

Recommendations for use:
- Preferably for use on slow-running angle grinders.

Ordering notes:
- Please complete the description with the desired grit size.

Matching tool drives:
angle grinder, cordless angle grinder



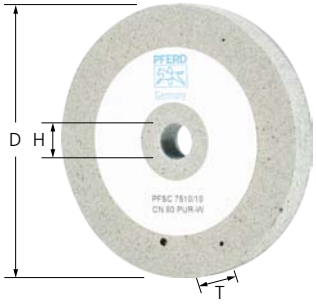
D [mm]	T [mm]	H [mm]	Type	Grit size 60	Grit size 150	Opt. RPM	Max. RPM		Description
				EAN 4007220					
115	14	22.23	soft	536377	536391	2,400	5,300	5	PFD 115-22 CN ... PUR-W
			medium-hard	536346	536360	2,400	5,300	5	PFD 115-22 CN ... PUR-MH

Poliflex fine grinding wheels PF SC PUR

For fine peripheral grinding of medium-sized to large surfaces.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.



D [mm]	T [mm]	H [mm]	Grit size 80	Grit size 150	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
75	10	10	144749	-	2,500	3,800	BO 8/10 6-20	5	PF SC 7510/10 CN ... PUR-W
125	20	20	144794	-	1,500	2,300	BO 12/20 10-50, BO MK 1/20 10-50	1	PF SC 12520/20 CN ... PUR-W
150	25	20	298428	298435	1,200	1,900	BO 12/20 10-50, BO MK 1/20 10-50	1	PF SC 15025/20 CN ... PUR-W

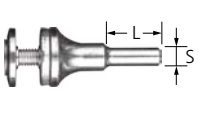
Arbors

Arbors BO

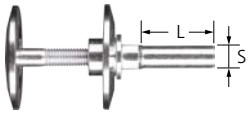
Matching arbor for Poliflex fine grinding wheels PF SC.

Advantages:
- High economic efficiency as the tool can be changed quickly.

Matching tool drives:
flexible shaft drive, straight grinder



BO 8/10 6-20



BO 12/20 10-50


BO MK 1/20 10-50

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
10	8	30	6–20	297667	1	BO 8/10 6-20
20	12	35	10–50	297674	1	BO 12/20 10-50
	-	-	10–50	297681	1	BO MK 1/20 10-50



Poliflex blocks PUR

The rhomboidal shape even enables work to be effortlessly performed on hard-to-reach places such as corners.

With a diamond cut-off wheel, the blocks can be minimized and adapted to the respective application as required.

Matching tool drives:
manual application

Ordering notes:
- Please complete the description with the desired grit size.

L [mm]	B [mm]	H [mm]	Grit size 60	Grit size 120	Grit size 240		Description
			EAN 4007220				
115	60	30	298671	298688	298695	5	PFB 1156030 CU ... PUR



Poliflex block set PSO PUR

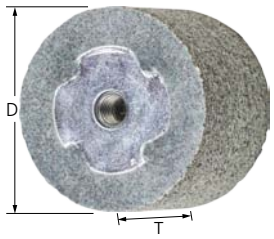
Set of different Poliflex blocks PUR.

Contents:
9 units in total, 3 Poliflex blocks from each category
- Grit 60 (coarse)
- Grit 120 (medium)
- Grit 240 (fine)

Advantages:
- Promotional display box.

Matching tool drives:
manual application

L x B x H [mm]	EAN 4007220		Description
285 x 150 x 60	298886	1	PSO 11560



Poliflex marbling tool holders PFZY PUR

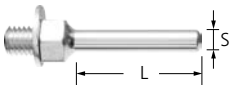
Tools with female thread M8 for marbling surfaces.

Recommendations for use:
- For face-down grinding, use at 1,000–4,000 RPM.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

D [mm]	T [mm]	Thread	Grit size 30	Grit size 80	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
50	40	M8	146194	146200	1,000–4,000	5,700	BO 6/8	5	PF ZY 5040 M8 CN ... PUR



Arbors BO

Matching arbor for Poliflex marbling tool holders PFZY.

Advantages:
- High economic efficiency as the tool can be changed quickly.

S [mm]	L [mm]	Thread	EAN 4007220		Description
6	40	M8	062104	1	BO 6/8

Poliflex structuring tools with the PU-STRUC bond are manufactured with grey silicon carbide. They are ideally suited to work on components made from stainless steel (INOX).
The PU-STRUC bond is homogeneously interspersed with a high proportion of abrasive grain.



Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool, soft grinding thanks to open structure and elastic bond.
- Quick and effective retouching of imperfections and transitions to directional textures.

Abrasive:

- Silicon carbide SiC

Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 5–10 m/s.

Ordering notes:

- When ordering, please state the EAN or the full description.

Safety notes:

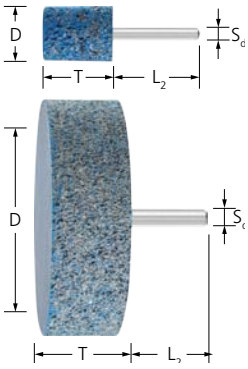
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.



Poliflex mounted texturing points PF ZY PU-STRUC

Mounted texturing point in cylindrical shape, for structuring small to medium-sized surfaces.

Matching tool drives:
flexible shaft drive, straight grinder

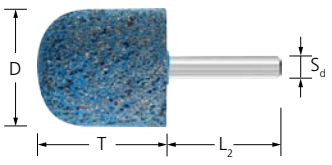


D [mm]	T [mm]	S_d [mm]	L_2 [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 6 mm								
20	30	6	40	752029	4,750–9,550	14,000	10	PF ZY 2030/6 CU 16 PU-STRUC
25	30	6	40	752036	3,800–7,600	11,500	10	PF ZY 2530/6 CU 16 PU-STRUC
32	32	6	40	752043	3,000–6,000	9,000	5	PF ZY 3232/6 CU 16 PU-STRUC
Shank dia. 8 mm								
100	30	8	40	752074	1,000–1,900	2,800	1	PF ZY 10030/8 CU 16 PU-STRUC

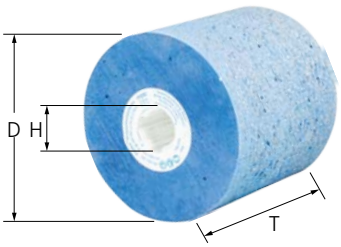
Poliflex mounted texturing points PF WR PU-STRUC

Mounted texturing point in cylindrical shape with radius end, for structuring small surfaces, transitions and inner radii.

Matching tool drives:
flexible shaft drive, straight grinder



D [mm]	T [mm]	S_d [mm]	L_2 [mm]	EAN 4007220	Opt. RPM	Max. RPM		Description
30	45	8	40	752081	3,150–6,350	9,500	5	PF WR 3045/8 CU 16 PU-STRUC
40	45	8	40	752104	2,350–4,750	7,000	5	PF WR 4045/8 CU 16 PU-STRUC
50	45	8	40	752111	1,900–3,800	5,700	5	PF WR 5045/8 CU 16 PU-STRUC



Poliflex texturing rollers PF W PU-STRUC

For structuring large surfaces.

Matching tool drives:
drum grinders

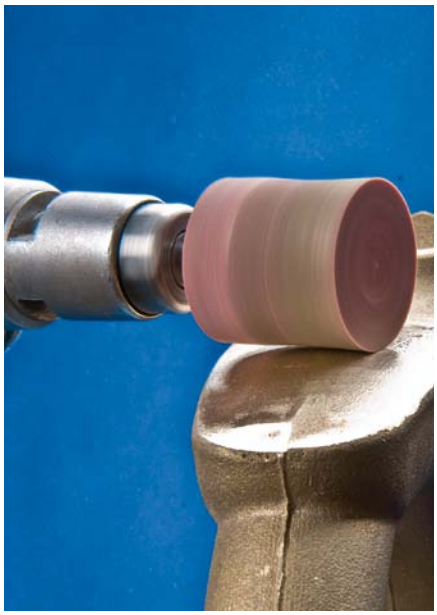
Ordering notes:
- The centre hole diameter of 19 mm with 4 wedge keyways fits on all conventional drum drives.
- Other drum tools can be found in the set on page 90 as well as on pages 116–117 and in catalogue section 8.

D [mm]	T [mm]	H [mm]	Abrasives	EAN 4007220	Opt. RPM	Max. RPM		Description
100	100	19	SiC	752159	1,000–1,900	2,800	1	PF W 100100/19 CU 16 PU-STRUC



Poliflex fine grinding tools with the GR bond are manufactured with pink aluminium oxide. The GR bond is an elastomer-based soft bond. Suitable for use on surfaces.

Poliflex fine grinding tools with the GHR bond are manufactured with an abrasive grain mixture comprising aluminium oxide and silicon carbide (SiC). The GHR bond is likewise a soft yet sturdy elastomer-based bond. Suitable for use on edges.



Advantages:

- For achieving a fine, shiny surface finish.
- **GR:** Soft grinding thanks to soft, elastic bond.
- **GHR:** Soft grinding with a longer tool life.

Abrasive:

- White aluminium oxide AW
- Silicon carbide SiC

Applications:

- Step-by-step fine grinding

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- **GR:** For best performance, use with a recommended cutting speed of 10–12 m/s.
- **GHR:** For best performance, use with a recommended cutting speed of 20–25 m/s.

Ordering notes:

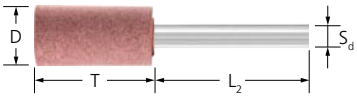
- When ordering, please state the EAN or the full description.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.



Poliflex fine grinding points PF ZY GR/GHR



Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

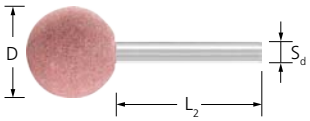
Ordering notes:

- Poliflex fine grinding points with a grit size of 400 are manufactured from the abrasive AW white aluminium oxide.
- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size 46	80	120	220	400	Opt. RPM	Max. RPM		Description
				EAN 4007220								
Shank dia. 3 mm GR												
4	8	3	30	-	-	144800	-	-	47,500	71,600	10	PF ZY 0408/3 AR ... GR
6	10	3	30	-	-	144824	-	-	32,000	47,700	10	PF ZY 0610/3 AR ... GR
8	8	3	30	-	-	144848	144855	-	24,000	35,800	10	PF ZY 0808/3 AR ... GR
	12	3	30	-	-	144886	144893	-	24,000	35,800	10	PF ZY 0812/3 AR ... GR
10	6	3	30	-	-	145838	-	-	19,000	28,600	10	PF ZY 1006/3 AR ... GR
	10	3	30	-	-	144947	144954	-	19,000	28,600	10	PF ZY 1010/3 AR ... GR
	15	3	30	-	-	145036	145043	-	19,000	28,600	10	PF ZY 1015/3 AR ... GR
12	8	3	30	-	-	145883	-	-	16,000	23,800	10	PF ZY 1208/3 AR ... GR
	12	3	30	-	-	145203	-	-	16,000	23,800	10	PF ZY 1212/3 AR ... GR
	20	3	30	-	-	145265	-	-	16,000	23,800	10	PF ZY 1220/3 AR ... GR
Shank diameter of 6 mm GR												
10	10	6	40	-	-	144992	-	-	19,000	28,600	10	PF ZY 1010/6 AR ... GR
	15	6	40	-	-	145081	145098	-	19,000	28,600	10	PF ZY 1015/6 AR ... GR
	25	6	40	-	533925	145128	145135	-	19,000	28,600	10	PF ZY 1025/6 AR ... GR
12	8	6	40	-	-	145913	-	-	16,000	23,800	10	PF ZY 1208/6 AR ... GR
	12	6	40	-	-	145234	-	-	16,000	23,800	10	PF ZY 1212/6 AR ... GR
	20	6	40	-	-	145296	145302	-	16,000	23,800	10	PF ZY 1220/6 AR ... GR
15	15	6	40	-	-	145371	-	-	12,500	19,000	10	PF ZY 1515/6 AR ... GR

Continued on next page

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size 46	80	120	220	400	Opt. RPM	Max. RPM		Description
				EAN 4007220								
15	25	6	40	-	-	145418	145425	-	12,500	19,000	10	PF ZY 1525/6 AR ... GR
	30	6	40	-	-	145470	145487	-	12,500	19,000	10	PF ZY 1530/6 AR ... GR
20	12	6	40	-	-	145982	-	-	9,500	14,300	10	PF ZY 2012/6 AR ... GR
	20	6	40	-	-	145562	145579	-	9,500	14,300	10	PF ZY 2020/6 AR ... GR
	30	6	40	-	534113	145630	-	-	9,500	14,300	10	PF ZY 2030/6 AR ... GR
25	15	6	40	-	-	146026	-	-	7,500	14,300	10	PF ZY 2515/6 AR ... GR
	25	6	40	-	-	145708	145715	-	7,500	11,400	10	PF ZY 2525/6 AR ... GR
30	20	6	40	-	-	146057	-	-	6,500	9,500	5	PF ZY 3020/6 AR ... GR
	30	6	40	-	-	145760	-	-	6,500	9,500	5	PF ZY 3030/6 AR ... GR
Shank dia. 8 mm GR												
40	25	8	40	-	-	146095	-	-	4,500	9,500	5	PF ZY 4025/8 AR ... GR
Shank dia. 3 mm GHR												
4	8	3	30	-	-	-	-	533734	100,000	143,200	10	PF ZY 0408/3 AW ... GHR
8	12	3	30	-	-	533765	-	-	60,000	71,600	10	PF ZY 0812/3 ANCN ... GHR
						-	-	533772	60,000	71,600	10	PF ZY 0812/3 AW ... GHR
10	10	3	30	-	-	533871	-	-	45,000	57,200	10	PF ZY 1010/3 ANCN ... GHR
	15	3	30	-	-	533895	-	-	45,000	52,000	10	PF ZY 1015/3 ANCN ... GHR
Shank dia. 6 mm GHR												
10	25	6	40	-	-	533956	-	-	45,000	57,200	10	PF ZY 1025/6 ANCN ... GHR
						-	-	533970	45,000	57,200	10	PF ZY 1025/6 AW ... GHR
15	30	6	40	145555	534069	-	-	-	32,000	47,700	10	PF ZY 1530/6 ANCN ... GHR
20	30	6	40	145692	-	-	-	-	24,000	28,600	10	PF ZY 2030/6 ANCN ... GHR
25	25	6	40	145753	-	-	-	-	19,000	22,900	10	PF ZY 2525/6 ANCN ... GHR



Poliflex fine grinding points PF KU GR/GHR

Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

Ordering notes:
- Please complete the description with the desired grit size.

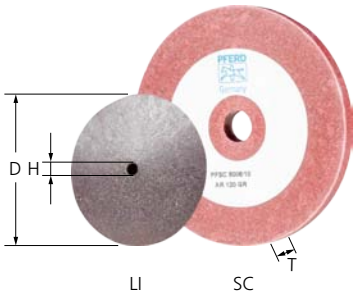
D [mm]	S_d [mm]	L_2 [mm]	Grit size 120	Opt. RPM	Max. RPM		Description
			EAN 4007220				
Shank dia. 3 mm							
8	3	30	146217	24,000	35,800	10	PF KU 08/3 AR ... GR
10	3	30	146231	19,000	28,600	10	PF KU 10/3 AR ... GR
Shank dia. 6 mm							
12	6	40	146255	16,000	23,800	10	PF KU 12/6 AR ... GR
15	6	40	146279	12,500	19,000	10	PF KU 15/6 AR ... GR
20	6	40	146293	9,500	14,300	10	PF KU 20/6 AR ... GR
25	6	40	146316	7,500	11,400	10	PF KU 25/6 AR ... GR
30	6	40	146323	6,500	9,500	5	PF KU 30/6 AR ... GR

Poliflex fine grinding discs/lenses PF SC/LI GR/GHR

Ideally suited to very fine grinding on all metallic materials, e.g. in tool- and mould-making, in the dental sector and in the jewellery sector.

Due to their construction, the small diameter variants are particularly suited to work on tight and hard-to-reach places.

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

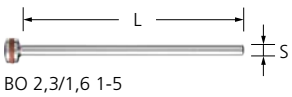


D [mm]	T [mm]	H [mm]	Grit size 120	Grit size 220	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
Disc shape GR									
25	3	2	146699	-	7,500	11,400	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PF SC 2503/2 AR ... GR
30	6	6	144695	-	6,300	9,500	BO 6/6 3-10	5	PF SC 3006/6 AR ... GR
50	6	6	144718	-	3,800	5,700	BO 6/6 3-10	5	PF SC 5006/6 AR ... GR
80	6	10	144756	-	2,400	3,500	BO 8/10 6-20	5	PF SC 8006/10 AR ... GR
100	20	10	144787	-	1,900	2,800	BO 8/10 6-20	1	PF SC 10020/10 AR ... GR
Disc shape GHR									
25	3	2	-	146705	7,500	11,400	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PF SC 2503/2 CU ... GHR
Lens shape GHR									
16	4	2	-	146675	12,000	17,900	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PF LI 1604/2 CU ... GHR
24	3	2	-	146682	8,000	12,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100	PF LI 2403/2 CU ... GHR

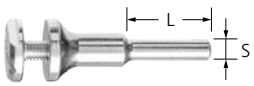
Arbors BO

Matching arbor for Poliflex fine grinding discs and lenses PF SC/LI.

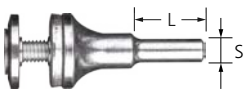
Advantages:
- High economic efficiency as the tool can be changed quickly.



BO 2,3/1,6 1-5
BO 3/1,6 1-5



BO 6/6 3-10



BO 8/10 6-20

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
1.6	2.34	43	1–5	151570	10	BO 2,3/1,6 1-5
	3	43	1–5	151587	10	BO 3/1,6 1-5
6	6	25	3–10	297650	1	BO 6/6 3-10
10	8	30	6–20	297667	1	BO 8/10 6-20





Poliflex fine grinding tools with the LR bond are manufactured with white aluminium oxide. The LR bond is a hard, sturdy bond. Suitable for use on surfaces.

Poliflex fine grinding tools with the LHR bond are manufactured with an abrasive grain mixture comprising white aluminium oxide and a portion of green silicon carbide. The LHR bond is a hard, sturdy bond. Suitable for use on edges.

Advantages:

- For achieving a fine, shiny surface finish.
- High profitability thanks to high abrasive performance and long tool life.

Abrasive:

- Aluminium oxide A
- Silicon carbide SiC

Applications:

- Step-by-step fine grinding

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- **LR:** For best performance, use with a recommended cutting speed of 15–20 m/s.
- **LHR:** For best performance, use with a recommended cutting speed of 30–40 m/s.

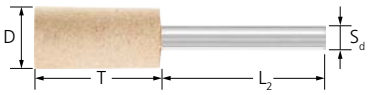
Ordering notes:

- When ordering, please state the EAN or the full description.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.





Poliflex fine grinding points PF ZY LR/LHR

Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

Ordering notes:

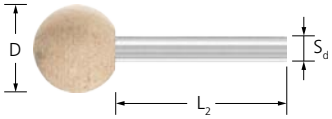
- Poliflex fine grinding points LHR with a grit size of 60 are manufactured from an abrasive mixture of AWCN white aluminium oxide and green silicon carbide.
- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size 60	120	220	400	Opt. RPM	Max. RPM		Description
				EAN 4007220							
Shank dia. 3 mm LR											
4	8	3	30	-	144817	-	533697	95,000	143,200	10	PF ZY 0408/3 AW ... LR
6	10	3	30	-	144831	-	-	64,000	95,400	10	PF ZY 0610/3 AW ... LR
8	8	3	30	-	144862	-	-	47,500	71,600	10	PF ZY 0808/3 AW ... LR
	12	3	30	-	144909	144916	533758	47,500	71,600	10	PF ZY 0812/3 AW ... LR
10	10	3	30	-	144961	144978	-	38,000	57,200	10	PF ZY 1010/3 AW ... LR
	15	3	30	-	145050	-	-	38,000	57,200	10	PF ZY 1015/3 AW ... LR
12	12	3	30	-	145210	-	-	32,000	47,700	10	PF ZY 1212/3 AW ... LR
	20	3	30	-	145272	-	-	32,000	47,700	10	PF ZY 1220/3 AW ... LR
Shank diameter of 6 mm LR											
10	10	6	40	-	145012	-	-	38,000	57,200	10	PF ZY 1010/6 AW ... LR
	15	6	40	-	145104	-	-	38,000	57,200	10	PF ZY 1015/6 AW ... LR
	25	6	40	-	145142	145159	-	38,000	57,200	10	PF ZY 1025/6 AW ... LR
12	12	6	40	-	145258	-	-	32,000	47,700	10	PF ZY 1212/6 AW ... LR
	20	6	40	-	145319	-	-	32,000	47,700	10	PF ZY 1220/6 AW ... LR
15	15	6	40	-	145395	-	-	25,500	38,100	10	PF ZY 1515/6 AW ... LR
	25	6	40	-	145449	-	-	25,500	38,100	10	PF ZY 1525/6 AW ... LR
	30	6	40	-	145500	-	-	25,500	38,100	10	PF ZY 1530/6 AW ... LR

Continued on next page

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size 60	Grit size 120	Grit size 220	Grit size 400	Opt. RPM	Max. RPM		Description
				EAN 4007220							
20	20	6	40	-	145593	-	-	19,000	28,600	10	PF ZY 2020/6 AW ... LR
20	30	6	40	-	145661	-	-	19,000	28,600	10	PF ZY 2030/6 AW ... LR
25	25	6	40	-	145739	-	-	15,000	22,900	10	PF ZY 2525/6 AW ... LR
30	30	6	40	-	145791	-	-	12,500	19,000	5	PF ZY 3030/6 AW ... LR
Shank dia. 3 mm LHR											
8	12	3	30	-	144923	-	-	47,000	76,700	10	PF ZY 0812/3 AW ... LHR
Shank dia. 6 mm LHR											
10	25	6	40	145166	-	-	-	75,000	83,200	10	PF ZY 1025/6 AWCN ... LHR
				-	145173	-	-	75,000	83,200	10	PF ZY 1025/6 AW ... LHR
20	20	6	40	-	145616	-	-	38,000	47,700	10	PF ZY 2020/6 AW ... LHR

Poliflex fine grinding points PF KU LR/LHR



Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

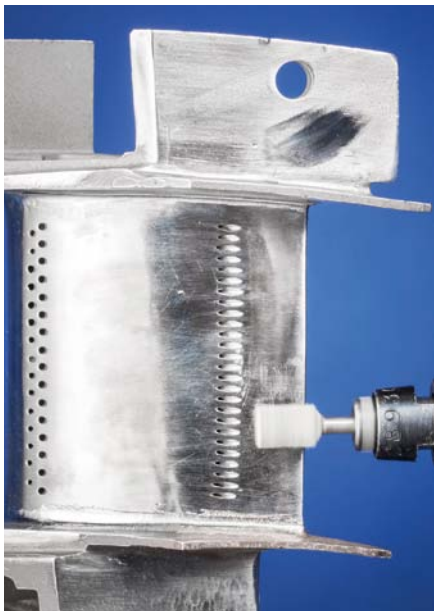
Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	S_d [mm]	L_2 [mm]	Grit size 120	Opt. RPM	Max. RPM		Description
			EAN 4007220				
Shank dia. 3 mm							
8	3	30	146224	47,000	71,600	10	PF KU 08/3 AW ... LR
10	3	30	146248	38,000	57,200	10	PF KU 10/3 AW ... LR
Shank dia. 6 mm							
15	6	40	146286	29,500	38,100	10	PF KU 15/6 AW ... LR
20	6	40	146309	19,000	28,600	10	PF KU 20/6 AW ... LR









Poliflex fine grinding tools with the TX bond are manufactured with standard aluminium oxide. The textile fabric inlays make the TX bond a very hard, sturdy bond. Suitable for use on edges.

Advantages:

- For achieving a fine, matt surface finish.
- High profitability thanks to high abrasive performance and long tool life.

Abrasive:

- Aluminium oxide A

Applications:

- Step-by-step fine grinding

Matching tool drives:

- Flexible shaft drives
- Straight grinders

Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 20–30 m/s.
- The 19 x 2.5 mm dimension variant is ideally suited to grinding tracks.

Ordering notes:

- When ordering, please state the EAN or the full description.

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.





Poliflex fine grinding points PF ZY TX

Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

Recommendations for use:

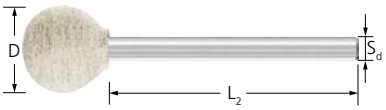
- The dimensions of 19 x 2.5 mm have been specifically designed for cleaning and slot grinding applications. Seat mounting rails (tracks) in passenger aircraft can be cleaned and rust removed.

Ordering notes:

- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Opt. RPM	Max. RPM		Description
				80	120				
				EAN 4007220					
Shank dia. 3 mm									
6	10	3	30	298060	298077	63,000	95,400	10	PF ZY 0610/3 AN ... TX
8	12	3	30	298084	298091	47,500	71,600	10	PF ZY 0812/3 AN ... TX
Shank dia. 6 mm									
10	25	6	40	297780	297889	38,000	57,200	10	PF ZY 1025/6 AN ... TX
16	32	6	40	297919	297940	24,000	35,800	10	PF ZY 1632/6 AN ... TX
19	2.5	6	40	067857	-	20,000	30,100	10	PF ZY 192,5 6 AN ... TX
20	32	6	40	297957	297964	19,000	28,600	10	PF ZY 2032/6 AN ... TX
25	32	6	40	297988	297995	15,000	22,900	10	PF ZY 2532/6 AN ... TX

Poliflex fine grinding points PF KU TX



Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	S_d [mm]	L_2 [mm]	Grit size		Opt. RPM	Max. RPM		Description
			80	120				
			EAN 4007220					
Shank dia. 3 mm								
6	3	30	298145	298152	63,000	95,400	10	PF KU 06/3 AN ... TX
8	3	30	-	298176	47,500	71,600	10	PF KU 08/3 AN ... TX
10	3	30	-	298190	38,000	57,200	10	PF KU 10/3 AN ... TX

Poliflex fine grinding points PF KE TX



Fine grinding points in conical shape for fine grinding inner radii, contours and transitions.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Opt. RPM	Max. RPM		Description
				80	120				
				EAN 4007220					
Shank dia. 6 mm									
10	25	6	40	298121	298138	38,000	57,200	10	PF KE 1025/6 AN ... TX
16	45	6	40	298015	-	24,000	38,800	10	PF KE 1645/6 AN ... TX
25	70	6	40	298008	-	15,000	22,900	10	PF KE 2570/6 AN ... TX

Poliflex fine grinding points PF SP TX

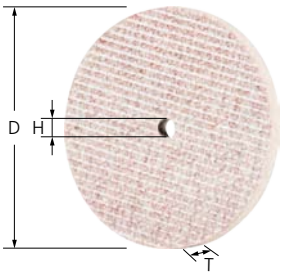


Fine grinding points in pointed tree shape for fine grinding inner radii, contours and transitions.

Ordering notes:
- Please complete the description with the desired grit size.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Opt. RPM	Max. RPM		Description
				80	120				
				EAN 4007220					
Shank dia. 3 mm									
10	20	3	30	298107	298114	38,000	57,200	10	PF SP 1020/3 AN ... TX
Shank dia. 6 mm									
20	32	6	40	298039	298046	19,000	28,600	10	PF SP 2032/6 AN ... TX



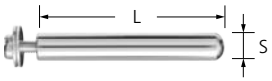


Poliflex fine grinding discs PF SC TX

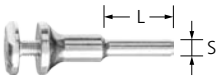
For fine peripheral grinding of small surfaces.

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

D [mm]	T [mm]	H [mm]	Grit size 80	Grit size 120	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220						
25	3	3	505502	505519	15,000	22,900	BO 6/3 1-6	20	PF SC 2503/3 A ... TX
	6	3	-	505540	15,000	22,900	BO 6/3 1-6	20	PF SC 2506/3 A ... TX
40	3	3	505564	505571	9,500	14,300	BO 6/3 1-6	10	PF SC 4003/3 A ... TX
	6	6	-	505618	9,500	14,300	BO 6/6 3-10	10	PF SC 4006/6 A ... TX



BO 6/3 1-6



BO 6/6 3-10

Arbors BO

Matching arbor for Poliflex fine grinding discs PF SC.

Advantages:
- High economic efficiency as the tool can be changed quickly.

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
3	6	40	1–6	505694	1	BO 6/3 1-6
6	6	25	3–10	297650	1	BO 6/6 3-10







Ceramic fibre files are made of high-grade ceramic fibres directionally embedded in a special resinoid bond. Suitable for use on surfaces and in hard-to-reach areas in tool- and mould-making.



Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.

Abrasive:

- Ceramic fibres
- Grit size colour code:
  180 = Gold
  280 = Light brown
  400 = Orange
  700 = Blue

Materials that can be worked:

- Aluminium
- Copper
- Stainless steel (INOX)
- Steel, cast steel

Applications:

- Surface work
- Finishing
- Step-by-step fine grinding

Matching tool drives:

- Manual application
- Manual filing tool

Recommendations for use:

- Use the files at a 45° angle for the highest stock removal rate.

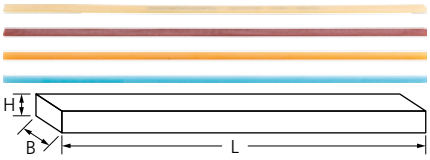
Safety notes:



KFF

The various shapes enable work on difficult geometries in tool-making applications.

Ordering notes:
- Please complete the description with the desired grit size.



H [mm]	B [mm]	L [mm]	Grit size 180	280	400	700		Description
			EAN 4007220					
Flat ▭								
0.5	4	150	668887	668894	668900	668917	1	KFF 0,5 x 4 x 150 A ...
1	4	150	668924	668931	668948	668955	1	KFF 1,0 x 4 x 150 A ...
2	4	150	668962	668979	668986	668993	1	KFF 2,0 x 4 x 150 A ...
0.5	6	150	669006	669013	669020	669037	1	KFF 0,5 x 6 x 150 A ...
1	6	150	669044	669051	669068	669075	1	KFF 1,0 x 6 x 150 A ...
2	6	150	669082	669099	669105	669112	1	KFF 2,0 x 6 x 150 A ...
1	10	150	669129	669136	669143	669150	1	KFF 1,0 x 10 x 150 A ...
Round ○								
2.35	-	150	026724	026748	026755	026762	1	KFF RD 2,35 x 150 A ...
3	-	150	026779	026786	026793	026809	1	KFF RD 3 x 150 A ...
Three square △								
3	3	150	026816	026823	026830	026847	1	KFF DKT 3 x 3 x 3 x 150 A ...



Detailed information on grinding and polishing stones can be found in catalogue section 3.

Polishing tools
General information

The comprehensive range of polishing tools contains:
- Felt points
- Mounted felt flap wheels
- Felt wheels
- Felt flap discs
- Cloth rings

Felt points and discs are available in two types:
- **Felt points/discs without metal inlay:**
  These are predominantly used for high-gloss polishing
- **Felt points/discs with metal inlay (MS):**
  These are used for increased stock removal when pre-polishing with diamond grinding pastes.

Advantages:

- Felt points and discs: Precise retention of geometric shapes due to the hardness of these tools.
- Felt flap discs, cloth rings and mounted felt flap wheels: Optimum adaptation to contours thanks to high flexibility.
- Can be freely shaped, meaning they can be used for tools with complicated geometries.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Polishing

Recommendations for use:

- For best performance, use with a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- **Felt points and discs:**
  Use diamond polishing pastes and polishing paste bars.
- **Cloth rings and mounted felt flap wheels:**
  Use polishing and grinding pastes.
- When changing the polishing paste, use a brand-new polishing tool.

Ordering instructions:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**295243**
  FK ZYA 0610/3 M
- **Ordering example explanation:**
  FK = Felt point
  ZYA = Cylindrical shape
  0610 = Outer diameter D x width T [mm]
  3 = Shank diameter S_d [mm]
  M = Medium hardness

Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.



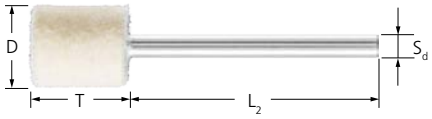
Recommended rotational speed range

Example:
FK ZYA 2530/6 ST-BO
Cutting speed: 5–10 m/s
Rotational speed: 3,800-7,600 RPM

Example:
TR 10010 ST/10
Cutting speed: 10–15 m/s
Rotational speed: 1,900-2,800 RPM

Tool dia. [mm]	Cutting speed [m/s]					
	5	10	15	20	25	32
	Rotational speeds [RPM]					
6	15,900	31,800	47,700	63,600	79,500	101,800
8	11,900	23,800	35,800	47,700	59,600	76,300
10	9,500	19,000	28,600	38,100	47,700	61,100
12	7,900	15,900	23,800	31,800	39,700	50,900
15	6,300	12,700	19,000	25,400	31,800	40,700
20	4,700	9,500	14,300	19,000	23,800	30,500
25	3,800	7,600	11,400	15,200	19,000	24,400
30	3,100	6,300	9,500	12,700	15,900	20,300
45	2,100	4,200	6,300	8,400	10,600	13,500
60	1,500	3,100	4,700	6,300	7,900	10,100
80	1,100	2,300	3,500	4,700	5,900	7,600
100	900	1,900	2,800	3,800	4,700	6,100
115	800	1,600	2,400	3,300	4,100	5,300
125	700	1,500	2,200	3,000	3,800	4,800
150	600	1,200	1,900	2,500	3,100	4,000
200	400	900	1,400	1,900	2,300	3,000

Shape ZYA



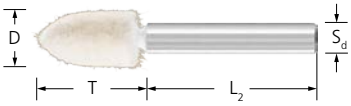
The cylindrical shape ZYA is mainly used peripherally. The variant with end hole (ST-BO) is particularly suitable for face-down use.

Felt points with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond polishing pastes.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium)	Type H (hard)	Type MS (metal insert)	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Shank dia. 2.35 mm										
4	12	2.35	34	035757	-	-	23,000–47,000	119,000	10	FK ZYA 0412/2,35 ...
6	10	2.35	35	035771	035788	-	16,000–32,000	79,500	10	FK ZYA 0610/2,35 ...
8	10	2.35	35	035818	035825	-	12,000–24,000	59,500	10	FK ZYA 0810/2,35 ...
Shank dia. 3 mm										
4	12	3	37	035764	-	-	23,000–47,000	119,000	10	FK ZYA 0412/3 ...
6	10	3	35	295243	035795	-	16,000–32,000	79,500	10	FK ZYA 0610/3 ...
8	10	3	35	295250	035832	-	12,000–24,000	59,500	10	FK ZYA 0810/3 ...
10	12	3	34	035849	035856	-	10,000–20,000	47,500	10	FK ZYA 1012/3 ...
	15	3	32	153871	035887	295304	10,000–20,000	47,500	10	FK ZYA 1015/3 ...
12	20	3	28	035917	035924	-	7,950–15,900	39,500	10	FK ZYA 1220/3 ...
Shank dia. 3 mm – end hole										
15	20	3	28	035955	035962	-	6,000–12,000	31,500	10	FK ZYA 1520/3 ... ST-BO
Shank dia. 6 mm										
10	12	6	42	035863	035870	-	10,000–20,000	47,500	10	FK ZYA 1012/6 ...
	15	6	40	153772	035894	-	10,000–20,000	47,500	10	FK ZYA 1015/6 ...
12	20	6	36	035931	035948	-	7,950–15,900	39,500	10	FK ZYA 1220/6 ...
Shank dia. 6 mm – end hole										
15	20	6	38	294727	035979	295311	6,000–12,000	31,500	10	FK ZYA 1520/6 ... ST-BO
20	25	6	43	153802	035986	295328	5,000–10,000	23,500	10	FK ZYA 2025/6 ... ST-BO
25	30	6	40	153888	036006	295335	4,000–8,000	19,000	10	FK ZYA 2530/6 ... ST-BO



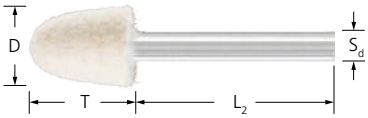
Shape SPK

The conical pointed shape SPK is mainly used for work on radii and contours.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium)	Type H (hard)	Opt. RPM	Max. RPM		Description
				EAN 4007220					
Shank dia. 2.35 mm									
6	10	2.35	37	036013	036020	16,000–32,000	79,500	10	FK SPK 0610/2,35 ...
	18	2.35	33	036044	036068	16,000–32,000	79,500	10	FK SPK 0618/2,35 ...
8	12	2.35	36	036099	036105	12,000–24,000	59,500	10	FK SPK 0812/2,35 ...
Shank dia. 3 mm									
6	10	3	37	588666	036037	16,000–32,000	79,500	10	FK SPK 0610/3 ...
	18	3	33	036051	036075	16,000–32,000	79,500	10	FK SPK 0618/3 ...
8	12	3	36	295267	036112	12,000–24,000	59,500	10	FK SPK 0812/3 ...
10	18	3	33	153925	036129	10,000–20,000	47,500	10	FK SPK 1018/3 ...
12	18	3	33	295274	-	8,000–16,000	39,500	10	FK SPK 1218/3 ...
Shank dia. 6 mm									
10	18	6	41	153796	036136	10,000–20,000	47,500	10	FK SPK 1018/6 ...
15	20	6	42	153932	-	6,000–12,000	31,500	10	FK SPK 1520/6 ...
	30	6	45	153949	-	6,000–12,000	31,500	10	FK SPK 1530/6 ...
20	25	6	47	294734	-	5,000–10,000	23,500	10	FK SPK 2025/6 ...
25	30	6	45	588710	-	4,000–8,000	19,000	10	FK SPK 2530/6 ...
30	35	6	42	588727	-	3,200–6,350	15,500	10	FK SPK 3035/6 ...



Shape KEL

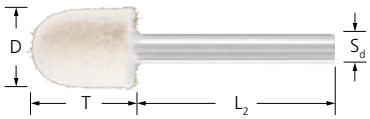
The conical shape KEL is mainly used for work on radii.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium)	Type H (hard)	Opt. RPM	Max. RPM		Description
				EAN 4007220					
Shank dia. 2.35 mm									
6	10	2.35	37	036143	-	16,000–32,000	79,500	10	FK KEL 0610/2,35 ...
Shank dia. 3 mm									
6	10	3	37	588734	-	16,000–32,000	79,500	10	FK KEL 0610/3 ...
10	15	3	34	588765	-	10,000–20,000	47,500	10	FK KEL 1015/3 ...
Shank dia. 6 mm									
10	15	6	40	588840	-	10,000–20,000	47,500	10	FK KEL 1015/6 ...
15	20	6	42	294741	-	6,000–12,000	31,500	10	FK KEL 1520/6 ...
20	25	6	47	153956	036150	5,000–10,000	23,500	10	FK KEL 2025/6 ...
	30	6	45	036167	036174	5,000–10,000	23,500	10	FK KEL 2030/6 ...
25	30	6	45	153819	-	4,000–8,000	19,000	10	FK KEL 2530/6 ...
30	35	6	42	153826	-	3,200–6,350	15,500	10	FK KEL 3035/6 ...

Shape WRC



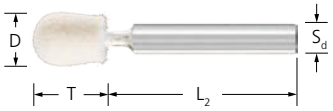
The cylindrical shape with radius end WRC is mainly used for work on small, concave contours.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
■ Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium) EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 2.35 mm								
6	10	2.35	37	036181	16,000–32,000	79,500	10	FK WRC 0610/2,35 ...
8	12	2.35	36	036204	12,000–24,000	59,500	10	FK WRC 0812/2,35 ...
10	14	2.35	35	036211	10,000–20,000	47,500	10	FK WRC 1014/2,35 ...
Shank dia. 3 mm								
6	10	3	36	588451	16,000–32,000	79,500	10	FK WRC 0610/3 ...
8	12	3	43	295281	12,000–24,000	59,500	10	FK WRC 0812/3 ...
10	14	3	35	295298	10,000–20,000	47,500	10	FK WRC 1014/3 ...
Shank dia. 6 mm								
15	20	6	42	153895	6,000–12,000	31,500	10	FK WRC 1520/6 ...
20	25	6	47	153901	5,000–10,000	23,500	10	FK WRC 2025/6 ...
25	30	6	45	153918	4,000–8,000	19,000	10	FK WRC 2530/6 ...

Shape TRE

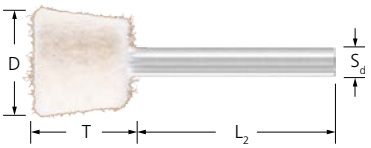


The oval shape TRE is mainly used for work on small radii.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
■ Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium) EAN 4007220	Opt. RPM	Max. RPM		Description
Shank dia. 2.35 mm								
6	10	2.35	37	036228	16,000–32,000	79,500	10	FK TRE 0610/2,35 ...
8	12	2.35	36	036242	12,000–24,000	59,500	10	FK TRE 0812/2,35 ...
10	14	2.35	35	036266	10,000–20,000	47,500	10	FK TRE 1014/2,35 ...
Shank dia. 3 mm								
6	10	3	37	036235	16,000–32,000	79,500	10	FK TRE 0610/3 ...
8	12	3	36	036259	12,000–24,000	59,500	10	FK TRE 0812/3 ...
10	14	3	35	036273	10,000–20,000	47,500	10	FK TRE 1014/3 ...
Shank dia. 6 mm								
10	14	6	43	153789	10,000–20,000	47,500	10	FK TRE 1014/6 ...



Shape WKN

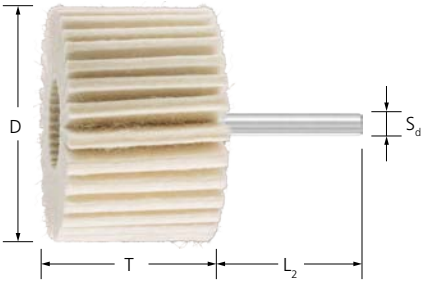
The tapered shape WKN is mainly used for work on interior angles.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type M (medium)	Type H (hard)	Opt. RPM	Max. RPM		Description
				EAN 4007220					
Shank dia. 2.35 mm									
10	15	2.35	32	036280	-	10,000–20,000	47,500	10	FK WKN 1015/2,35 ...
12	12	2.35	34	036303	036327	8,000–16,000	39,500	10	FK WKN 1212/2,35 ...
Shank dia. 3 mm									
10	15	3	32	036297	-	10,000–20,000	47,500	10	FK WKN 1015/3 ...
12	12	3	36	036310	036334	8,000–16,000	39,500	10	FK WKN 1212/3 ...
15	15	3	32	036341	036358	6,000–12,000	31,500	10	FK WKN 1515/3 ...
20	16	3	28	036365	-	5,000–10,000	23,500	10	FK WKN 2016/3 ...
Shank dia. 6 mm									
20	16	6	38	294758	-	5,000–10,000	23,500	10	FK WKN 2016/6 ...

Mounted felt flap wheels FLS



FLS

Mounted felt flap wheels are used for pre-polishing and high-gloss polishing on small to medium-sized components.

Advantages:
- Low thermal load on the workpiece.

Recommendations for use:
- Use the hard type for pre-polishing flat surfaces, and the soft type for high-gloss polishing and processing workpieces with lots of contours.
- If very fine finishes need to be achieved, the two types can be used successively.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L [mm]	Type W (soft)	Type H (hard)	Opt. RPM	Max. RPM		Description
				EAN 4007220					
30	20	6	40	936160	936177	6,300	20,000	5	FLS 3020/6 ...
40	20	6	40	936184	936191	4,750	15,000	5	FLS 4020/6 ...
50	30	6	40	936207	936214	3,800	12,000	5	FLS 5030/6 ...
60	40	6	40	936221	936238	3,150	10,000	5	FLS 6040/6 ...
80	50	6	40	936245	936252	2,400	7,500	5	FLS 8050/6 ...



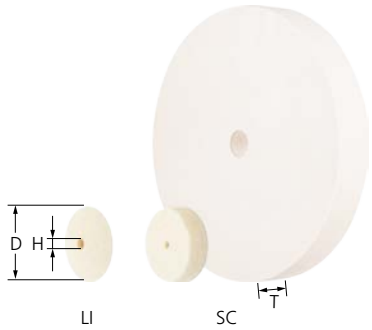
FK SC/LI

Felt wheels and lenses are mainly used peripherally.

Felt wheels with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond grinding pastes.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order the matching arbor separately.
- Please complete the description with the desired type.



D [mm]	T [mm]	H [mm]	Type M (medium)	Type H (hard)	Type MS (metal insert)	Opt. RPM	Max. RPM	Suitable arbors		Description
			EAN 4007220							
Lenses										
17	5	2	-	036402	-	5,600–11,000	28,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	10	FK LI 1705/2 ...
22	5	2	-	036419	-	4,300–8,650	21,700	BO 2,3/1,6 1-5, BO 3/1,6 1-5	10	FK LI 2205/2 ...
Wheels										
17	5	2	036372	-	-	5,600–11,000	28,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	10	FK SC 1705/2 ...
20	5	2	036389	-	-	5,000–10,000	23,500	BO 2,3/1,6 1-5, BO 3/1,6 1-5	10	FK SC 2005/2 ...
30	5	2	036396	-	-	3,000–6,000	20,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	10	FK SC 3005/2 ...
	7	6	153864	-	-	3,000–6,000	20,000	BO 6/6 3-10	5	FK SC 3007/6 ...
45	9	6	153840	-	-	2,000–4,000	13,500	BO 6/6 3-10	5	FK SC 4509/6 ...
60	10	6	297605	-	-	1,500–3,000	10,000	BO 6/6 3-10	5	FK SC 6010/6 ...
80	10	10	154069	-	295342	1,000–2,000	7,500	BO 8/10 6-20	5	FK SC 8010/10 ...
100	20	10	297612	-	295359	900–1,800	6,100	BO 8/10 6-20	1	FK SC 10020/10 ...
125	20	20	297629	-	295366	750–1,500	4,900	BO 12/20 10-50, BO MK 1/20 10-50	1	FK SC 12520/20 ...
150	25	20	297636	-	-	600–1,200	4,000	BO 12/20 10-50, BO MK 1/20 10-50	1	FK SC 15025/20 ...
200	30	20	297643	-	-	500–1,000	3,000	BO 12/20 10-50, BO MK 1/20 10-50	1	FK SC 20030/20 ...

Felt flap discs FFS

FFS

Felt flap discs are used for pre-polishing and high-gloss polishing on medium-sized to large components.

Advantages:
- Low thermal load on the workpiece.

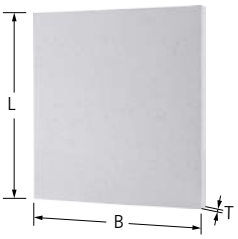
Recommendations for use:
- Use the hard type for pre-polishing flat surfaces, and the soft type for high-gloss polishing and processing workpieces with lots of contours.
- If very fine finishes need to be achieved, the two types can be used successively.

Matching tool drives:
angle grinder, cordless angle grinder

Ordering notes:
- Please complete the description with the desired type.



D [mm]	T [mm]	H [mm]	Type W (soft)	Type H (hard)	Opt. RPM	Max. RPM		Description
			EAN 4007220					
115	22	22.23	936085	936139	1,650	8,350	5	FFS 115/22,23 ...
125	22	22.23	936146	936153	1,500	7,650	5	FFS 125/22,23 ...



FK P

Felt sheets are suited to a very wide variety of polishing applications. The two different hardness grades available only multiply the number of potential applications.

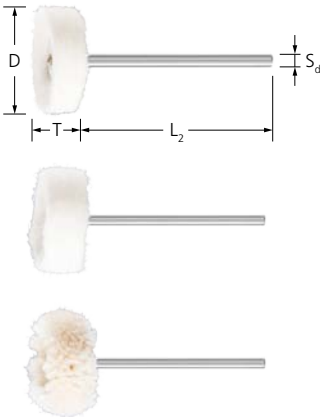
Advantages:
- Depending on the requirements, can be cut or punched into any shape (e.g. rectangle, square, stick or wheel) quickly and easily.

Matching tool drives:
manual application

Ordering notes:
- Please complete the description with the desired type.

L [mm]	B [mm]	T [mm]	Type M (medium)	Type H (hard)		Description
			EAN 4007220			
250	250	3	036433	-	1	FK P 250-250-3 ...
		6	036440	036457	1	FK P 250-250-6 ...
		12	036464	036471	1	FK P 250-250-12 ...

Cloth rings



Shank-mounted cloth rings TR

Shank-mounted cloth rings are used with polishing pastes for pre-polishing, gloss polishing and high-gloss polishing in tool- and mould-making applications.

Shank-mounted cloth rings are available in three types:

BW (cotton)	= Very fine high-gloss polishing, dust removal and buffing
FZ (felt cloth)	= Pre-polishing and gloss polishing in combination with appropriate polishing pastes
FL (flannel)	= Buffing, gloss polishing and high-gloss polishing in combination with the appropriate polishing pastes

Recommendations for use:
- Make sure that the tool does not overheat when polishing.
- Use a sufficient amount of polishing paste.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Detailed information and ordering data on polishing pastes can be found on pages 153–154.
- Please complete the description with the desired type.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Type BW	Type FZ	Type FL	Opt. RPM	Max. RPM		Description
				EAN 4007220						
Shank dia. 2.35 mm										
22	10	2.35	40	034538	034545	034552	13,000	17,350	10	TR 2210/2,35 ...
Shank dia. 3 mm										
22	10	3	40	034569	034576	034583	13,000	17,350	10	TR 2210/3 ...

Cloth rings with centre hole TR



Cloth rings are used for pre-polishing and high-gloss polishing with polishing pastes.
If the intention is to achieve very smooth surface finishes, use several or even all variants successively.

Cloth rings are available in four types:
ST (sisal cloth) = Coarse pre-polishing
TH (hard cloth) = Pre-polishing
TW (soft cloth) = High-gloss polishing
FL (flannel) = High-gloss polishing/buffing

Recommendations for use:
- Pre-polishing of steel and INOX: Cloth rings ST or TH with polishing paste PP 1 VP STEELOX.
- Pre-polishing of aluminium and brass: Cloth rings ST or TH with polishing paste PP 2 VP ALU.
- Pre-polishing of non-ferrous metals: Cloth rings ST or TH with polishing paste PP 3 VP NON-FERROUS.
- High-gloss polishing on all metals: Cloth rings TW or FL with polishing paste PP 4 UNIVERSAL.
- High-gloss polishing on plastics: Cloth rings TW or FL with polishing paste PP 5 HGP PLAST.
- Type TW and FL cloth rings achieve their best performance at a recommended cutting speed of 5–15 m/s.
- Type ST and TH cloth rings achieve their best performance at a recommended cutting speed of 10–15 m/s.

Matching tool drives:
flexible shaft drive, straight grinder

Ordering notes:
- Please order arbor separately.
- TR 12510 type ST: 10 mm hole (25.4/6-edge, arbor FR/VR 12/25,4).
- Please complete the description with the desired type.

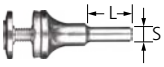
D [mm]	Used width [mm]	H [mm]	Type				Opt. RPM	Max. RPM	Suitable arbors		Description
			ST	TH	TW	FL					
			EAN 4007220								
50	10	6	-	804315	804322	804339	3,800	12,000	BO 6/6 3-10	5	TR 5010-6 ...
80	10	10	294086	294093	294109	294116	2,500	7,500	BO 8/10 6-20	5	TR 8010-10 ...
100	10	10	294123	294130	294147	294154	1,900	6,100	BO 8/10 6-20	5	TR 10010-10 ...
125	10	20	294161	294178	294185	294192	1,300	4,900	BO 12/20 10-50, BO MK 1/20 10-50	5	TR 12510-20 ...
150	10	20	294208	294215	294222	294239	1,250	4,000	BO 12/20 10-50, BO MK 1/20 10-50	5	TR 15010-20 ...
200	10	20	294246	294253	294260	294277	950	3,000	BO 12/20 10-50, BO MK 1/20 10-50	5	TR 20010-20 ...



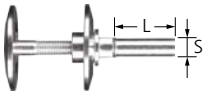




BO 6/6 3-10



BO 8/10 6-20



BO 12/20 10-50


BO MK 1/20 10-50

Arbors for felt wheels and cloth rings BO

Matching arbors for felt wheels and cloth rings.

Advantages:
- High economic efficiency as the tool can be changed quickly.

Ordering notes:
- Please complete the description with the desired type.

Suitable for centre hole dia. [mm]	S [mm]	L [mm]	Clamping width [mm]	EAN 4007220		Description
6	6	25	3–10	297650	1	BO 6/6 3-10
10	8	30	6–20	297667	1	BO 8/10 6-20
20	12	35	10–50	297674	1	BO 12/20 10-50
	-	-	10–50	297681	1	BO MK 1/20 10-50

You can find additional felt polishing tools in the following product families:



COMBICLICK:
CC-FR, page 18



COMBIDISC:
CD-FR, page 42



Short belts:
P-BA, page 51



PFERD offers grinding pastes for use in extremely fine grinding work, such as when grinding in valve seats, shaft bearings and as a preparation for polishing with felt polishing tools and cloth rings.

PFERD offers five different polishing paste bars that are marked with different colours, which enables them to be easily assigned to the respective application task. You can find the key for the respective colours in the table below.



Advantages:

- High productivity.
- Quick results.
- Coordinated system.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Polishing
- Step-by-step fine grinding

Grinding pastes SFP

Oil-soluble grinding pastes with sharp-edged SiC grain.



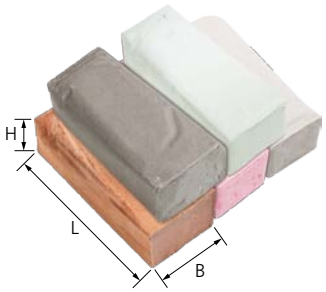
Grit size	Contents [g]	EAN 4007220		Description
90	250	153963	1	SFP 90
150	250	153970	1	SFP 150
280	250	153987	1	SFP 280
360	250	153994	1	SFP 360
600	250	298664	1	SFP 600
800	250	154007	1	SFP 800

Polishing paste bars PP

Apart from being used with felt tools, polishing pastes are also used in combination with cloth rings for pre-polishing and high-gloss polishing. If the intention is to achieve very smooth surface finishes, use several or even all types successively.

Intended applications for the different types:
ST (sisal cloth) = Coarse pre-polishing with PP 1, PP 2 or PP 3
TH (hard cloth) = Pre-polishing with PP 1, PP 2 or PP 3
TW (soft cloth) = High-gloss polishing with PP 4 or PP 5
FL (flannel) = High-gloss polishing/buffing with PP 4 or PP 5

Polishing paste bars are available in a small pack and a bulk pack.



Type	Use for	Contents [g]	EAN 4007220	Colour	B [mm]	H [mm]	L [mm]		Description
Bulk pack									
pre-polishing	Steel + stainless steel (INOX)	1,100	294567	green	70	50	140	1	G-PP 1 VP STEELOX
	Aluminium + brass	1,300	294574	grey	70	50	140	1	G-PP 2 VP ALU
	Non-ferrous metals	1,150	294581	brown	70	50	140	1	G-PP 3 VP NON-FERROUS
high-gloss polishing	All metals	1,150	294598	pink	70	50	140	1	G-PP 4 HGP UNIVERSAL
	plastics	1,100	294604	beige	70	50	140	1	G-PP 5 HGP PLAST
Small pack									
pre-polishing	Steel + stainless steel (INOX)	108	955666	green	25	30	90	1	K-PP 1 VP STEELOX
	Aluminium + brass	142	955673	grey	25	30	90	1	K-PP 2 VP ALU
	Non-ferrous metals	111	955680	brown	25	30	90	1	K-PP 3 VP NON-FERROUS
high-gloss polishing	All metals	132	955697	pink	25	30	90	1	K-PP 4 HGP UNIVERSAL
	plastics	104	955703	beige	25	30	90	1	K-PP 5 HGP PLAST

Grinding oils and polishing pastes
Diamond polishing pastes



Diamond polishing pastes are used for work on very hard materials, such as tungsten carbide and hardened steels. They are used in combination with felt polishing elements or discs.
Diamond polishing pastes can be diluted and dissolved with water and alcohol.

Diamond polishing pastes in the ECO type are a cheaper alternative.

Available grit sizes:
30 (coarse) = P 500
15 (medium) = P 1200
10 (medium-fine) = P 2000
7 (fine) = P 3000
3 (very fine) = P 5000
1 (ultra-fine) = P 14000
(P = Grit size according to ISO 6344)

Advantages:

- High productivity.
- Quick results.
- Precisely coordinated granulation rows.

Materials that can be worked:

- Can be used on almost all very hard materials, such as tungsten carbide and hardened steels.

Applications:

- Polishing
- Step-by-step fine grinding

Ordering notes:

- The grit sizes are specified in µm.
- Please complete the description with the desired contents.
- When ordering, please state the EAN or the full description.



Diamond polishing pastes DPP, Diamond polishing pastes type ECO DPP

Diamond polishing pastes guarantee quick and efficient work, particularly in tool- and mould-making.

Recommendations for use:

- When using diamond polishing pastes, use the coarse paste first.
- If extensive surface improvements are required, use several grit sizes one after another, each finer than the previous, cleaning well between pastes.
- When changing grit size, make sure that a new, clean abrasive support (e.g. felt point or felt wheel) is used.

Ordering notes:

- Please complete the description with the desired grit size.

Grit size [µm]	Contents [g]			Colour of sealing cap		Description
	5	20	10			
	EAN 4007220					
DPP						
30	294543	535981	-	brown	1	DPP 30-...
15	294536	535998	-	blue	1	DPP 15-...
10	025468	025499	-	light blue	1	DPP 10-...
7	294505	536001	-	red	1	DPP 7-...
3	294499	536018	-	green	1	DPP 3-...
1	025451	025475	-	yellow	1	DPP 1-...
ECO DPP						
30	-	-	025550	brown	1	DPP ECO 30-...
15	-	-	025543	blue	1	DPP ECO 15-...
10	-	-	025536	light blue	1	DPP ECO 10-...
7	-	-	025529	red	1	DPP ECO 7-...
3	-	-	025512	green	1	DPP ECO 3-...
1	-	-	025505	yellow	1	DPP ECO 1-...

Special diluent for diamond polishing pastes PSP



The diluent is used to keep the lubricating layer between the support and the workpiece consistent during polishing work.

Recommendations for use:

- The diluent should be used extremely sparingly. Excessive use of the special diluent will wash out the diamond grit from the paste, thus diminishing polishing performance.

Contents [ml]	EAN 4007220		Description
125	294550	1	PSP 125

Grinding oils



Three types of grinding oil are supplied:

- **"Fe" for steel:** Offers protection against corrosion.
- **"NE" for non-ferrous metals and stainless steel (INOX):** Prevents unwelcome marks on the workpiece, particularly on stainless steel surfaces.
- **"ALU" for aluminium:** Prevents the grinding tool from clogging.

Advantages:

- Longer tool life.
- Lower temperature development due to lubricating and cooling effect.
- Less adherence of chips to the abrasive coating.
- Improved surface finish.

Applications:

- Polishing
- Step-by-step fine grinding

Ordering notes:

- The transportation of the aerosol cans by air, sea and rail is not possible.

Materials that can be worked:

- Can be used on nearly all materials.

Grinding oils

Grinding oils are used in applications with coated abrasive tools.



Use for	Contents [ml]	EAN 4007220		Description
Spray can				
steel	400	147597	1	410 Fe
non-ferrous metals, stainless steel (INOX)	400	147603	1	411 NE
aluminium	400	791332	1	412 ALU
Canister 1 l				
steel	1,000	294444	1	410/1 Fe
non-ferrous metals, stainless steel (INOX)	1,000	294451	1	411/1 NE
aluminium	1,000	791349	1	412/1 ALU
Canister 5 l				
steel	5,000	294468	1	410/5 Fe
non-ferrous metals, stainless steel (INOX)	5,000	294475	1	411/5 NE
aluminium	5,000	791356	1	412/5 ALU



The highly effective cleaners and maintenance products are practically applied to a very wide range of components.

Materials that can be worked:

- Can be used on nearly all materials.

Applications:

- Cleaning
- Preserving
- Protecting



Universal cleaner UC-S

Highly effective, universal workshop cleaner for cleaning and de-greasing components as a preparation for painting. Removes polishing paste residue, processing oils, corrosion-protection oils, light waxes and other types of contamination.

Advantages:
- Biodegradable surfactants.
- Short drying time.
- Non-combustible.
- Suitable for versatile use.

Recommendations for use:
- Spray, briefly leave on and wipe off with a suitable cloth.

Contents [ml]	EAN 4007220		Description
500	027349	1	UC-S 500



INOX SHINER IS-S maintenance product

Maintenance products for protecting and caring for stainless steel (INOX), aluminium, non-ferrous metals, glass and plastic. Removes dust, fingerprints, oil and light scale deposits.

Advantages:
- Leaves a dry, glossy protective film.
- Very easy to use.
- No cleaning marks.
- Suitable for versatile use.

Recommendations for use:
- Spray, apply evenly on the surface with a soft dry cloth or paper towel and wipe dry.
- Conduct a compatibility test beforehand on surfaces with a mirror finish.

Contents [ml]	EAN 4007220		Description
500	027332	1	INOX SHINER IS-S 500

VICTO GRAIN

Further information about the high-performance abrasive grain VICTOGRAIN as well as an overview of all respective products can be found on the following pages.

PFERD

www.pferd.com

VICTOGRAIN products are some of the most effective grinding tools in the world.

PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

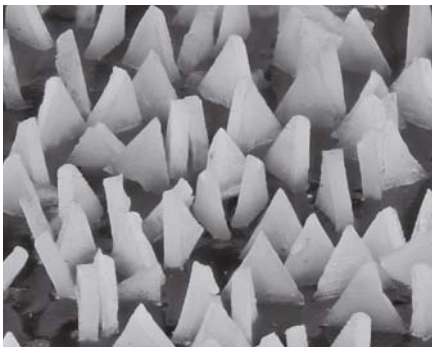
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with

- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

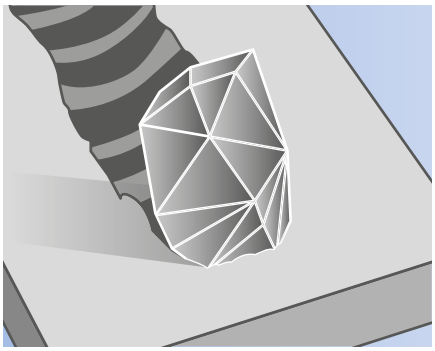
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides.
This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

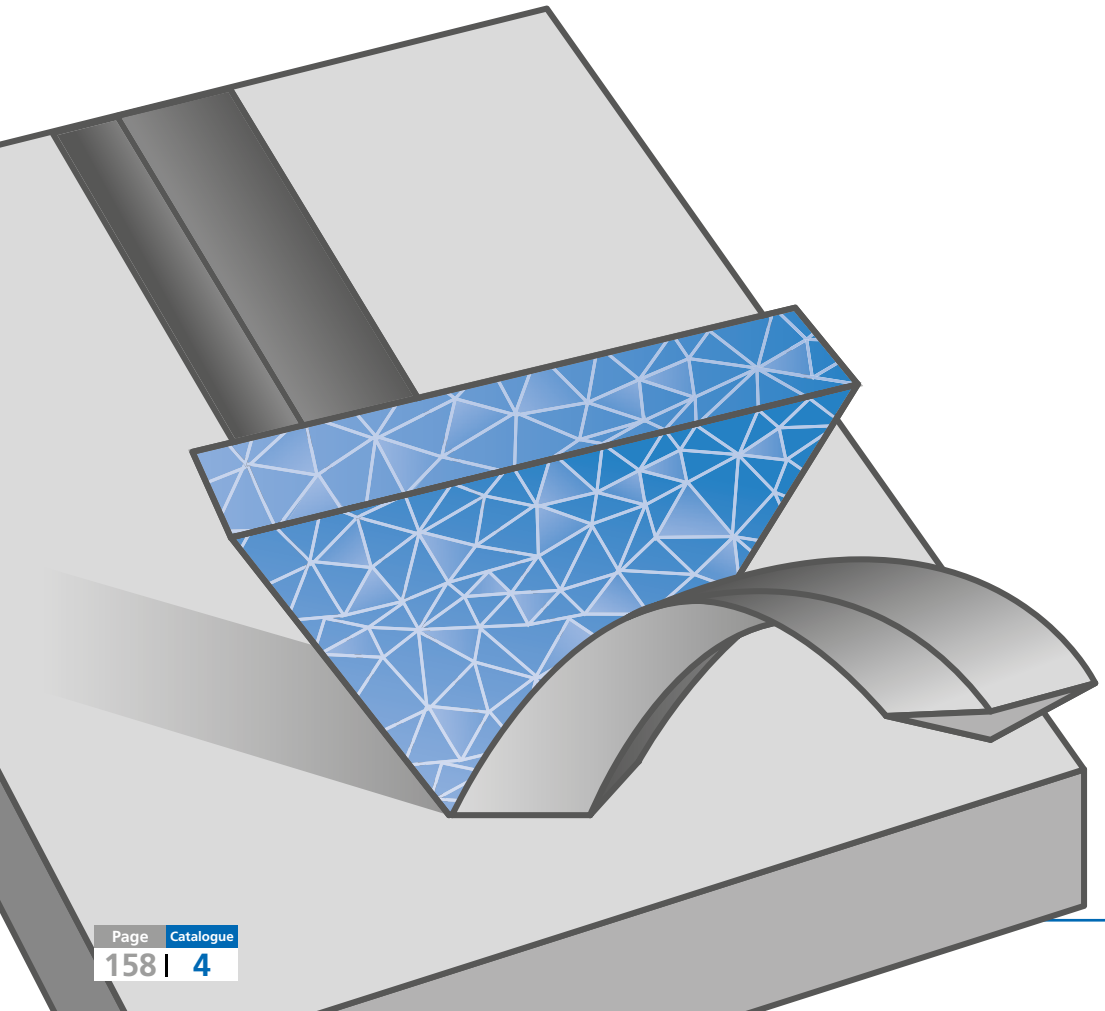
By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.



The **VICTO**GRAIN abrasive grain is optimally aligned



Conventional abrasive grain



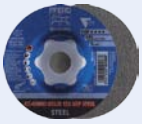
VICTOGRAIN abrasive grain

Here is an overview of all **VICTO**GRAIN products which can be found in catalogue section 4:

Picture	Description	Page
	COMBICLICK fibre discs **VICTO**GRAIN-COOL	15
	Fibre discs **VICTO**GRAIN-COOL	23
	COMBIDISC abrasive discs **VICTO**GRAIN-COOL	36
	COMBIDISC midget fibre discs **VICTO**GRAIN-COOL	36



Here is an overview of all **VICTO**GRAIN products which can be found in catalogue section 6:

Picture	Description	Page
	CC-GRIND grinding discs CC-GRIND-SOLID SGP STEEL	49
	CC-GRIND grinding discs CC-GRIND-SOLID SGP INOX	49
	CC-GRIND grinding discs CC-GRIND-FLEX SGP STEEL	50





Quality tools from a single source



Catalogue section 1

Files



Catalogue section 2

Milling tools



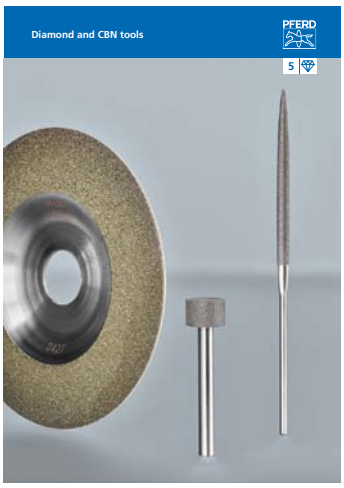
Catalogue section 3

Mounted points



Catalogue section 4

Fine grinding and polishing tools



Catalogue section 5

Diamond and CBN tools



Catalogue section 6

Cut-off wheels, flap discs and grinding wheels



Catalogue section 7

Cut-off wheels for stationary applications



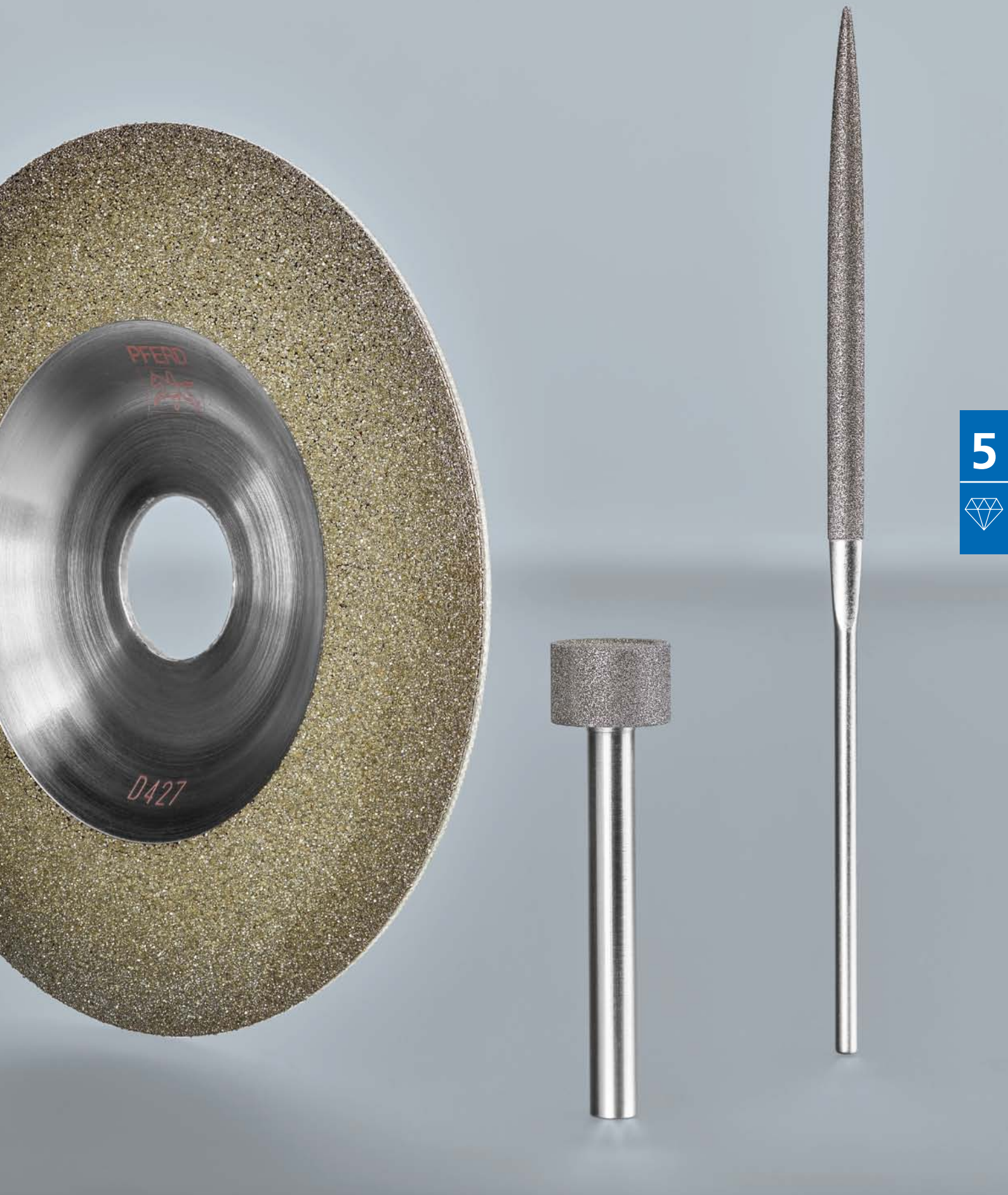
Catalogue section 8

Industrial power brushes



Catalogue section 9

Tool drives


PFERD
D427

Diamond and CBN tools
Table of contents

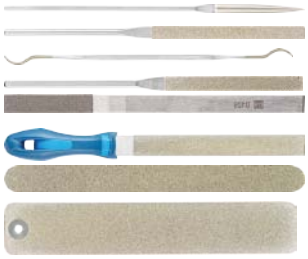
General information 4
The fast way to the best tool 6
Abrasives, materials, grit sizes 8
Comparison of bond types 9
Recommended cutting speeds 10
Recommended rotational speed range and safety notes 11

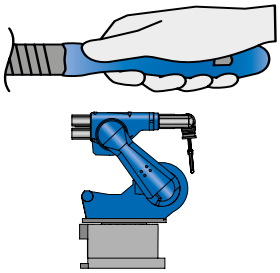
Diamond and CBN tools – electroplated bond





Customer-specific tool solutions 14





Diamond files

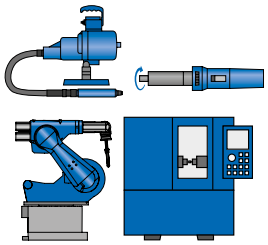
- Diamond escapement files 16
- Diamond needle files 17
- Diamond riffler files 18
- Diamond handy files 19
- Conical diamond files 19
- Diamond machinist's files 20
- Flexible diamond files 21
- Diamond sheets 21





- Diamond files for manual filing machines 22

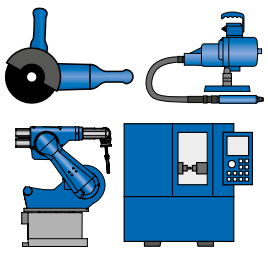




Diamond and CBN grinding points and grinding discs

- Diamond grinding points 24
- Diamond grinding discs 29
- CBN grinding points 30
- CBN grinding discs 33

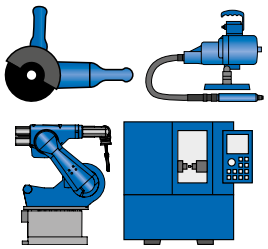




Diamond cut-off wheels

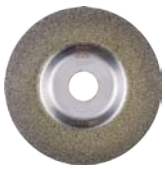
- Diamond cut-off wheels 34

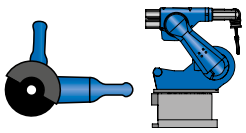




Diamond tools for foundries

- Diamond cut-off wheels for foundries 36
- Diamond grinding points for foundries 36

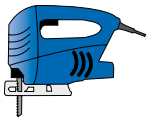




Diamond grinding discs

- Diamond grinding disc CC-GRIND-SOLID-DIAMOND 38



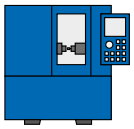


Diamond sabre saw blades

- Diamond sabre saw blades 38

Diamond and CBN tools – resinoid bond



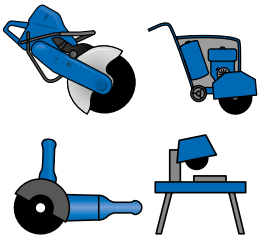


Diamond and CBN grinding tools

- Diamond grinding tools 41
- CBN grinding tools 42
- Sharpening block 43
- Customer-specific tool solutions 44

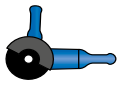
Diamond cut-off wheels for the construction industry





Diamond cut-off wheels

- Segmented type 50
- Continuous rim type (TURBO) 51
- Continuous rim type 52
- DSB sharpening block 52



Angle grinder



Machine tools



Filing machine



Straight grinder



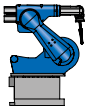
Manual application files



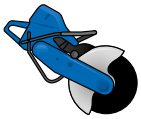
Sabre saw



Table saw



Robot



Petrol cutter



In use in many industries

The use of efficient tools for work on surfaces and cutting materials is an important factor for ensuring profitability in many processes and industries.

For many materials and applications, tools with super-hard abrasives like diamond or CBN (cubic boron nitride) abrasives provide a cost-effective alternative to conventional tools.

With their high hardness, they have a particularly long tool life and are an established problem-solver in many industries:

- Automotive industry and suppliers
- Energy industry
- Foundries (grey and nodular cast iron)
- Ceramic industry
- Plastics processing (GRP/CRP)
- Machine and plant construction
- Medical equipment
- Tool and mould construction
- Tool industry



PFERD quality

PFERD diamond and CBN grinding tools comply with the highest quality and safety requirements and are manufactured and labelled according to the European safety standard EN 13236.

In addition to the high quality standards, occupational health and safety as well as ergonomics play a prominent role.

PFERD quality management is certified according to ISO 9001.



PFERDTOOL-CENTER

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool.

Your local retailer or PFERD sales representative will be glad to answer any questions you might have.



Packaging

Diamond and CBN tool packaging is matched to the requirements of the industry. It provides the tools with optimum protection against dirt and damage. The packaging units (PU) for the individual tools are listed in the product tables.

Diamond file sets and diamond machinist's files and sheets are supplied in practical, sturdy plastic boxes. These are ideal for storing the tools in the tool trolley or on the workbench.

Particularly large or heavy products made to order are supplied in sturdy wooden crates that protect the tools during transport.

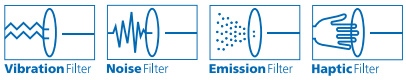
All tools
and more information:
www.pferd.com

PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



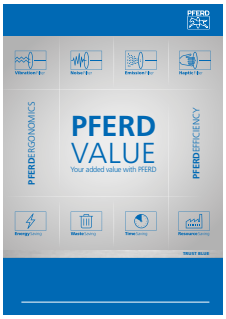
As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



Electroplated diamond and CBN tools are characterized by low dust generation.

Diamond machinist's files are supplied with ergonomic file handles.

For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



Associations

PFERD is an active member of the German Abrasives Association (VDS), the Federation of European Producers of Abrasives (FEPA) and the Organization for the Safety of Abrasives (oSa). The national and international activities of those associations include the areas of safety, standardization, classification and quality assurance.

FEPA

VDS Verband Deutscher Schleifmittelwerke

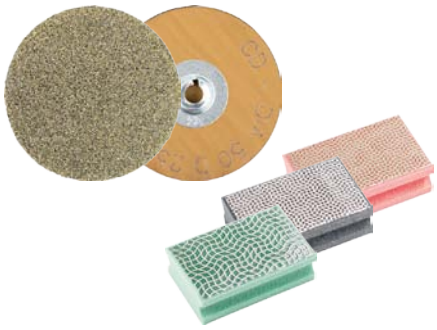
oSa®

Additional diamond tools with electroplated bonds in the PFERD product range

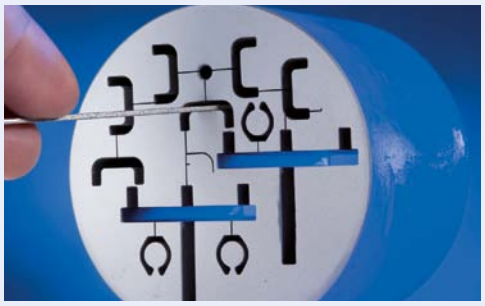
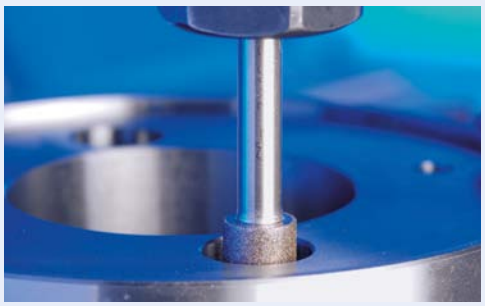
COMBIDISC diamond abrasive discs:
COMBIDISC is a comprehensive range for work on surfaces. COMBIDISC diamond abrasive discs are ideally suited for work on wear-resistant coatings and hard facings made from tungsten carbide, chromium carbide, titanium carbide, etc.

Diamond hand pads:
Diamond hand pads are ideally suited for grinding work on wear-resistant coatings and hard facings made from tungsten carbide, chromium carbide, titanium carbide, etc.

Further information and ordering data can be found in catalogue section 4.





General application ▶	Material ▶	Application ▶
Filing 	■ Hardened steels ■ Tungsten carbide ■ Ceramic ■ Glass ■ Ferrite ■ Nickel- and titanium-based alloys	Precision filing
		Precision filing with air-powered filing machines
		Machining concave and convex surfaces
	■ Fibre-reinforced plastics (GRP/CRP)	Deburring, chamfering and breaking of edges
Grinding 	■ Tungsten carbide ■ Ceramic ■ Glass ■ Ferrite (magnetic material) ■ Nickel- and titanium-based alloys	Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering
		Internal grinding of bores
	■ Tungsten carbide	Sharpening of tungsten carbide tools
	■ Hardened steel materials from approx. 54 HRC	Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering
		Internal grinding of bores
	■ HSS (High Speed Steel)	Sharpening of HSS tools
	■ Fibre-reinforced plastics (GRP/CRP)	Deburring, chamfering and general grinding work
	■ Grey and nodular cast iron	Grinding burning-ins, sand inclusions and adhesions
Cutting 	■ Tungsten carbide ■ Ceramic ■ Glass ■ Ferrite ■ Nickel- and titanium-based alloys	Cutting
	■ Fibre-reinforced plastics (GRP/CRP)	Cut-off grinding, trimming, making cut-outs and cutting straight contours to size
		Sawing, trimming, making cut-outs and cutting curved contours to size
	■ Grey and nodular cast iron	Separation of open risers, burrs, feeders, sprues, parting lines, etc.

You can find diamond cut-off wheels for the construction industry on page 48.

Tools ▶		Page
Diamond files		16
Diamond files for air-powered filing machines		22
Flexible diamond files		21
Diamond sheets		21
Diamond machinist's files, grit size D 251		20
Electroplated diamond grinding points		24
Diamond grinding disc CC-GRIND-SOLID-DIAMOND		38
Electroplated diamond grinding points, cylindrical shape ZY		24
Electroplated diamond grinding discs		29
Resinoid-bonded diamond grinding discs		40
Electroplated CBN grinding points		30
Electroplated CBN grinding points, cylindrical shape ZY		30
Electroplated CBN grinding discs		33
Resinoid-bonded CBN grinding discs		42
Electroplated diamond grinding points, cylindrical shape with radius end WR, grit size D 357		26
Diamond grinding disc CC-GRIND-SOLID-DIAMOND		38
Grinding points for foundries		36
Diamond cut-off wheels, grit size D64/D151		34
Diamond cut-off wheels, grit size D357/D427		34
Diamond sabre saw blades		38
Diamond cut-off wheels, grit size D 852		34

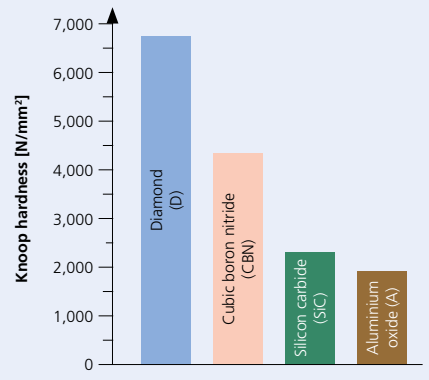
Super-hard abrasives

Diamond and CBN form the group of super-hard abrasives.

Diamond is the hardest naturally occurring solid. It consists of pure carbon in a crystalline structure. For grinding tools, the diamonds used are generally synthetic, produced at very high temperatures under high pressure. The properties of the abrasive can be optimized for the subsequent application of the tool.

CBN (cubic boron nitride) is the second-hardest solid known. It consists of boron and nitrogen in a crystalline structure.

For work on certain materials, diamond and CBN tools are an economic alternative to tools with conventional abrasives such as aluminium oxide and silicon carbide. Diamond and CBN grain is much harder and its cutting edges are very resistant to blunting. Diamond and CBN tools therefore enjoy a very long tool life.



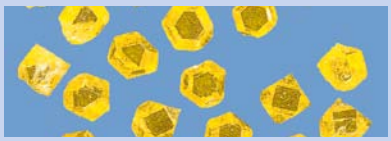
Materials

Diamond and CBN abrasives are used when materials cannot be machined with conventional abrasives such as aluminium oxide or silicon carbide. They also provide a more economical solution for many applications.

Due to high chemical wear, rotating diamond tools are not suitable for work on steel. CBN tools are used for these applications. The two abrasives complement each other ideally. In the adjacent overview, you will find various materials associated with the abrasives.

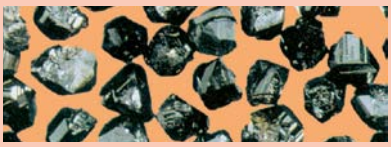
Using the colour coding system, the abrasive of the tool can be identified immediately.

Diamond = blue



- Duroplastics, in particular with glass or carbon fibre reinforcement (GRP and CRP)
- Ferrite (magnetic material)
- Glass
- Graphite and synthetic carbon
- Grey and nodular cast iron
- Tungsten carbide
- Nickel- or titanium-based superalloys
- Technical ceramics
- Wear-resistant coatings (powder metal alloys and hardfacing alloys)

CBN = red



- Case-hardened steels
- Roller-bearing and ball-bearing steels
- Tool steels
- Other hardened steel materials with a hardness from approx. 54 HRC

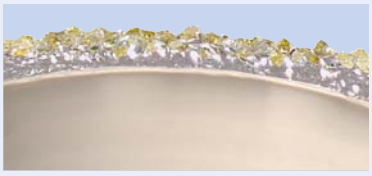
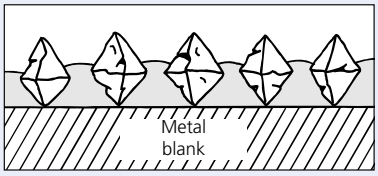
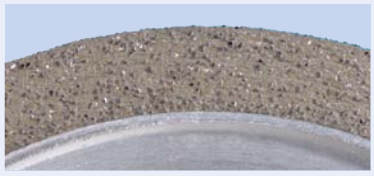
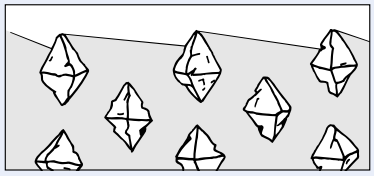
Grit sizes

The grit size data for diamond and CBN tools relates to the average grit diameter in [µm]. Thus, the higher the number specified in the grit designation, the coarser the grit size. A coarse grit size increases stock removal and the surface roughness of the workpiece.

Selecting the optimum grit size depends on the intended application, the material to be machined, the tool drive employed and a wide range of other factors. As a general rule, the harder the material to be worked and the finer the desired surface roughness, the finer the selected grit size should be.



Grit sizes	Grit designations [µm] ISO 6106 (FEPA Standard)		Equivalent US mesh number/inch US Mesh Size
	Diamond	CBN	
Micro-grit	D 25 / D 30	-	-
	D 46	B 46	325/400
	D 54	B 54	270/325
	D 64	B 64	230/270
	D 76	B 76	200/230
	D 91	B 91	170/200
	D 107	B 107	140/170
	D 126	B 126	120/140
	D 151	B 151	100/120
	D 181	B 181	80/100
	D 213	B 213	70/80
	D 251	-	60/70
	-	B 252	60/80
	D 301	B 301	50/60
	D 357	B 357	45/50
	D 427	B 427	40/50
	D 502	-	35/45
	D 602	-	30/40
	D 711	-	25/30
	D 852	-	20/30
	D 1001	-	16/20

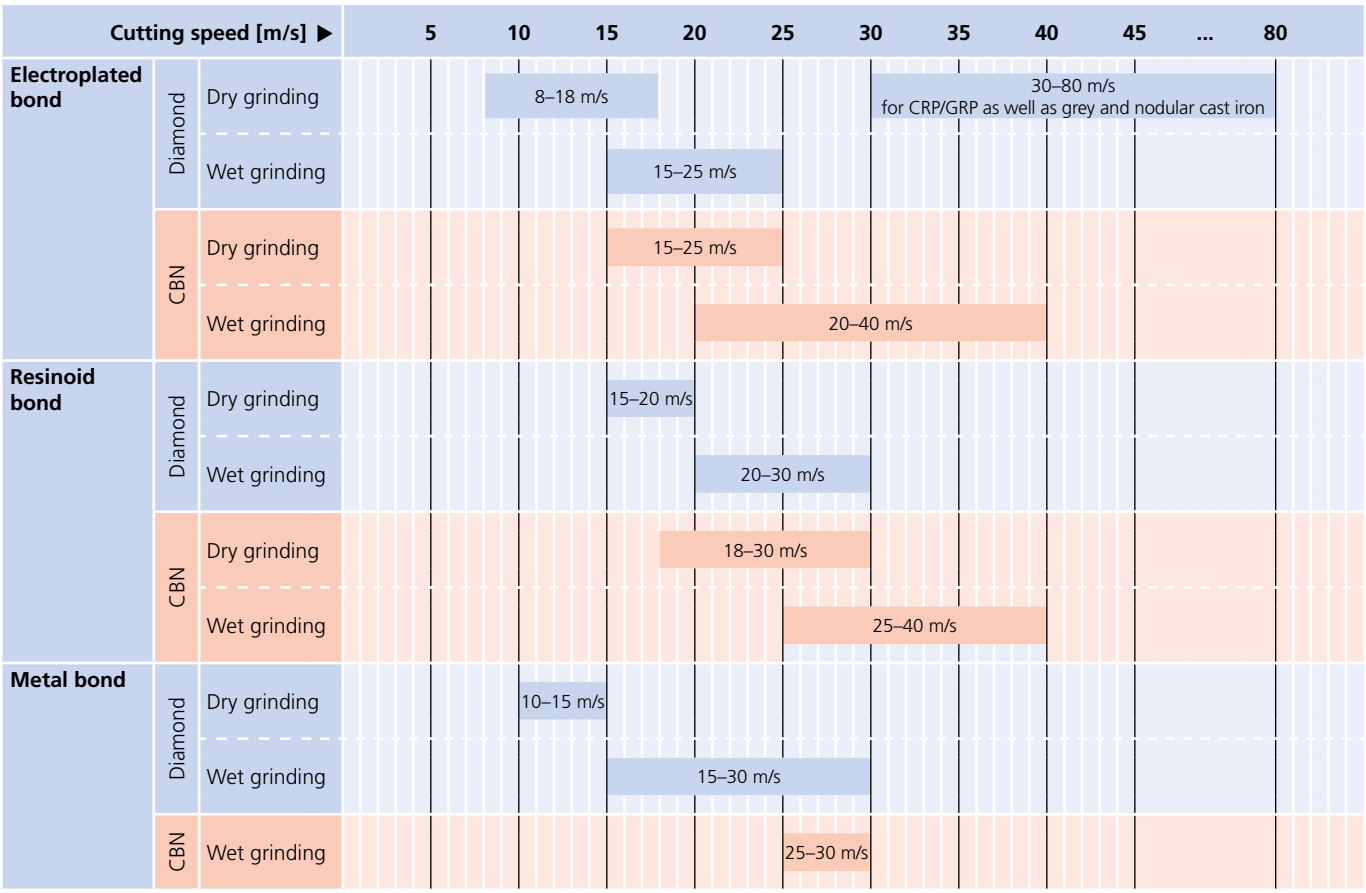
	Electroplated bond	Resinoid and metal bond
Bond type	  	  
Tool construction	The main characteristic of electroplated tools is the monolayer coating with diamond or CBN grit. The coating is provided by the fixation of abrasive grit onto a metal blank via an electrochemically deposited nickel layer. The nickel layer thickness is around half of the grit diameter used.	The abrasive coating of resinoid-bonded diamond and CBN tools consists of abrasive grit, bond and fillers. The bond is tightly pressed, i.e. it has no pores. The metal bond is closely related to the resinoid bond. It is characterized by a higher grit retention strength and dimensional stability when compared to the resinoid bond.
Advantages	■ Shorter work time due to the coating type ■ Reduction in unproductive idle times because dressing and profiling are not required ■ Reduction in tool costs due to the monolayer coating and the possibility of recoating ■ Individual tool profiles ■ Constant tool geometry due to the monolayer coating Further information on the advantages of electroplated grinding tools can be found on page 13.	Resinoid bond: ■ The characteristics of the resinoid bond can be optimally adjusted to the application ■ Easy to dress Metal bond: ■ High dimensional stability and wear resistance
Applications	Electroplated tools are problem solvers for work on various materials, such as particularly hard or abrasive materials. Among other things, the characteristics of the electrochemically coated tools can be adapted to the application through the selection of the grit sizes. Electroplated diamond and CBN tools are used for both wet and dry grinding.	Resinoid-bonded diamond and CBN grinding discs are often used for grinding, i.e. sharpening tungsten carbide or HSS tools, as well as in other production grinding processes. Metal-bonded tools are used for grinding glass and industrial ceramics. Resinoid and metal-bonded diamond and CBN tools are used for both wet and dry grinding, according to the tool specification.
	Pages 12–38	**Pages 39–47**

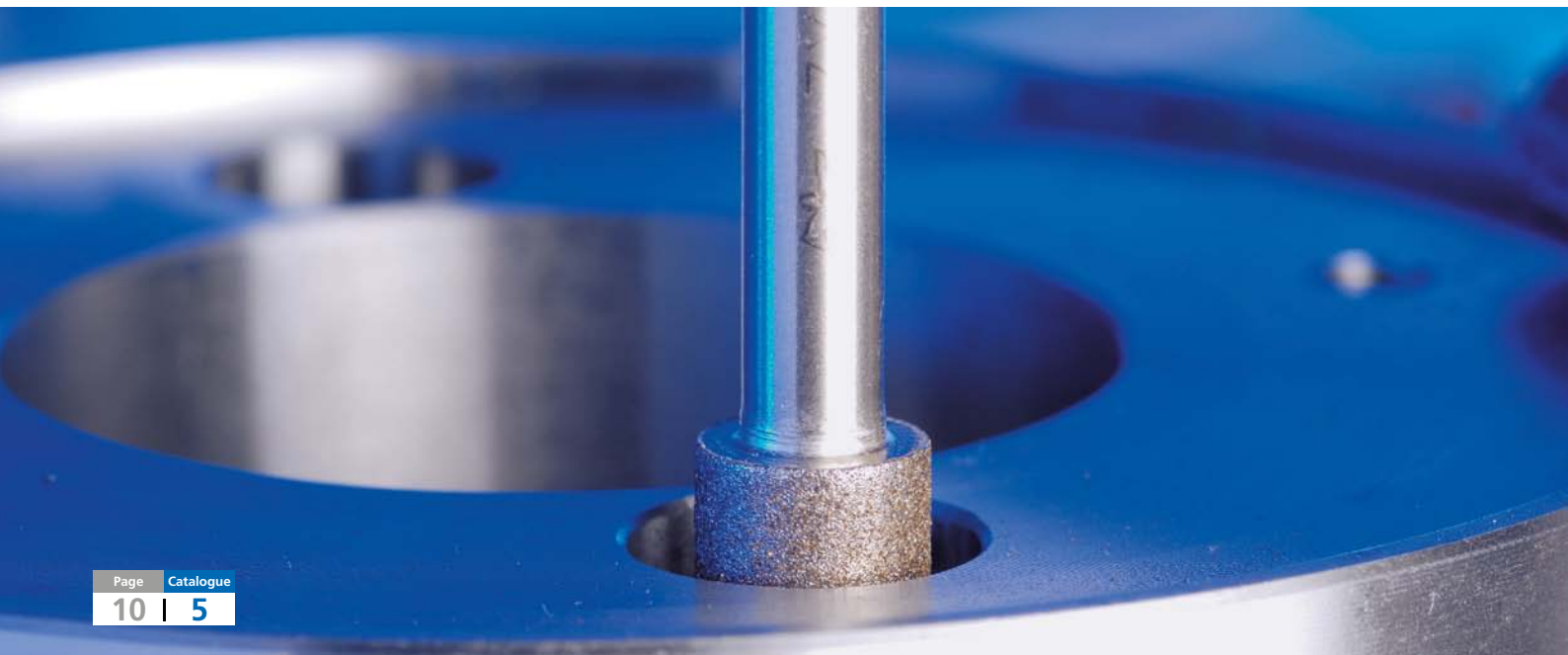
Diamond and CBN tools
Recommended cutting speeds

The recommended cutting speed ranges depend on the application and must not exceed the maximum permissible peripheral speed. Because of the wide range of tasks and application fields of electroplated diamond and CBN tools, as well as the large influence of the employed tool drive, it is not possible to specify a generally valid cutting speed. The recommended cutting speed ranges serve as reference values.

Generally, the following applies:

- In dry grinding, do not use diamond tools at too high a cutting speed in order to avoid thermal damage to the abrasive.
- If possible, do not use CBN tools under the cutting speeds specified below. The optimum cutting speed has a direct effect on the economic value of the tools in use.
- All parameters must always be coordinated with each other within the grinding process. If the cutting speed is changed, among others the feed, infeed and coolant supply must be adjusted accordingly.
- Electroplated diamond and CBN tools can be used in dedicated stationary applications up to a peripheral speed of 125 m/s.





Refer to the table for the recommended rotational speed based on the diameter and cutting speed of your tool.

Example:
Diamond grinding point
Diameter: 20 mm
Cutting speed: 25 m/s
Rotational speed rounded off: 23,900 RPM

Tool dia. [mm]	Cutting speed [m/s]											
	8	12	15	18	20	25	30	40	50	80	100	125
	Rotational speed rounded off [RPM]											
1	153,000	-	-	-	-	-	-	-	-	-	-	-
2	76,400	115,000	143,000	172,000	191,000	-	-	-	-	-	-	-
3	50,900	76,400	95,500	115,000	127,000	159,000	191,000	-	-	-	-	-
4	38,200	57,300	71,600	85,900	95,500	119,000	143,000	-	-	-	-	-
5	30,600	45,800	57,300	68,800	76,400	95,500	115,000	153,000	-	-	-	-
6	25,500	38,200	47,700	57,300	63,700	79,600	95,500	127,000	159,000	-	-	-
7	21,800	32,700	40,900	49,100	54,600	68,200	81,900	109,000	136,000	-	-	-
8	19,100	28,600	35,800	43,000	47,700	59,700	71,600	95,500	119,000	191,000	-	-
9	17,000	25,500	31,800	38,200	42,400	53,100	63,700	84,900	106,000	170,000	-	-
10	15,300	22,900	28,600	34,400	38,200	47,700	57,300	76,400	95,500	153,000	191,000	-
12	12,700	19,100	23,900	28,600	31,800	39,800	47,700	63,700	79,600	127,000	159,000	199,000
14	10,900	16,400	20,500	24,600	27,300	34,100	40,900	54,600	68,200	109,000	136,000	171,000
15	10,200	15,300	19,100	22,900	25,500	31,800	38,200	50,900	63,700	102,000	127,000	159,000
16	9,500	14,300	17,900	21,500	23,900	29,800	35,800	47,700	59,700	95,500	119,000	149,000
18	8,500	12,700	15,900	19,100	21,200	26,500	31,800	42,400	53,100	84,900	106,000	133,000
20	7,600	11,500	14,300	17,200	19,100	23,900	28,600	38,200	47,700	76,400	95,500	119,000
22	6,900	10,400	13,000	15,600	17,400	21,700	26,000	34,700	43,400	69,400	86,800	109,000
25	6,100	9,200	11,500	13,800	15,300	19,100	22,900	30,600	38,200	61,100	76,400	95,500
30	5,100	7,600	9,500	11,500	12,700	15,900	19,100	25,500	31,800	50,900	63,700	79,600
40	3,800	5,700	7,200	8,600	9,500	11,900	14,300	19,100	23,900	38,200	47,700	59,700
50	3,100	4,600	5,700	6,900	7,600	9,500	11,500	15,300	19,100	30,600	38,200	47,700
75	2,000	3,100	3,800	4,600	5,100	6,400	7,600	10,200	12,700	20,400	25,500	31,800
100	1,530	2,300	2,900	3,400	3,800	4,800	5,700	7,600	9,500	15,300	19,100	23,900
125	1,220	1,830	2,300	2,800	3,100	3,800	4,600	6,100	7,600	12,200	15,300	19,100
150	1,020	1,530	1,910	2,300	2,500	3,200	3,800	5,100	6,400	10,200	12,700	15,900
175	870	1,310	1,640	1,960	2,200	2,700	3,300	4,400	5,500	8,700	10,900	13,600
200	760	1,150	1,430	1,720	1,910	2,400	2,900	3,800	4,800	7,600	9,500	11,900
230	660	1,000	1,250	1,490	1,660	2,100	2,500	3,300	4,200	6,600	8,300	10,400
250	610	920	1,150	1,380	1,530	1,910	2,300	3,100	3,800	6,100	7,600	9,500
300	510	760	950	1,150	1,270	1,590	1,910	2,500	3,200	5,100	6,400	8,000
350	440	650	820	980	1,090	1,360	1,640	2,200	2,700	4,400	5,500	6,800
400	380	570	720	860	950	1,190	1,430	1,910	2,400	3,800	4,800	6,000
450	340	510	640	760	850	1,060	1,270	1,700	2,100	3,400	4,200	5,300
500	310	460	570	690	760	950	1,150	1,530	1,910	3,100	3,800	4,800
600	250	380	480	570	640	800	950	1,270	1,590	2,500	3,200	4,000

Safety notes:

The operator is responsible for the grinding application, including correct tool drive use, correct handling and use of the grinding tools.

 = Wear eye protection!

 = Wear hearing protection!

 = Read the safety instructions!

 = Wear a dust mask!

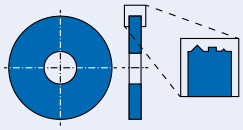
 = Wear gloves!

Diamond and CBN tools electroplated bond



The advantages of electroplated diamond and CBN grinding tools

Individual tool geometry



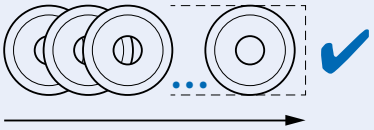
- Since virtually any machine-produced tool blank geometry can be used, electroplated diamond and CBN tools offer maximum flexibility in terms of tool profiles.

Shorter processing time



- The individual diamond or CBN grit projects well out of the electroplated bond. The resulting large chip spaces reduce tool loading while delivering very high stock removal. In conjunction with a sharp-edged super-hard grit, they guarantee maximum cutting characteristics and a very high stock removal rate.

Constant tool geometry



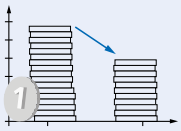
- The tool geometry of electroplated tools is retained thanks to the monolayer coating. This eliminates time-consuming profiling. The constant tool diameter enables work on deep-lying areas for a large number of workpieces, minimizes the formation of dust and allows use on robots.

Reduction in unproductive idle time

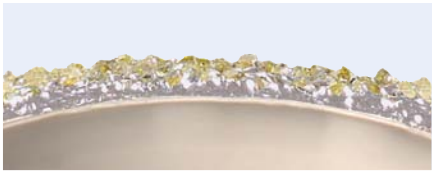


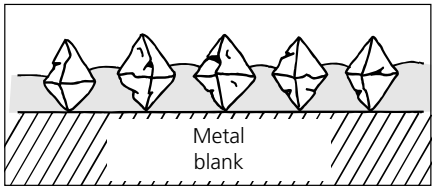
- The combination of the super-hard diamond or CBN abrasives and an electroplated bond results in a very long tool life and thus a reduction in tool changing times.
- No expensive and complicated dressing. Electroplated diamond and CBN tools are ready for immediate use thanks to their monolayer coating.

Reduction in tool costs



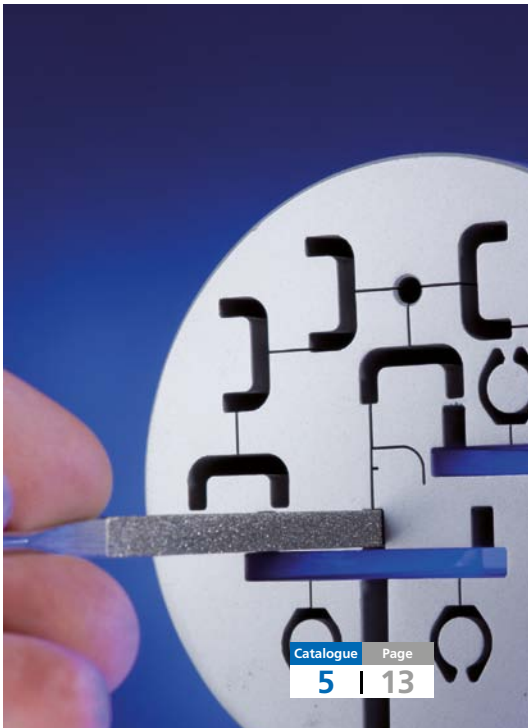
- Electroplated tools are less expensive than tools with other bond types due to their monolayer coating. They also provide an economic solution for the production of small batch sizes.
- Complex and/or large tool blanks can be recoated and reused.











Diamond and CBN tools electroplated bond

Customer-specific tool solutions



PFERD specializes in consultancy for and the production of customer-specific electroplated diamond and CBN tools.

Almost all tool blank geometries can be coated with various grit sizes. The electroplated bond also enables economic production of small batch sizes. Because of the diverse possibilities, our production can respond to individual customer requirements with a high degree of flexibility.

Our technical advisers will be happy to visit you on-site to develop individual tool solutions for your applications.

Get the best possible advice for super-hard solutions!

1. Process analysis and tool development

Contact us at www.pferd.com and arrange an appointment with our experienced sales representatives and technical advisers.

If you already have precise ideas about the desired tool, you can provide us with a technical drawing or a dimensioned sketch and information on the desired abrasives and grit sizes.

Our employees **will analyse your application with you on-site** and develop the most economic individual tool solution for you. You will then immediately receive a quote.
Three production variants are possible:

2. Production

Complete production
From design and construction, through manufacture of the tool blank (steel, stainless steel or brass) and its coating with diamond or CBN grit, to the balancing of the finished tool, PFERD offers you all the production steps from a single source. This guarantees you the highest level of quality, flexibility and on-time delivery.

Coating
Steel, stainless steel or brass blanks provided by the customer can also be coated with diamond or CBN grit. Close cooperation at an early stage is recommended.

Recoating
PFERD offers recoating of blunt tools with steel or stainless steel blanks as an economic alternative to replacement production.
Tools with brass blanks cannot be recoated.

3. Use

Our flexible production and global logistics network ensure that you receive your new tool on time.

If desired, your personal sales representative and a technical adviser will set up all the process parameters together with you.

See the quality, performance and economic value of PFERD tools for yourself!

PFERD offers comprehensive information on various topics related to cutting and work on surfaces.

In our **PRAXIS brochure "PFERD tools for use on plastics"** you will find lots of information about plastics and their properties, valuable practical tips and tricks, as well as the appropriate tools which meet the high demands of this material.

Please contact us for further details!

In the brochure **"Electroplated diamond tools – economical processing of grey and nodular cast iron"** we have combined our standard and special product range for use on grey and nodular cast iron.



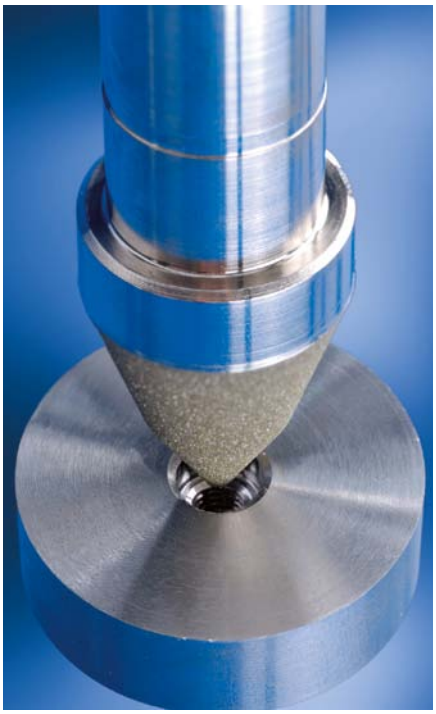














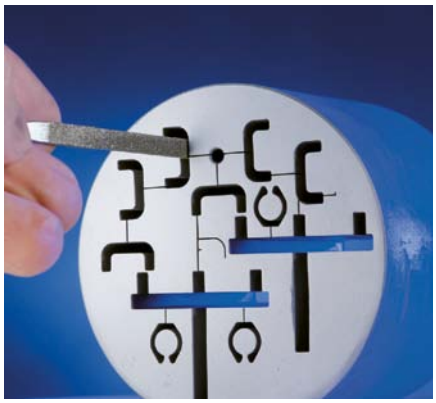








5



Diamond files and sheets are used particularly successfully for tasks where conventional files fail due to the hardness of the material to be worked.

Recommendations for use:

- Apply only slight pressure to the file, especially in workpiece edge areas.
- Loaded diamond files can be cleaned in kerosene or anti-static plastic cleaner with a file brush. Alternatively, ultrasonic cleaning is also possible. Often it will suffice to knock the file against a hard object.
- Avoid contact with grease when using files!

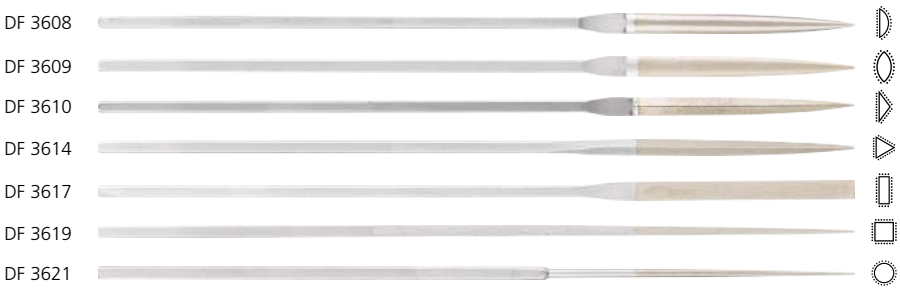
Note:

Diamond files and sheets are also used for processing hardened steel. The working temperatures are so low that no chemical wear occurs. This allows the higher hardness of the diamond grain to be exploited for a longer tool life.

Ordering notes:

- Please complete the description with the desired grit size.

Diamond escapement files



Diamond escapement files

Diamond escapement files are used on very small shapes in tool making and precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

PFERDVALUE:

HapticFilter

Profile	Cross section with coating [mm]	Overall length [mm]	Coating length [mm]	Grit size					Description
				D 25	D 46	D 91	D 126		
				EAN 4007220					
half-round	4.2 x 1.5	140	40	535530	323625	254622	254639	1	DF 3608 ...
crossing oval	3.8 x 1.8	140	40	535516	323632	254462	254479	1	DF 3609 ...
barrette	4 x 1.2	140	40	535509	323649	254493	254509	1	DF 3610 ...
three square	3	140	40	535561	323656	254554	254578	1	DF 3614 ...
hand	4 x 1.2	140	40	535578	323663	254523	254530	1	DF 3617 ...
square	2 x 2	140	40	535547	323670	254592	254608	1	DF 3619 ...
round	1.8	140	40	535523	323687	254653	254660	1	DF 3621 ...



Diamond escapement file sets

Diamond escapement file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:
1 piece each:
- DF 3608 (half-round)
- DF 3614 (three square)
- DF 3617 (hand)
- DF 3619 (square)
- DF 3621 (round)

PFERDVALUE:

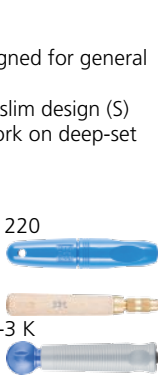
HapticFilter

Grit size					Description
D 25	D 46	D 91	D 126		
EAN 4007220					
535639	323700	323694	017364	1	DF 3090 ...

Diamond needle files

Diamond needle files are designed for general use in tool making.
Diamond needle files in extra slim design (S) are particularly suitable for work on deep-set and narrow contours.

Accessories:
- Quick-mounting handle SH 220 (EAN 4007220**806555**)
- Needle file holder NFH 212 (EAN 4007220**669532**)
- Needle file holder NFH 211-3 K (EAN 4007220**267783**)





Profile	Cross section with coating [mm]	Overall length [mm]	Coating length [mm]	Grit size D 91	Grit size D 126	Grit size D 181		Description
				EAN 4007220				
Needle files, extra slim (S)								
hand	5.3 x 1.3	140	70	-	806227	-	1	DF 4112S ...
three square	2.8	140	70	-	806258	-	1	DF 4132S ...
square	2.3	140	70	-	806289	-	1	DF 4142S ...
round	2.8	140	70	-	806319	-	1	DF 4162S ...
Needle files								
hand	5.5 x 1.6	140	70	016664	016671	016688	1	DF 4112 ...
hand with rounded edges	5.5 x 1.6	140	70	016695	016701	016718	1	DF 4112R ...
flat	5.5 x 1.6	140	70	016725	016732	016749	1	DF 4122 ...
three square	3.5	140	70	016756	016763	016770	1	DF 4132 ...
square	2.6 x 2.6	140	70	016787	016794	016800	1	DF 4142 ...
half-round	5.5 x 1.6	140	70	016817	016824	016831	1	DF 4152 ...
round	3.2	140	70	016848	016855	016862	1	DF 4162 ...
knife	5 x 1.8	140	70	016879	016886	016893	1	DF 4172 ...
feather edge	5 x 2.4	140	70	016909	016916	-	1	DF 4182 ...
crossing oval	5 x 2.2	140	70	016930	016947	-	1	DF 4192 ...
barrette	5 x 2	140	70	016633	016640	-	1	DF 4102 ...

Diamond needle file sets

Diamond needle file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.



Contents DF 4205:
1 piece each:
- DF 4112 (hand)
- DF 4132 (three square)
- DF 4142 (square)
- DF 4152 (half-round)
- DF 4162 (round)

Contents DF 4211:
1 piece each:
- DF 4112 (hand)
- DF 4112R (hand with rounded edges)
- DF 4122 (flat)
- DF 4132 (three square)
- DF 4142 (square)
- DF 4152 (half-round)
- DF 4162 (round)
- DF 4172 (knife)
- DF 4182 (feather edge)
- DF 4192 (crossing oval)
- DF 4102 (barrette)

Grit size D 91	Grit size D 126	Grit size D 181		Description
EAN 4007220				
017371	017388	017395	1	DF 4205 ...
017401	017418	017425	1	DF 4211 ...



Diamond riffler files

Diamond riffler files are used for work in hard-to-reach areas and on complex geometries. The coating length is 25 mm on both sides of the files.

Accessories:

- Riffler file holder RFH 150 (EAN 4007220**015322**)



Profile	Cross section with coating [mm]	Overall length [mm]	Double-sided coating length [mm]	Grit size			Description
				D 91	D 126		
				EAN 4007220			
crossing oval	3.2 x 2	150	25	017029	017036	1	DF 15 ...
	3.7 x 2	150	25	017050	017067	1	DF 16 ...
hand	3.1 x 3	150	25	017081	017098	1	DF 18 ...
square	2.5 x 2.5	150	25	017111	017128	1	DF 20 ...
three square	3	150	25	017142	017159	1	DF 22 ...
round	3	150	25	017173	017180	1	DF 24 ...
hand	3.8 x 1.6	150	25	016961	016978	1	DF 914 ...
	4 x 2	150	25	016992	017005	1	DF 918 ...



Diamond riffler file set

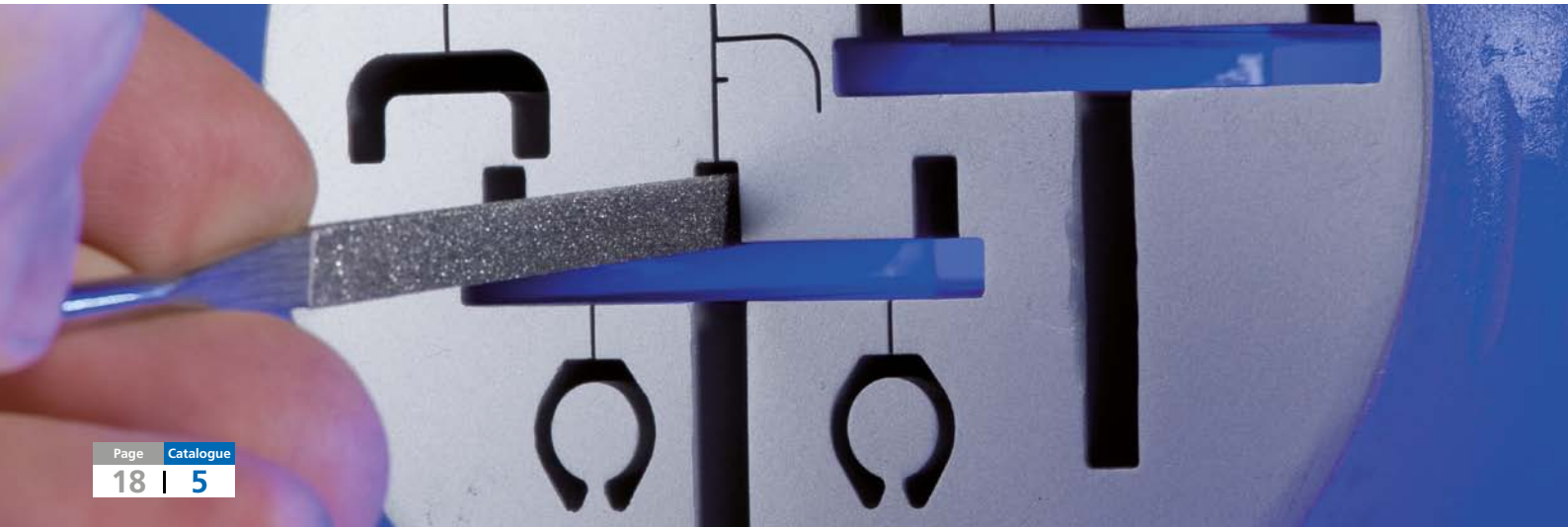
The diamond riffler file set is supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:

1 piece each:

- DF 16 (crossing oval)
- DF 18 (hand)
- DF 20 (square)
- DF 22 (three square)
- DF 24 (round)

Grit size		Description
D 126		
EAN 4007220		
355381	1	DF 1624 D 126



Diamond handy files

Diamond handy files have a forged shank which allows the use without an additional handle.

PFERDVALUE:





Profile	Cross section with coating [mm]	Overall length [mm]	Coating length [mm]	Grit size			Description
				D 126	D 181		
				EAN 4007220			
hand	10.3 x 2.8	215	100	017302	535455	1	DF 2601 ...
half-round	12.5 x 3.8	215	100	017319	535462	1	DF 2602 ...
three square	10	215	100	017326	535479	1	DF 2607 ...
square	5.5 x 5.5	215	100	017333	535486	1	DF 2608 ...
round	6.7	215	100	017340	535493	1	DF 2610 ...

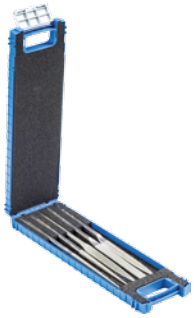
Diamond handy file sets

Diamond handy file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:
1 piece each:
- DF 2601 (hand)
- DF 2602 (half-round)
- DF 2607 (three square)
- DF 2608 (square)
- DF 2610 (round)

PFERDVALUE:





Grit size			Description
D 126	D 181		
EAN 4007220			
017357	535585	1	DF 2627 ...

Conical diamond files

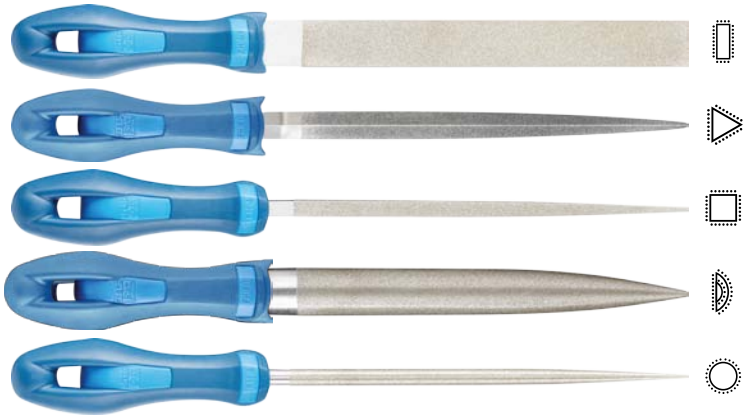
Conical diamond files

The conical diamond files are used on particularly narrow, deep contours in toolmaking. Because of the forged shank, they can be used without a handle.



Width A [mm]	Thickness B [mm]	Thickness B_1 [mm]	Overall length [mm]	Coating length [mm]	Grit size				Description
					D 46	D 91	D 126		
					EAN 4007220				
4.0	2.0	0.5	170	50	070635	070659	070666	1	DF-K 170-4-2-0,5 ...
6.0	2.4	0.5	170	50	070673	070680	070697	1	DF-K 170-6-2,4-0,5 ...
8.0	2.4	0.5	170	50	070703	070710	070727	1	DF-K 170-8-2,4-0,5 ...
10.0	2.5	0.5	170	50	070734	070741	070758	1	DF-K 170-10-2,5-0,5 ...

Diamond and CBN tools electroplated bond
Diamond machinist's files



Diamond machinist's files

Diamond machinist's files are used, among other industries, in large tool construction. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP).
Diamond machinist's files are supplied with an ergonomic handle.

PFERDVALUE:

HapticFilter

Profile	Cross section with coating [mm]	Overall length [mm]	Coating length [mm]	Grit size				Description
				D 126	D 151	D 251		
				EAN 4007220				
hand	10 x 3.2	100	85	255117	805954	805961	1	DF 1112/100 ...
	11.2 x 4.2	125	110	255131	955888	-	1	DF 1112/125 ...
	13 x 5	150	135	255155	805978	805985	1	DF 1112/150 ...
	22.5 x 5.5	200	180	-	017203	017210	1	DF 1112/200 ...
three square	7	100	85	255179	955895	-	1	DF 1132/100 ...
	14	200	180	-	017227	017234	1	DF 1132/200 ...
square	7.5 x 7.5	200	180	-	017241	-	1	DF 1142/200 ...
half-round pointed	12 x 4	100	85	255193	955901	-	1	DF 1152/100 ...
	22 x 6.5	200	180	-	017265	017272	1	DF 1152/200 ...
round	8	200	180	-	017289	-	1	DF 1162/200 ...





Flexible diamond files



The flexible diamond files perfectly adapt to the workpiece surface. Due to its flexibility, they can be used in convex and concave contours with small radii.

Recommendations for use:

- Only use files up to a bending radius of 15 mm.

Cross section with coating [mm]	Overall length [mm]	Coating type	Grit size				Description
			D 76	D 126	D 181		
			EAN 4007220				
0.5 x 14	165	one side	004920	004951	004968	5	DF-FLEX 14-165 ...

Diamond sheets



The diamond sheets are exceptionally well suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Cross section with coating [mm]	Overall length [mm]	Coating type	Grit size			Description
			D 64	D 126		
			EAN 4007220			
0.7 x 30	170	complete	806371	955925	1	DBL 30-0,7-170 ...
1.3 x 35	350	complete	955918	806388	1	DBL 35-1,3-350 ...







DF 5301–5309 

DF 5310–5314 

DF 5316 

DF 5390–5392 

DF 5331–5347 

DF 5365–5375 

DF 5352–5362 

DF 5380–5382 

DF 0103, DF 0106 

Diamond files for manual filing machines

Diamond files for manual filing tools are suitable for use in machines, as well as for hand filing.
The shank diameter of the diamond files is 3 mm.

Accessories:

- Air-powered filing machine PFGA 07/220 (EAN 4007220**657638**): For detailed information and ordering data, please refer to catalogue section 9.



Profile	Cross section with coating [mm]	Overall length [mm]	Coating length [mm]	Coating type	Grit size D 126 EAN 4007220		Description
hand	2 x 1	50	15	one side	256718	1	DF 5301 D 126
	3 x 1	50	15	one side	256749	1	DF 5303 D 126
	4 x 1	50	15	one side	256817	1	DF 5305 D 126
	5 x 2	50	15	one side	256848	1	DF 5307 D 126
	5 x 2	60	25	one side	256879	1	DF 5309 D 126
	2 x 1	50	15	both sides	256909	1	DF 5310 D 126
	3 x 1	50	15	both sides	256930	1	DF 5311 D 126
	4 x 1	50	15	both sides	256961	1	DF 5312 D 126
	5 x 2	50	15	both sides	256992	1	DF 5313 D 126
	5 x 2	60	25	both sides	257029	1	DF 5314 D 126
	0.5 x 4	50	15	face side	257050	1	DF 5316 D 126
square	1.5 x 1.5	50	15	complete	257296	1	DF 5390 D 126
	3 x 3	50	15	complete	257326	1	DF 5391 D 126
	4 x 4	50	15	complete	257357	1	DF 5392 D 126
round	1	50	15	complete	257418	1	DF 5331 D 126
	2	50	15	complete	257449	1	DF 5335 D 126
	3	50	15	complete	257470	1	DF 5339 D 126
	4	50	15	complete	257500	1	DF 5345 D 126
	2	60	25	complete	257531	1	DF 5337 D 126
	3	60	25	complete	257562	1	DF 5343 D 126
	4	60	25	complete	257593	1	DF 5347 D 126
three square	2	50	15	complete	257173	1	DF 5365 D 126
	3.5	50	15	complete	257203	1	DF 5367 D 126
	3.5	60	25	complete	257234	1	DF 5371 D 126
	4.5	60	25	complete	257265	1	DF 5375 D 126
crossing oval	2 x 1	50	15	complete	257623	1	DF 5352 D 126
	3.5 x 2	50	15	complete	257654	1	DF 5356 D 126
	6 x 3	50	12	complete	257685	1	DF 5360 D 126
	3.5 x 2	60	25	complete	257715	1	DF 5358 D 126
	6 x 3	60	25	complete	257746	1	DF 5362 D 126
knife	1 x 4	50	15	complete	257777	1	DF 5380 D 126
	2 x 6	50	15	complete	257807	1	DF 5382 D 126
flat conical	3.3 x 1	55	16	complete	665862	1	DF 0103 D 126
	6.3 x 1	55	16	complete	665879	1	DF 0106/55 D 126
	6.3 x 1	73	16	complete	665886	1	DF 0106/73 D 126

Powered tools



Matching tool drives:

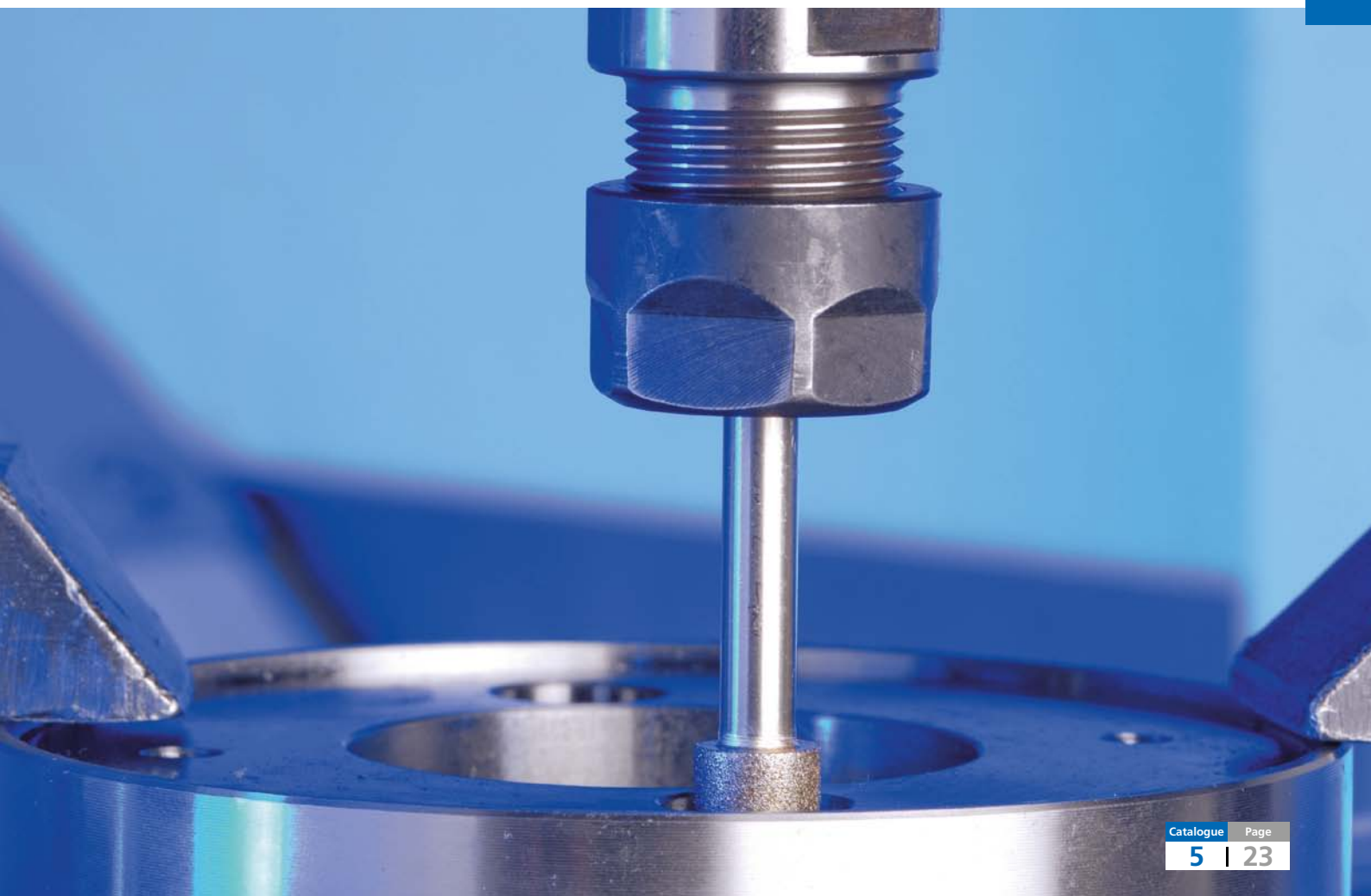
- Machine tool
- Robot
- Straight grinder
- Flexible shaft drive

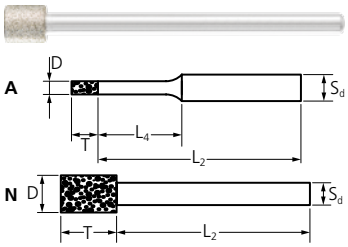
Conditions for use:

- Because of the monolayer coating, drive spindles and tool holders must have a high concentricity. The finer the grit size used, the more accurate the concentricity needs to be.
- The tool drive must have sufficient drive output on the grinding spindle to ensure the required rotational speed, even under load.
- For stationary tool drives, the tool machine, tool and workpiece holder must be sufficiently rigid.
- The workpiece must be mounted stable.

Recommendations for use:

- Electroplated diamond and CBN tools can be used for both dry and wet grinding. If possible, wet grinding is to be preferred in order to reduce tool wear and the risk of thermal damage.
- Generally, the following applies: For optimum profitability, select a grit size that is as coarse as possible and as fine as necessary. Influencing factors include the hardness of the material and the surface quality required.
- Loaded tools can be cleaned using ultrasound. In the event of strong contamination on the coating, please clean using the sharpening block DSB 2005025 (EAN 4007220**168332**). More detailed information and ordering data can be found on page 52.
- Select as large a tool diameter as possible, since this increases the number of diamond or CBN grit that engage the workpiece. For internal grinding, the maximum tool diameter is 3/4 of the diameter to be ground.
- The longitudinal feed rate for internal grinding must not exceed 2/3 of the total width per workpiece rotation. The infeed depends on the material to be machined, the cutting speed, the stability of the tool, its holder and the tool drive.





Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours using stationary or handheld equipment. Grinding points with a diameter of 8 mm or more have a recess on the front surface.

A = stepped shank
N = non-stepped shank



Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size D 64	Grit size D 91	Grit size D 126	Grit size D 181		Description
				EAN 4007220					
Shank dia. 3 mm									
0.5 x 2	3	38	5	354322	-	-	-	5	DZY-A 0,5-2/3 ...
0.8 x 2	3	38	5	354339	-	-	-	5	DZY-A 0,8-2/3 ...
1.0 x 4	3	36	9	354346	257883	257890	-	5	DZY-A 1,0-4/3 ...
1.2 x 4	3	36	9	354353	354360	354377	-	5	DZY-A 1,2-4/3 ...
1.4 x 4	3	36	9	354384	354391	354407	-	5	DZY-A 1,4-4/3 ...
1.6 x 4	3	36	10	-	354421	354438	-	5	DZY-A 1,6-4/3 ...
1.8 x 4	3	36	10	-	354452	354469	-	5	DZY-A 1,8-4/3 ...
2.0 x 4	3	36	10	354476	260784	119181	-	5	DZY-A 2,0-4/3 ...
2.2 x 4	3	36	14	-	354490	354506	-	5	DZY-A 2,2-4/3 ...
2.4 x 4	3	36	14	-	354520	354537	-	5	DZY-A 2,4-4/3 ...
2.6 x 4	3	36	14	-	354551	354568	-	5	DZY-A 2,6-4/3 ...
2.8 x 4	3	36	14	-	354582	354599	-	5	DZY-A 2,8-4/3 ...
3.0 x 4	3	36	19	354605	260821	119204	-	5	DZY-A 3,0-4/3 ...
3.5 x 5	3	45	-	-	260845	119211	-	5	DZY-N 3,5-5/3 ...
4.0 x 5	3	45	-	-	260869	119228	260876	5	DZY-N 4,0-5/3 ...
4.5 x 5	3	45	-	-	260883	119235	-	5	DZY-N 4,5-5/3 ...
5.0 x 5	3	45	-	-	260906	119242	260913	5	DZY-N 5,0-5/3 ...
5.5 x 6	3	44	-	-	257944	257951	257968	5	DZY-N 5,5-6/3 ...
Shank dia. 6 mm									
6.0 x 6	6	54	19	-	260920	119259	260937	1	DZY-A 6,0-6/6 ...
7.0 x 8	6	52	-	-	-	119266	-	1	DZY-N 7,0-8/6 ...
8.0 x 8	6	52	-	-	260968	119273	260975	1	DZY-N 8,0-8/6 ...
9.0 x 8	6	52	-	-	-	258040	-	1	DZY-N 9,0-8/6 ...
10.0 x 8	6	52	-	-	260982	119280	260999	1	DZY-N 10,0-8/6 ...
12.0 x 8	6	52	-	-	261002	119297	261019	1	DZY-N 12,0-8/6 ...
15.0 x 10	6	50	-	-	-	119303	-	1	DZY-N 15,0-10/6 ...
18.0 x 10	6	50	-	-	-	258163	-	1	DZY-N 18,0-10/6 ...
20.0 x 10	6	50	-	-	-	258194	-	1	DZY-N 20,0-10/6 ...
Shank dia. 10 mm									
15.0 x 10	10	110	-	-	-	355091	-	1	DZY-N 15,0-10/10 ...
Shank dia. 12 mm									
25.0 x 10	12	110	-	-	-	355138	-	1	DZY-N 25,0-10/12 ...

Special shape ZY

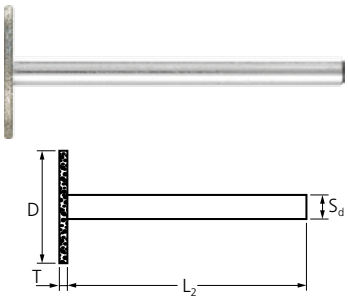
The special shape ZY is suitable for grinding slits and grooves in hard-to-reach areas.

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter, Energy Saving, Waste Saving, Time Saving, Resource Saving



D x T [mm]	S_d [mm]	L_2 [mm]	Grit size D 64 EAN 4007220	Grit size D 91 EAN 4007220		Description
Shank dia. 3 mm						
8.0 x 0.5	3	35	353240	-	1	DZY-N 8,0-0,5/3 ...
14.0 x 0.5	3	35	353257	-	1	DZY-N 14,0-0,5/3 ...
14.0 x 1	3	35	353264	353271	1	DZY-N 14,0-1,0/3 ...

Spherical shape KU

The spherical shape KU is often used in manual applications. This shape is well suited for engraving, contour grinding and deburring tasks.

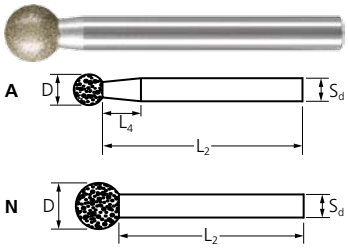
A = stepped shank
N = non-stepped shank

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

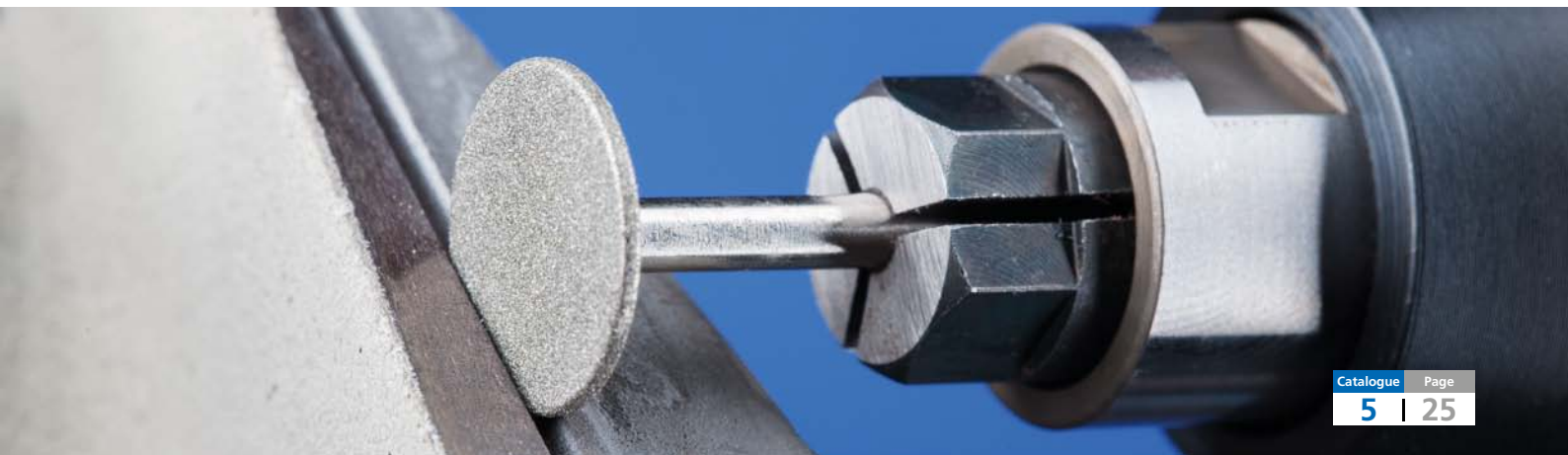
Ordering notes:
- Please complete the description with the desired grit size.

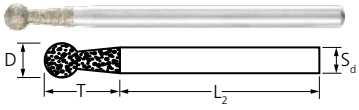
PFERDVALUE:

Emission Filter, Energy Saving, Waste Saving, Time Saving, Resource Saving



D [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size D 64 EAN 4007220	Grit size D 91 EAN 4007220	Grit size D 126 EAN 4007220	Grit size D 181 EAN 4007220		Description
Shank dia. 3 mm									
1.0	3	44	10	354926	258620	258637	258644	5	DKU-A 1,0/3 ...
2.0	3	43	8	354933	258651	258668	258675	5	DKU-A 2,0/3 ...
3.0	3	42	6	354940	258682	258699	258705	5	DKU-A 3,0/3 ...
4.0	3	41	5	-	258712	258729	258736	5	DKU-A 4,0/3 ...
5.0	3	40	2	-	258743	258750	258767	5	DKU-A 5,0/3 ...
6.0	3	39	-	-	258774	258781	258798	1	DKU-N 6,0/3 ...
Shank dia. 6 mm									
8.0	6	52	10	-	-	258842	-	1	DKU-A 8,0/6 ...
10.0	6	50	5	-	-	258903	-	1	DKU-A 10,0/6 ...
12.0	6	48	-	-	-	258965	-	1	DKU-N 12,0/6 ...





Special shape KU

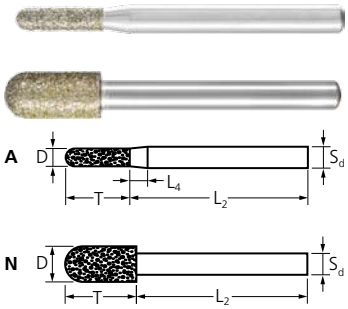
The special shape KU is often used for deburring plastic profiles in manual applications. This shape is also coated with grit under the ball-shaped part of the grinding point on the stepped shank. The special shape of the tool provides optimum results when machining profiles.

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	Grit size D 181 EAN 4007220		Description
Shank dia. 3 mm					
3.0 x 10	3	40	353844	1	DKU 3,0-10/3 D 181
4.0 x 10	3	40	353868	1	DKU 4,0-10/3 D 181



Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks. Coarse grit size D 357 is especially well suited to use on fibre-reinforced plastics (GRP/CRP).

A = stepped shank
N = non-stepped shank

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

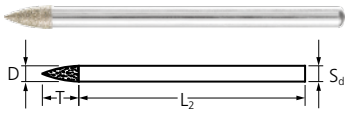
D x T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size D 126 EAN 4007220	Grit size D 357 EAN 4007220		Description
Shank dia. 6 mm							
5.0 x 18	6	50	5	955932	353981	1	DWR-A 5,0-18/6 ...
6.0 x 18	6	50	5	955949	353998	1	DWR-A 6,0-18/6 ...
10.0 x 20	6	50	-	955956	354001	1	DWR-N 10,0-20/6 ...



More PFERD tools and tips and tricks for work on plastics can be found in our PRAXIS brochure "PFERD tools for use on plastics". Please contact us.



Pointed tree shape SPG



The pointed tree shape SPG is exceptionally well suited to machining small holes or bores as well as for engraving work.

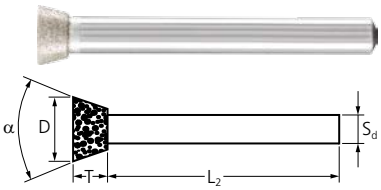
Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	Grit size D 126 EAN 4007220		Description
Shank dia. 3 mm					
3.0 x 7	3	43	536421	1	DSPG 3,0-7/3 D 126
3.0 x 13	3	37	806203	1	DSPG 3,0-13/3 D 126
Shank dia. 6 mm					
6.0 x 18	6	50	955963	1	DSPG 6,0-18/6 D 126

Cup shape KT



The cup shape KT is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

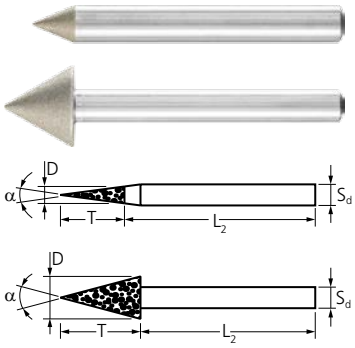
Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	α	S_d [mm]	L_2 [mm]	Grit size D 126 EAN 4007220		Description
Shank dia. 3 mm						
3.0 x 7	8°	3	43	354018	1	DKT 3,0-8°/3 D 126
Shank dia. 6 mm						
10.0 x 5	30°	6	50	354025	1	DKT 10,0-30°/6 D 126





Conical pointed shape SK

The conical pointed shape SK is exceptionally well suited to deburring bores, regrinding centring holes and chamfering.



Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

D x T [mm]	α	S_d [mm]	L_2 [mm]	Grit size D 64 EAN 4007220	Grit size D 126 EAN 4007220		Description
Shank dia. 6 mm							
6.0 x 45	7°	6	50	354049	955970	1	DSK 6,0-7°/6 ...
6.0 x 26	12°	6	50	354056	955987	1	DSK 6,0-12°/6 ...
6.0 x 21	15°	6	50	354063	955994	1	DSK 6,0-15°/6 ...
6.0 x 11	30°	6	50	354032	354070	1	DSK 6,0-30°/6 ...
6.0 x 5	60°	6	50	393390	956007	1	DSK 6,0-60°/6 ...
10.0 x 9	60°	6	50	806128	806135	1	DSK 10,0-60°/6 ...
10.0 x 5	90°	6	50	806142	806159	1	DSK 10,0-90°/6 ...
15.0 x 13	60°	6	50	806166	806173	1	DSK 15,0-60°/6 ...
15.0 x 7.5	90°	6	50	806180	806197	1	DSK 15,0-90°/6 ...



Diamond grinding point set

The set contains 10 diamond grinding points with grit size D 126 in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

Contents:
1 piece each:
- DZY-A 1,0-4/3 D 126
- DZY-A 2,0-4/3 D 126
- DZY-N 4,0-5/3 D 126
- DZY-N 5,0-5/3 D 126
- DZY-N 14,0-1,1/3 D 126
- DKU-A 2,0/3 D 126
- DKU-A 4,0/3 D 126
- DKU-N 6,0/3 D 126
- DSPG 3,0-7/3 D 126
- DKT 3,0-8°/3 D 126

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

S_d [mm]	Grit size D 126 EAN 4007220		Description
3	103845	1	D-Set/3 D126

Grinding discs 1A1

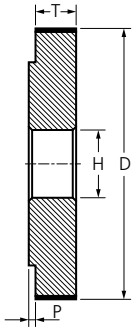
Diamond grinding discs are intended for use on stationary machines. Grinding discs with an outer diameter of 18 mm or more have an additional centring shoulder which allows them to be accurately mounted and aligned on the machine spindle. Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.

Recommendations for use:
- Dry grinding: 8–18 m/s
- Wet grinding: 15–25 m/s

PFERDVALUE:

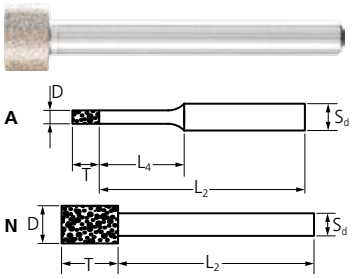
Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving





D x T [mm]	H [mm]	P [mm]	Grit size D 151 EAN 4007220		Description
12.0 x 10	8	-	665893	1	D1A1 12-10-8 D 151
14.0 x 10	8	-	665961	1	D1A1 14-10-8 D 151
16.0 x 10	8	-	665978	1	D1A1 16-10-8 D 151
18.0 x 10	8	2	665992	1	D1A1 18-10-8 D 151
20.0 x 10	8	2	354629	1	D1A1 20-10-8 D 151
30.0 x 10	10	2	354636	1	D1A1 30-10-10 D 151
40.0 x 10	10	2	354643	1	D1A1 40-10-10 D 151
50.0 x 10	10	2	354131	1	D1A1 50-10-10 D 151

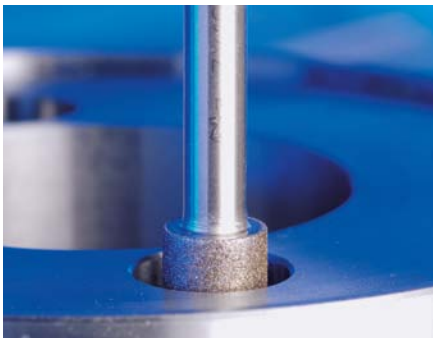




Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours using stationary or handheld equipment. Grinding points with a diameter of 8 mm or more have a recess on the front surface.

A = stepped shank
N = non-stepped shank



Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

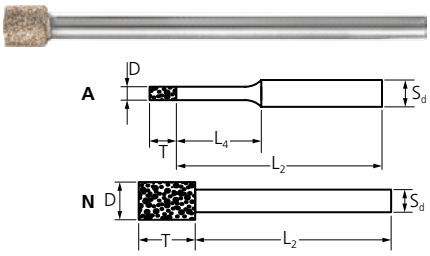
Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size B 64	Grit size B 126		Description
				EAN 4007220			
Shank dia. 3 mm							
0.5 x 2	3	38	5	354650	-	5	BZY-A 0,5-2/3 ...
0.8 x 2	3	38	5	354667	-	5	BZY-A 0,8-2/3 ...
1.0 x 4	3	36	9	354674	258224	5	BZY-A 1,0-4/3 ...
1.2 x 4	3	36	9	354681	354698	5	BZY-A 1,2-4/3 ...
1.4 x 4	3	36	9	-	354711	5	BZY-A 1,4-4/3 ...
1.6 x 4	3	36	10	354728	354735	5	BZY-A 1,6-4/3 ...
1.8 x 4	3	36	10	-	354759	5	BZY-A 1,8-4/3 ...
2.0 x 4	3	36	10	354766	119310	5	BZY-A 2,0-4/3 ...
2.2 x 4	3	36	14	-	354780	5	BZY-A 2,2-4/3 ...
2.4 x 4	3	36	14	354797	354803	5	BZY-A 2,4-4/3 ...
2.6 x 4	3	36	14	354810	354827	5	BZY-A 2,6-4/3 ...
2.8 x 4	3	36	14	-	354841	5	BZY-A 2,8-4/3 ...
3.0 x 4	3	36	19	354858	119334	5	BZY-A 3,0-4/3 ...
3.5 x 5	3	45	-	354865	119341	5	BZY-N 3,5-5/3 ...
4.0 x 5	3	45	-	354872	119358	5	BZY-N 4,0-5/3 ...
4.5 x 5	3	45	-	-	119365	5	BZY-N 4,5-5/3 ...
5.0 x 5	3	45	-	354896	119372	5	BZY-N 5,0-5/3 ...
5.5 x 6	3	44	-	-	258286	5	BZY-N 5,5-6/3 ...
Shank dia. 6 mm							
6.0 x 6	6	54	19	354919	119389	1	BZY-A 6,0-6/6 ...
7.0 x 8	6	52	-	-	119396	1	BZY-N 7,0-8/6 ...
8.0 x 8	6	52	-	-	119402	1	BZY-N 8,0-8/6 ...
9.0 x 8	6	52	-	-	258408	1	BZY-N 9,0-8/6 ...
10.0 x 8	6	52	-	-	119419	1	BZY-N 10,0-8/6 ...
12.0 x 8	6	52	-	-	119426	1	BZY-N 12,0-8/6 ...
13.0 x 10	6	50	-	-	258460	1	BZY-N 13,0-10/6 ...
14.0 x 10	6	50	-	-	258491	1	BZY-N 14,0-10/6 ...
15.0 x 10	6	50	-	-	119433	1	BZY-N 15,0-10/6 ...
18.0 x 10	6	50	-	-	258521	1	BZY-N 18,0-10/6 ...
20.0 x 10	6	50	-	-	258552	1	BZY-N 20,0-10/6 ...
Shank dia. 10 mm							
15.0 x 10	10	110	-	-	355145	1	BZY-N 15,0-10/10 ...

Cylindrical points with carbide shank



Cylindrical points with tungsten carbide shank are used for internal grinding on stationary machines.
The elastic modulus of the tungsten carbide shank is approximately three times higher than that of a steel shank. The modulus of elasticity indicates the amount of deformation a body undergoes as a result of a given load.
In internal grinding applications, tools with a tungsten carbide shank offer higher stock removal rates, superior surfaces and more precise shape and position tolerances.

A = stepped shank
N = non-stepped shank

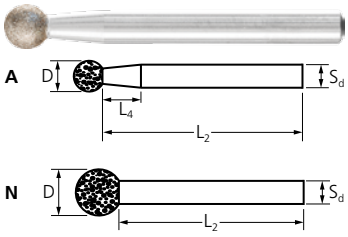
Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

PFERDVALUE:

Emission Filter, Energy Saving, Waste Saving, Time Saving, Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size B 151 EAN 4007220		Description
Shank dia. 3 mm						
4.0 x 5	3	43	-	353714	1	BZY-N 4,0-5/3 HM B 151
5.0 x 5	3	43	-	353721	1	BZY-N 5,0-5/3 HM B 151
Shank dia. 6 mm						
6.0 x 6	6	98	19	353691	1	BZY-A 6,0-6/6 HM B 151
8.0 x 8	6	98	-	353738	1	BZY-N 8,0-8/6 HM B 151
12.0 x 8	6	98	-	956014	1	BZY-N 12,0-8/6 HM B 151

Spherical shape KU



Spherical shape CBN grinding points are often used for engraving, contour grinding and deburring work.

A = stepped shank
N = non-stepped shank

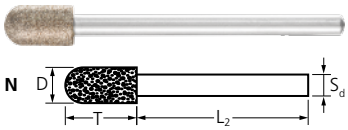
Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

Ordering notes:
- Please complete the description with the desired grit size.

PFERDVALUE:

Emission Filter, Energy Saving, Waste Saving, Time Saving, Resource Saving

D [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size B 64	Grit size B 126		Description
				EAN 4007220			
Shank dia. 3 mm							
1.0	3	44	10	354957	258996	5	BKU-A 1,0/3 ...
2.0	3	43	8	354964	259023	5	BKU-A 2,0/3 ...
3.0	3	42	6	354971	259054	5	BKU-A 3,0/3 ...
4.0	3	41	5	-	259085	5	BKU-A 4,0/3 ...
5.0	3	40	2	-	259115	5	BKU-A 5,0/3 ...
6.0	3	39	-	-	259146	1	BKU-N 6,0/3 ...
Shank dia. 6 mm							
8.0	6	52	10	-	259207	1	BKU-A 8,0/6 ...
10.0	6	50	5	-	259269	1	BKU-A 10,0/6 ...
12.0	6	48	-	-	259320	1	BKU-N 12,0/6 ...



Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks.

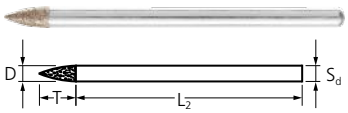
N = non-stepped shank

Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	Grit size B 126 EAN 4007220		Description
Shank dia. 3 mm					
5.0 x 10	3	40	354087	1	BWR-N 5,0-10/3 B 126
6.0 x 10	3	40	354094	1	BWR-N 6,0-10/3 B 126



Pointed tree shape SPG

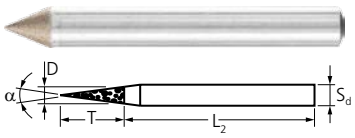
The pointed tree shape SPG is exceptionally well suited to machining small holes or bores as well as for engraving work.

Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	Grit size B 126 EAN 4007220		Description
Shank dia. 3 mm					
3.0 x 7	3	43	354100	1	BSPG 3,0-7/3 B 126
Shank dia. 6 mm					
6.0 x 18	6	50	354117	1	BSPG 6,0-18/6 B 126



Conical pointed shape SK

The conical pointed shape SK is exceptionally well suited to deburring bores, regrinding centring holes and chamfering.



Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

PFERDVALUE:

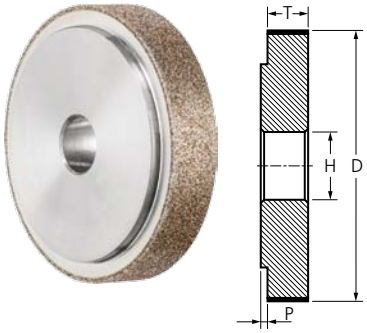
Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	α	S_d [mm]	L_2 [mm]	Grit size B 64 EAN 4007220		Description
Shank dia. 6 mm						
6.0 x 7	45°	6	50	393406	1	BSK 6,0-45°/6 B 64
6.0 x 5	60°	6	50	393413	1	BSK 6,0-60°/6 B 64

Grinding discs 1A1

CBN grinding discs are intended for use on stationary machines. The grinding discs have an additional centring shoulder which allows them to be accurately mounted and aligned on the machine spindle.
Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.





Recommendations for use:
- Dry grinding: 15–25 m/s
- Wet grinding: 20–40 m/s

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

D x T [mm]	H [mm]	P [mm]	Grit size B 151 EAN 4007220		Description
20.0 x 10	8	2	355015	1	B1A1 20-10-8 B 151
30.0 x 10	10	2	355039	1	B1A1 30-10-10 B 151
40.0 x 10	10	2	355053	1	B1A1 40-10-10 B 151
50.0 x 10	10	2	355077	1	B1A1 50-10-10 B 151

Diamond and CBN tools electroplated bond
Diamond cut-off wheels



Electroplated diamond cut-off wheels are characterized by their particularly efficient cutting performance because of their large chip spaces.

Matching tool drives:

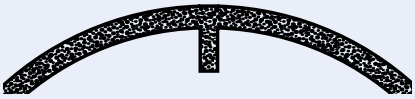
- Angle grinders
- Flexible shaft drives
- Straight grinders
- Stationary machines

Note:

- Other dimensions and CBN cut-off wheels are available on request. Further information on customer-specific tool solutions can be found on page 14.

Advice on tool selection:

- When cutting glass, ceramic or tungsten carbide, use fine grit sizes D 64 or D 151.
- When cutting pre-sintered ceramic, use coarse grit sizes D 357 or D 427.
- For cutting, trimming or cutting-to-length work on fibre-reinforced plastics (GRP/CRP), use coarse grit sizes D 357 or D 427. Fine grit sizes D 64 and D 151 can also be used for small geometries.
- The grit size D 852 is exceptionally well-suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS).

Shape D (continuous coating)	Shape G (with protective segments)	Shape S 2 (segmented)
		
The continuous coating is particularly suitable for very fine separating cuts.	The continuous coating with protective segments facilitates optimum free-cutting.	The segmentation allows particularly good chip removal.



Diamond cut-off wheels

Electroplated diamond cut-off wheels are used with grit sizes from D 64 to D 427 for cutting hard materials such as tungsten carbide or ceramics and fibre-reinforced plastics (GRP/CRP).

PFERDVALUE:

Emission Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving



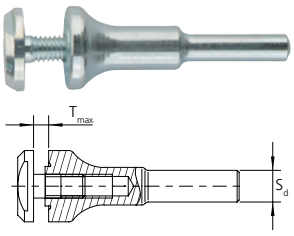
D [mm]	T [mm]	E [mm]	H [mm]	Shape	Protective segments per side	Grit size D 64	Grit size D 151	Grit size D 357	Grit size D 427		Description
						EAN 4007220					
Hard materials, e.g. glass, ceramics or tungsten carbide											
22	0.5	0.3	1.7	D	none	355190	-	-	-	1	D1A1R 22-0,5-1,7 D 64 GAD
30	1.0	0.6	10	D	none	-	355206	-	-	1	D1A1R 30-1-10 D 151 GAD
40	1.0	0.6	10	D	none	-	355213	-	-	1	D1A1R 40-1-10 D 151 GAD
50	1.4	1.0	6	D	none	-	355220	-	-	1	D1A1R 50-1,4-6 D 151 GAD
			10	D	none	-	666043	-	-	1	D1A1R 50-1,4-10 D 151 GAD
125	1.4	1.0	20	D	none	-	355237	-	-	1	D1A1R 125-1,4-20 D 151 GAD
Fibre-reinforced plastics (GRP and CRP) as well as pre-sintered and green ceramic											
50	2.0	1.0	6	D	none	-	-	308790	-	1	D1A1R 50-2-6 D 357 GAD
			6	G	3	-	-	168530	-	1	D1A1R 50-2-6 D 357 GAG
			10	D	none	-	-	666067	-	1	D1A1R 50-2-10 D 357 GAD
			10	G	3	-	-	666050	-	1	D1A1R 50-2-10 D 357 GAG
75	2.0	1.0	10	D	none	-	-	956038	-	1	D1A1R 75-2-10 D 357 GAD
				G	3	-	-	393420	-	1	D1A1R 75-2-10 D 357 GAG
100	2.0	1.0	22.23	D	none	-	-	-	805992	1	D1A1R 100-2-22,23 D 427 GAD
				G	3	-	-	-	806005	1	D1A1R 100-2-22,23 D 427 GAG
115	2.0	1.0	22.23	D	none	-	-	-	806012	1	D1A1R 115-2-22,23 D 427 GAD
				G	3	-	-	-	806029	1	D1A1R 115-2-22,23 D 427 GAG
125	2.0	1.0	22.23	D	none	-	-	-	806036	1	D1A1R 125-2-22,23 D 427 GAD
				G	3	-	-	-	806043	1	D1A1R 125-2-22,23 D 427 GAG
178	2.0	1.0	22.23	D	none	-	-	-	806050	1	D1A1R 178-2-22,23 D 427 GAD
230	2.5	1.5	22.23	S2	none	-	-	-	806074	1	D1A1RSS 230-2,5-22,23 D 427 GAS2
250	2.5	1.5	22.23	S2	none	-	-	-	806081	1	D1A1RSS 250-2,5-22,23 D 427 GAS2
300	2.5	1.5	30	S2	none	-	-	-	806098	1	D1A1RSS 300-2,5-30,0 D 427 GAS2
350	2.8	1.8	30	S2	none	-	-	-	806104	1	D1A1RSS 350-2,8-30,0 D 427 GAS2
400	3.8	2.8	30	S2	none	-	-	-	806111	1	D1A1RSS 400-3,8-30,0 D 427 GAS2

Arbors for diamond cut-off wheels

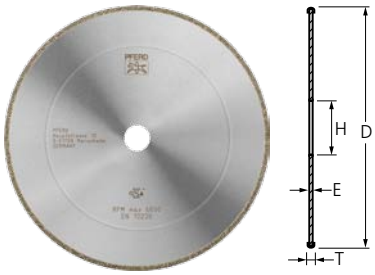
Accessories for mounting diamond cut-off wheels up to a diameter of 75 mm.

Safety notes:

- For safety reasons, it is imperative to remain within the stated rotational speed limit.



S_d [mm]	Suitable for centre hole dia. [mm]	$T_{max.}$ [mm]	EAN 4007220	Max. RPM		Description
3	1.7	1.0	443606	28,000	1	BO 3/1,7 1
6	10	3.0	956045	30,000	1	BO 6/10 3
8	10	3.0	806401	30,000	1	BO 8/10 3



Diamond cut-off wheels for grey and nodular cast iron

Electroplated diamond cut-off wheels with grit size D 852 are exceptionally well suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS) as well as for use in robots. The diameter of 230 mm is suitable for standard angle grinders; the diameter of 400 mm is suitable for stationary applications.

Advantages:
- Very long tool life.
- Ideal for work on deep-lying areas because of the constant tool diameter.
- Easy and quick elimination of metal contamination.
- Minimized dust formation due to the monolayer coating and coarse chips.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS)

Matching tool drives:
angle grinder, stationary machines

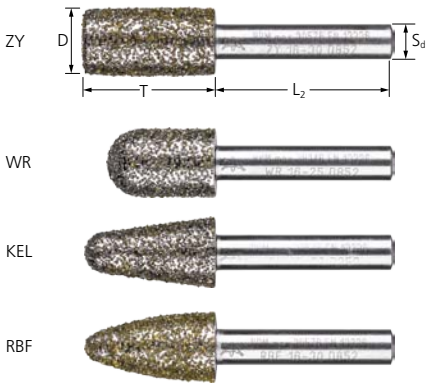
Accessories:
- Clamping flange set SFS 76 for thin 180/230 mm cut-off wheels helps to reduce noise development during manual grinding (M14 thread: EAN 4007220**595275**, 5/8" thread: EAN 4007220**895856**).



PFERDVALUE:

Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D [mm]	T [mm]	E [mm]	H [mm]	Shape	Protective segments per side	Grit size D 852 EAN 4007220		Description
Grey and nodular cast iron (GG and GGG or GJL and GJS)								
230	3.8	1.8	22.23	D	none	956021	1	D1A1R 230-3,8-22,23 D 852 GAD
400	4.5	2.5	40	D	none	947449	1	D1A1R 400-4,5-40,0 D 852 GAD



Diamond grinding points for grey and nodular cast iron

Diamond grinding points with grit size D 852 are exceptionally well suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS).

Advantages:
- Outstanding tool life.
- Fast, aggressive grinding with the highest possible stock removal rate.
- Easy and quick elimination of metal contamination thanks to diamond as a super-hard abrasive.
- Low dust load due to the dimensional stability of the grinding tool (no tool wear).

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS)

Applications:
grinding out, weld dressing, deburring

Recommendations for use:
- Dry grinding: 30–50 m/s

Matching tool drives:
flexible shaft drives, straight grinder, stationary machines

PFERDVALUE:

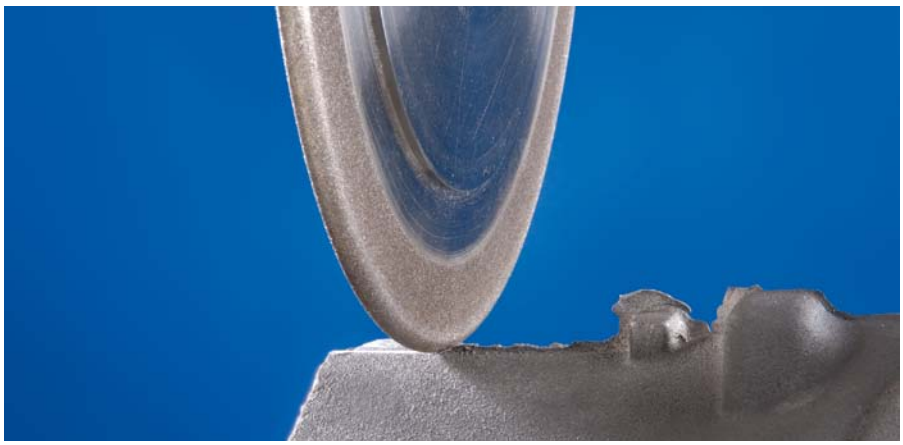
Emission Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D x T [mm]	S_d [mm]	L_2 [mm]	Grit size D 852 EAN 4007220		Description
Cylindrical shape ZY					
16.0 x 30	8	40	103708	1	DZY-N 16-30/8 D 852
20.0 x 30	8	40	103753	1	DZY-N 20-30/8 D 852
Cylindrical shape with radius end WR					
10.0 x 20	6	40	097366	1	DWR-N 10-20/6 D 852
12.0 x 25	6	40	097373	1	DWR-N 12-25/6 D 852
16.0 x 25	8	40	097472	1	DWR-N 16-25/8 D 852
Conical shape with radius end KEL					
16.0 x 30	8	40	097489	1	DKEL-N 16-30/8 D 852
Tree shape with radius end RBF					
12.0 x 25	6	40	102800	1	DRBF-N 12-25/6 D 852
16.0 x 30	8	40	103692	1	DRBF-N 16-30/8 D 852



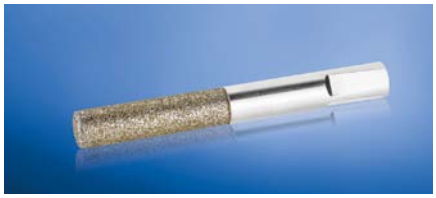


Customer-specific tool solutions for grey and nodular cast iron





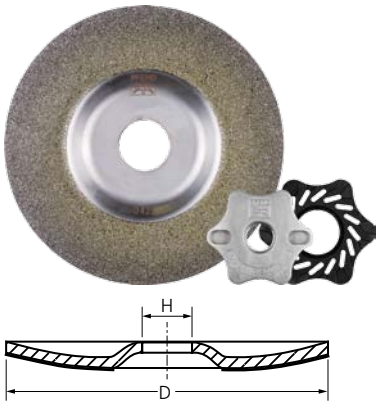








More informationen about customer-specific tool solutions can be found on page 14.



CC-GRIND-SOLID-DIAMOND

The CC-GRIND-SOLID-DIAMOND has been specially developed for applications on hard materials which cannot be machined with conventional tools made of aluminium oxide or silicon carbide.

Materials that can be worked:
scale, wear-resistant coatings (powder metal alloys and hardfacing alloys), technical ceramics, fibre-reinforced duroplastics (GRP, CRP), tungsten carbide, nickel- or titanium-based superalloys, grey/nodular cast iron (GG/GJL, GGG/GJS)

Recommendations for use:
- Only use the face of the disc, not suitable for peripheral grinding.
- To extend the tool life of the grinding disc on scale and wear-resistant coatings, reduce the cutting speed of the speed-adjustable angle grinder to 30 to 40 m/s.
- For optimum results, use with the CC-GRIND-SOLID/FLEX clamping flange set.
- When used on angle grinders with a 5/8-11 thread, the matching clamping flange set must be ordered separately.

Ordering notes:
- Matching clamping flange set (M14 thread) is included in delivery.

PFERDVALUE:

Vibration Filter · Emission Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

D [mm]	H [mm]	Grit size D 427 EAN 4007220	Grit size D 852 EAN 4007220	Included clamping flange set	Max. RPM		Description
100	16.0	068335	068366	SFS CC-GRIND-SOLID 100 M10	15,300	1	CC-GRIND-SOLID-DIAMOND 100-16,0 ...
115	22.23	068342	068373	SFS CC-GRIND-SOLID 115/125 M14	13,300	1	CC-GRIND-SOLID-DIAMOND 115-22,23 ...
125	22.23	068359	068380	SFS CC-GRIND-SOLID 115/125 M14	12,200	1	CC-GRIND-SOLID-DIAMOND 125-22,23 ...



Matching clamping flange set with 5/8-11 drive spindle thread:
SFS CC-GRIND-SOLID 115/125 5/8" (EAN 4007220**887592**):
For detailed information and ordering data, please refer to catalogue section 6.



For more information about the CC-GRIND product range, please refer to catalogue section 6.



Diamond sabre saw blades



Diamond sabre saw blades

Diamond sabre saw blades are exceptionally well suited to work on fibre-reinforced plastics (GRP/CRP), e.g. for making cut-outs in container construction or for cutting prefabricated slabs. They are characterized, in particular, by their flexible cutting lines for producing a wide range of geometries and by their long tool life.
Suitable for all Bosch-socket sabre saws.

Materials that can be worked:
fibre-reinforced duroplastics (GRP, CRP)

Matching tool drives:
sabre saw

Applications:
cutting out holes, cutting

Overall length [mm]	Total width [mm]	Coating length [mm]	Grit size D 357 EAN 4007220		Description
75	2	50	535950	1	DIA-SSB 50/75 D 357
100	2	75	535967	1	DIA-SSB 75/100 D 357

Diamond and CBN tools resinoid bond



5

Diamond and CBN tools resinoid bond
General information



Resinoid-bonded diamond and CBN grinding discs are often used for grinding tungsten carbide or HSS tools, as well as in other production grinding processes. They are used in both wet and dry grinding.

Advantages:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

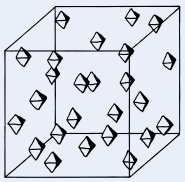
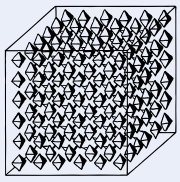
Matching tool drives:

- Machine tool

Recommendations for use:

- A larger diameter D allows greater profitability thanks to the improved thermal and kinematic conditions.
- Always select a coating width, W or U, that is narrower than the workpiece to be ground.
- A larger coating thickness, X, affects the material cost for diamond or CBN and the bond. It has only little influence on production costs, however. A larger coating thickness, X, is therefore generally more economical.
- Please observe the recommended cutting speeds on page 10.

Concentration information	Carat weight per cm³ of coating volume [ct/cm³]	Grit volume in % of the abrasive coating
C 25	1.1	6.25
C 38	1.65	9.50
C 50	2.2	12.50
C 75	3.3	18.75
C 100	4.4	25.00
C 125	5.5	31.25

Concentration	
low e.g. C 25	high e.g. C 125
	

Dressing

Tools with resinoid bonds are easy to dress. Different tool contours can be worked with the same tools. After dressing, ensure that the coating is worked on using sharpening block SBL 1002413, so that the easy cutting characteristics of the tool are regained. More detailed information and ordering data can be found on page 43.

Coolant

If possible, wet grinding is to be preferred to dry grinding. This reduces tool wear and the risk of thermal damage to the workpiece. Bonds that are designed for dry grinding may, in exceptional circumstances, also be used for wet grinding.

Diamond grinding discs:
Emulsion 1–5 %

CBN grinding discs:
Low-viscosity mineral oils or emulsions (5–8 %) with EP additives

Concentration

The concentration is the amount of grit in carats [ct] (= 0.2 g) per cubic centimetre of abrasive coating. A concentration of C 100 corresponds to 4.4 ct/cm³ and around 25 % of the volume of the abrasive in the total bond. The usual spread of the concentration can be seen in the table on the left.

A high concentration makes the tool more resistant to wear. This characteristic is particularly desirable in all profile grinding tasks.

As a rule, the longer tool life resulting from a high concentration compensates the higher tool costs (caused by the higher diamond or CBN grit volume). Please note that a high concentration can cause larger grinding forces and higher process temperatures. Therefore, it is not always the best solution in technological and economical terms.

Bond types

PHT	PHN	PH 4.1 (only CBN)	PH 4.2 (only CBN)	PHST
Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.	Phenolic resin bond for high-performance wet grinding. The PHN bond is designed for wet grinding. It is comparatively hard and offers an excellent tool life and dimensional stability.	Phenolic resin bond for the highest stock removal rates. Very long tool life. Suitable for dry and wet grinding.	High-performance bond for cool dry grinding at low infeed rates. Only for 11V9 and 12V9 up to diameter 150 mm.	Phenolic resin bond for dry grinding at very high stock removal rates. The PHST bond type can withstand higher loads, i.e. it allows a higher infeed per stroke without thermal damage to the workpiece. Inevitably, the reduction in grinding time is obtained at the expense of a slightly shorter tool life.

In addition to the listed bond types, a wide range of special bonds is available, which, in consultation with our technical advisers, can be used for special grinding work. Our technical advisers will be happy to provide a consultation at any time.

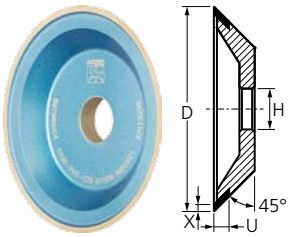
Shape 11V9

Shape	D - X - U - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
11V9	100 - 2 - 10 - 20	PHT	C 75	D 126	168592	1
	100 - 3 - 10 - 20	PHST	C 75	D 126	168622	1



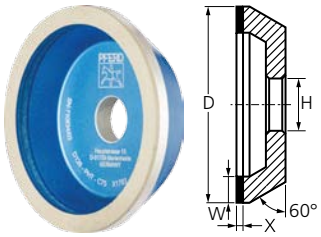
Shape 12V9

Shape	D - X - U - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
12V9	100 - 2 - 10 - 20	PHT	C 75	D 126	168646	1



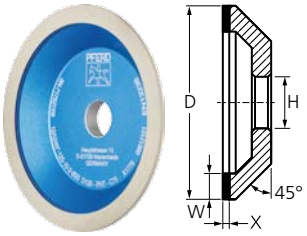
Shape 11A2/60°

Shape	D - W - X - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
11A2/60°	100 - 8 - 2 - 20	PHT	C 75	D 64	261965	1
				D 126	261972	1



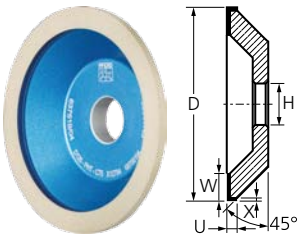
Shape 12A2/45°

Shape	D - W - X - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
12A2/45°	125 - 10 - 2 - 20	PHT	C 50	D 64	168677	1
			C 75	D 126	168660	1



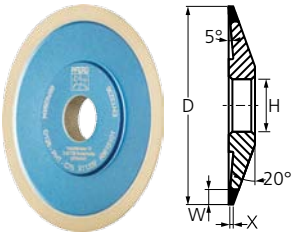
Shape 12C9

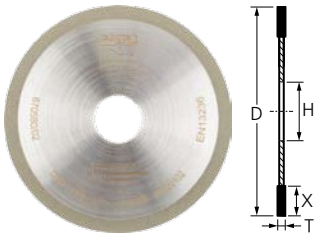
Shape	D - W - U - X - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
12C9	100 - 10 - 4 - 3 - 20	PHT	C 75	D 126	956052	1



Shape 4BT9

Shape	D - W - X - H [mm]	Bond	Grit concentration	Grit size	EAN 4007220	
4BT9	100 - 6 - 1 - 20	PHT	C 75	D 126	350119	1

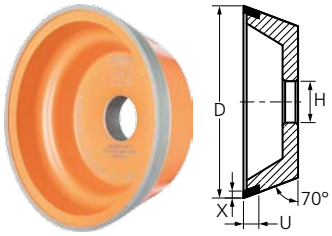




Shape 1A1R

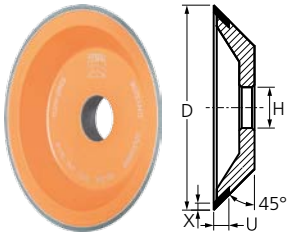
Shape	D - T - X - H [mm]	Bond	Grit concen-tration	Grit size	EAN 4007220	
1A1R	100 - 1 - 5 - 20	PHT	C 75	D 151	350096	1
	150 - 1 - 7 - 20	PHT	C 75	D 151	806357	1

CBN grinding tools



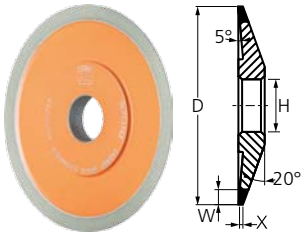
Shape 11V9

Shape	D - X - U - H [mm]	Bond	Grit concen-tration	Grit size	EAN 4007220	
11V9	100 - 2 - 10 - 20	PH 4.1	C 75	B 126	350171	1
		PH 4.2	-	B 151	535646	1



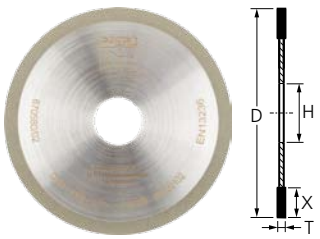
Shape 12V9

Shape	D - X - U - H [mm]	Bond	Grit concen-tration	Grit size	EAN 4007220	
12V9	100 - 2 - 10 - 20	PHT	C 75	B 126	168707	1



Shape 4BT9

Shape	D - W - X - H [mm]	Bond	Grit concen-tration	Grit size	EAN 4007220	
4BT9	100 - 6 - 1 - 20	PHT	C 75	B 126	350126	1



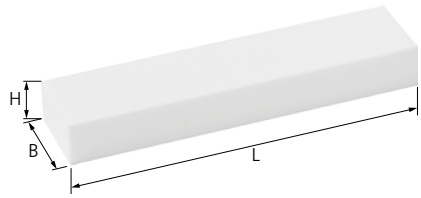
Shape 1A1R

Shape	D - T - X - H [mm]	Bond	Grit concen-tration	Grit size	EAN 4007220	
1A1R	100 - 1 - 5 - 20	PHT	C 100	B 151	350102	1

Sharpening block for diamond and CBN tools

The sharpening block is used to restore the sharpness of resinoid-bonded diamond and CBN grinding discs (e.g. after dressing with a diamond dressing tool).

The sharpening block is first soaked in coolant and then in-fed manually or by means of a suitable feeding device. Grinding with the sharpening block will quickly restore the sharpness of your grinding disc.



L [mm]	B [mm]	H [mm]	EAN 4007220		Description
100	24	13	255605	5	SBL 1002413

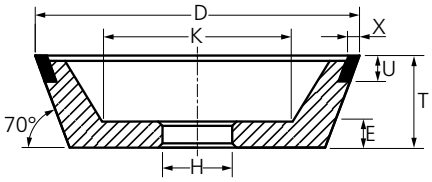


Diamond and CBN tools resinoid bond

Customer-specific tool solutions

In addition to the standard resinoid-bonded diamond and CBN grinding tools available from stock, customer-specific tool solutions are also possible.
In your request, please specify the material to be worked, the application and the tool drive.

In the following tables, all the available shapes and dimensions are shown. For dimensions separated by slashes, please select the desired dimension.



Description explanation based on ISO 6104:

11V9 100 - 2 - 10 - 20 D126 PHT C75
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

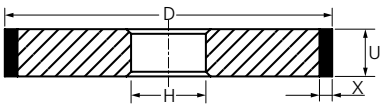
❶ Designation and shape of the tool according to ISO 6104
❷ Outer dia. D [mm]
❸ Usable abrasive coating thickness X [mm]
❹ Coating width U [mm]
❺ Bore diameter H [mm]
❻ Grit size (D = diamond, B = CBN)
❼ Bond type
❽ Grit concentration (C)

Abbreviation	Comment
α	Mount angle
D [mm]	Outer diameter
E [mm]	Bottom thickness
H [mm]	Bore diameter
J [mm]	Smaller diameter

Abbreviation	Comment
K [mm]	Internal diameter
L_2 [mm]	Shank length
L_4 [mm]	Reduced diameter length
R [mm]	Radius
S_1 [mm]	Reduced diameter

Abbreviation	Comment
S_d [mm]	Shank diameter
T [mm]	Total width
U [mm]	Coating width
W [mm]	Mounted point width
X [mm]	Usable abrasive coating thickness

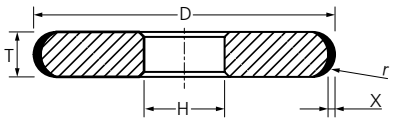
Shape 1A1



D [mm]	U [mm]	X [mm]	H [mm]
50	4 / 6 / 8 / 10 / 12	3 / 4 / 5 / 6	Please specify
75	6 / 8 / 10 / 12	3 / 4 / 5 / 6	
100	6 / 8 / 10 / 12	3 / 4 / 5 / 6	
125	8 / 10 / 12 / 15	3 / 4 / 5 / 6	
150	8 / 10 / 12 / 15 / 20	3 / 4 / 5 / 6	
175	10 / 12 / 15 / 20	3 / 4 / 5	
200	12 / 15 / 20 / 25 / 30	3 / 4 / 5 / 6	
225	12 / 15 / 20	3 / 4 / 5	
250	15 / 20 / 25 / 30 / 40 / 50	3 / 4 / 5	
300	15 / 20 / 25 / 30 / 40 / 50	3 / 4 / 5 / 6	
350	20 / 25 / 30 / 40 / 50	3 / 4 / 5 / 6	
400	25 / 30 / 40 / 50	3 / 4 / 5 / 6	
450	25 / 30 / 40 / 50	3 / 4 / 5 / 6	
500	30 / 40 / 50	3 / 4 / 5 / 6	
600	35 / 40	3 / 5	

Ordering example: 1A1 200-20-4-127 D 126 PHN C 75

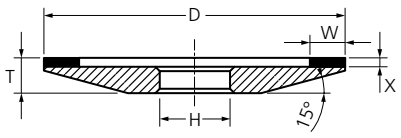
Shape 1FF1



D [mm]	T [mm]	X [mm]	R [mm]	H [mm]
50	6	2	3	Please specify
	8		4	
	10		5	
75	6		3	
	8		4	
	10		5	
100	6		3	
	8		4	
	10		5	
	12		6	
125	6		3	
	8		4	
	10		5	
	12		6	
150	6		3	
	8		4	
	10		5	
	12		6	

Ordering example: 1FF1 150-8/4R-2-32 D 126 PHN C 75

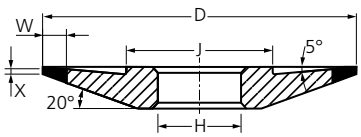
Shape 4A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]
50	3 / 5	2 / 3 / 4	Please specify	5
75	3 / 5			5
100	3 / 4 / 5 / 6 / 8 / 10			6
125	3 / 4 / 5 / 6 / 8 / 10			7
150	3 / 4 / 5 / 6 / 8 / 10 / 12.5			9

Ordering example: 4A2 100-4-2-20 D 64 PHT C 50

Shape 4BT9

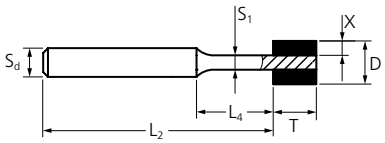


D [mm]	W [mm]	X [mm]	H [mm]	T [mm]	J [mm]
75	6	1	Please specify	8	36
100	6 / 10	1		10	50
125	6 / 10	1		12	65
150	6 / 10	1		15	80

Ordering example: 4BT9 100-6-1-20 D 126 PHN C 75

Other dimensions on request!

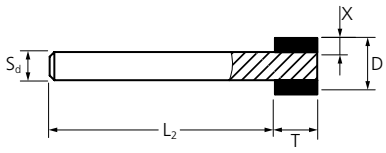
Shape 1A1W



D [mm]	T [mm]	X [mm]	S_d [mm]	L_2 [mm]	S_1 [mm]	L_4 [mm]
3	6	0.75	3	60	1.5	8
4	6	1	3	60	2	8
5	6	1.5	3	60	2	8
6	6	1.5	6	60	3	8
6	8	1.5	6	60	3	10
7	6	2	6	60	3	8
8	6	2	6	60	4	8
8	10	2	6	60	4	12
9	6	2	6	60	5	8

Ordering example: 1A1W 8-6-2-6-60-4-8 D 91 PHNT C 100

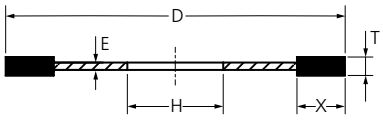
Shape 1A1W



D [mm]	T [mm]	X [mm]	S_d [mm]	L_2 [mm]
10	6	2	6	60
	10	2	6	60
12	6	2	6	60
	10	2	6	60
15	6	2	6	60
	10	2	6	60
18	6	2	6	60
	10	2	6	60
20	6	2	6	60
	10	2	6	60

Ordering example: 1A1W 15-10-2-6-60 D 91 PHNT C 100

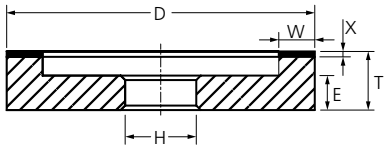
Shape 1A1R



D [mm]	T [mm]	X [mm]	H [mm]	E [mm]
75	1	5	H ≥ 20 mm	0.8
100	1	5		0.8
125	1	5	Please specify	0.8
150	1	7		0.8
175	1.2	7		0.9
200	1.2	7		0.9

Ordering example: 1A1R 150-1-7-20 D 151 PHT C 75

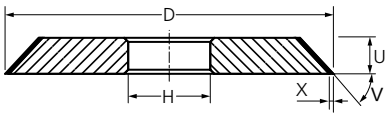
Shape 6A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 5	2 / 3 / 4	Please specify	20	10
75	3 / 5 / 10			20	10
100	5 / 8 / 10 / 12.5 / 15			20	10
125	4 / 6 / 8 / 10 / 12.5 / 15 / 20 / 25			23	10
150	6 / 8 / 10 / 12.5 / 15 / 20 / 25			23	10

Ordering example: 6A2 125-10-2-20 D 126 PHT C 50

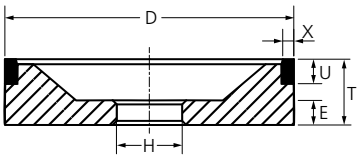
Shape 1V1



D [mm]	U [mm]	X [mm]	V	H [mm]
50	6 / 8	3 / 4	20° to 89°	Please specify
75	6 / 8 / 10			
100	8 / 10		Please specify	
125	8 / 10			
150	8 / 10			
175	10			
200	12 / 15			
250	15 / 20			
300	15 / 20			

Ordering example: 1V1 150-8-3/60°-32 B 126 PHN C 75

Shape 6A9

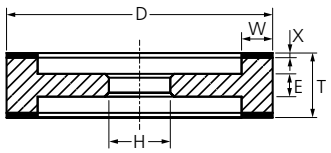


D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]
75	1.5	6 / 10	Please specify	25	10
	2	6 / 10		25	10
	3	6 / 10		25	10
100	1.5	6 / 10		30	10
	2	6 / 10		30	10
	3	6 / 10		30	10
125	1.5	6 / 10		30	10
	2	6 / 10		30	10
	3	6 / 10		30	10
150	1.5	6 / 10		35	10
	2	6 / 10		35	10
	3	6 / 10		35	10

Ordering example: 6A9 100-2-10-20 D 126 PHN C 100

Other dimensions on request!

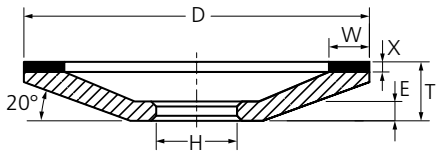
Shape 9A3



D [mm]	W [mm]	X [mm]	T [mm]	H [mm]	E [mm]
100	6 / 8 / 10	2 / 3	22	Please specify	10
125	6 / 8 / 10		22		10
150	4 / 6 / 8 / 10 / 15		25 / 35		14
175	3 / 4 / 6 / 8 / 10 / 15		25 / 35		14
200	8 / 10 / 15		30		18

Ordering example: 9A3 150-8-2-25-20 D 64 PHN C 75

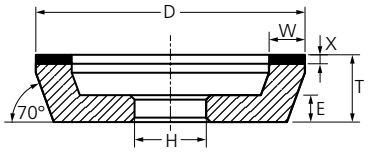
Shape 12A2/20°



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
75	3 / 5 / 6 / 8 / 10	2 / 3 / 4	Please specify	8	5
100	3 / 5 / 6 / 8 / 10			10	6
125	5 / 6 / 8 / 10			14	8
150	5 / 6 / 8 / 10			16	9
175	6 / 10			18	10
200	6 / 10			20	11
250	6 / 10			23	13

Ordering example: 12A2/20° 125-10-2-20 D 126 PHT C 50

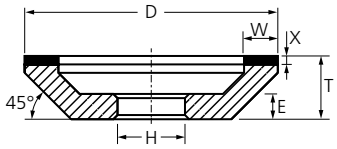
Shape 11A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 6	2 / 3 / 4	Please specify	20	8
75	3 / 6 / 10			20	10
100	4 / 6 / 8 / 10			20	10
125	5 / 6 / 8 / 10 / 12.5 / 15			23	10
150	6 / 8 / 10 / 12.5 / 15			23	10
175	6 / 10 / 12.5 / 15			25	12

Ordering example: 11A2 125-10-2-20 D 126 PHT C 50

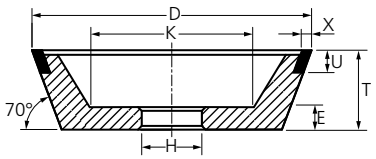
Shape 12A2/45°



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 6	2 / 3 / 4	Please specify	15	8
75	3 / 6 / 10			20	9
100	4 / 6 / 8 / 10			23	10
125	5 / 6 / 8 / 10 / 12.5 / 15			23	10
150	6 / 8 / 10 / 12.5 / 15			23	10
175	6 / 10 / 12.5 / 15			25	12

Ordering example: 12A2/45° 125-10-2-20 D 126 PHT C 50

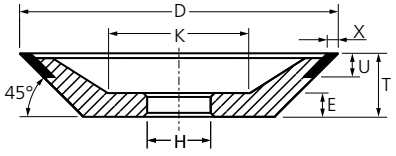
Shape 11V9



D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]	K [mm]
50	2	10	Please specify	30	10	22
75	1.5 / 2 / 3	10		30	10	41
100	1.5 / 2 / 3	10		35	10	60
125	1.5 / 2 / 3	10		40	10	75
150	1.5 / 2 / 3	10		50	10	89

Ordering example: 11V9 100-2-10-20 D 126 PHT C 75

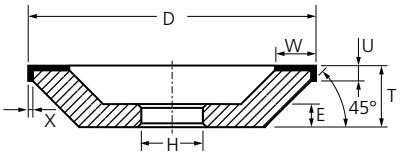
Shape 12V9



D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]	K [mm]
50	2	6	Please specify	20	10	24
75	2 / 3	10		20	10	41
100	1.5 / 2 / 3	10		20	10	62
125	1.5 / 2 / 3	10		25	10	76
150	2 / 3	10		25	10	97

Ordering example: 12V9 100-2-10-20 D 126 PHT C 75

Shape 12C9

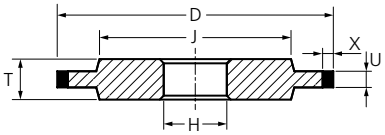


D [mm]	W [mm]	U [mm]	X [mm]	H [mm]	T [mm]	E [mm]
100	6 / 10	4	2	Please specify	26	10
	10	4	3		27	10
125	6 / 10	4	2		26	10
	10	4	3		27	10
	12.5	5	2		26	10
150	10	4	2		26	10
	10	4	3		27	10
	12.5 / 15	5	2		26	10

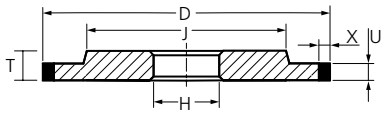
Ordering example: 12C9 100-10-4-2-20 D 64 PHN C 75

Other dimensions on request!

Shape 14A1



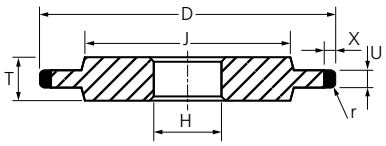
Shape 3A1



D [mm]	U [mm]	X [mm]	H [mm]	T [mm]	J [mm]
75	1 / 2	3 / 6	Please specify	6	50
	3 / 4 / 5	3 / 4 / 6		6	50
100	1 / 2	3 / 6		6	80
	3 / 4 / 5	3 / 4 / 6		6	70
125	1 / 2	3 / 6		7	105
	3 / 4 / 5 / 6	3 / 4 / 6		7	100
150	1 / 2	3 / 6		8	130
	3 / 4 / 5 / 6	3 / 4 / 6		8	120
175	1 / 2	3 / 6		10	150
	3 / 4 / 5 / 6 / 8	3 / 4 / 6		10	140
200	1 / 2	6		12	175
	3 / 4 / 5 / 6 / 8 / 10	3 / 4 / 5 / 6		12	160
225	6 / 8 / 10	3 / 4 / 5		12	180
250	6 / 8 / 10 / 12	3 / 4 / 5		15	200
300	8 / 10 / 12	3 / 4 / 5 / 6		15	250
350	10 / 12 / 15	3 / 4 / 5 / 6		20	300
400	10 / 12 / 15 / 20	3 / 4 / 5 / 6		25	350
450	10 / 12 / 15 / 20	3 / 4 / 5 / 6		25	400
500	15 / 20 / 25	3 / 4 / 5 / 6		30	450
600	15 / 20 / 25 / 30	3 / 5		35	550

Ordering example: 14A1 150-6-3-32 D 107 PHN C 100

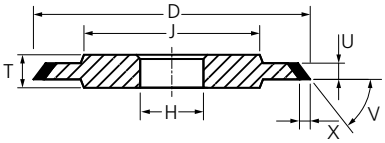
Shape 14F1



D [mm]	U [mm]	X [mm]	R [mm]	H [mm]	T [mm]	J [mm]
40	2	3 / 4 / 5 / 6	1	Please specify	6	25
	3		1.5		6	25
	4		2		6	25
50	2		1		6	30
	3		1.5		6	30
	4		2		6	30
75	2		1		6	50
	3		1.5		6	50
	4		2		6	50
100	2		1		6	70
	3		1.5		6	70
	4		2		6	70
125	2		1		8	100
	3		1.5		8	100
	4		2		8	100
150	2		1		8	120
	3		1.5		8	120
	4		2		8	120

Ordering example: 14F1 150-2/1R-6-32 D 107 PHN C 125

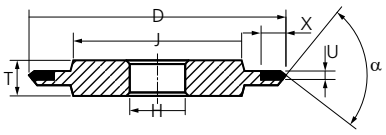
Shape 14V1



D [mm]	U [mm]	X [mm]	V	C [mm]	T [mm]	J [mm]
50	3 / 4 / 5	2 / 3 / 4	20° to 89°	Please specify	6	30
75	3 / 4 / 5				6	45
100	4 / 6				8	70
125	4 / 6		Please specify		8	100
150	4 / 6				8	120
175	4 / 6 / 8				10	140
200	4 / 6 / 8 / 10				12	160
250	4 / 6 / 8 / 10 / 12				15	200
300	4 / 6 / 8 / 10 / 12				15	250

Ordering example: 14V1 150-6-3/60°-32 B 126 PHN C 75

Shape 14E9



D [mm]	U [mm]	X [mm]	α	H [mm]	T [mm]	J [mm]
50	1 / 2	6	35° / 45° / 60° / 90°	Please specify	6	32
75	1 / 2	6	35° / 45° / 60° / 90°		6	50
100	1 / 2	6	35° / 45° / 60° / 90°		6	70
125	1 / 2	6	35° / 45° / 60° / 90°		8	100
150	1 / 2	6	35° / 45° / 60° / 90°		8	120

Ordering example: 14E9 150-2-6-60°-32 D 107 PHN C 125

Other dimensions on request!

Diamond cut-off wheels for the construction industry



Diamond cut-off wheels for the construction industry

General information

PFERD diamond cut-off wheels are manufactured in compliance with the highest quality and safety standards. They guarantee optimum cutting results and allow economic work on different materials, e.g. concrete, exposed aggregate concrete, clinker brick, hard stone, granite and other abrasive building materials. The product range offers the best tool for any application.



Advantages:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- Long tool life.
- High ease of cutting.
- High profitability.

Recommendations for use:

- If possible, wet grinding is to be preferred to dry grinding. This reduces tool wear, the risk of thermal damage to the workpiece and dust exposure.
- Cut using low pressure in order to stop the tool overheating.

Matching tool drives:

- Angle grinder
- Petrol cutter
- Table saw
- Joint cutter

Explanation of the order description

DS 230 x 2.8 x 22.23 SG
❶ ❷ ❸ ❹ ❺

❶ Description and shape of the tool
DS = Diamond, segmented type for fast cutting
DG = Diamond, continuous rim type for easy cutting (TURBO)
DG FL = Diamond, continuous rim type for very fine cutting, e.g. tiles and glazed tiles

❷ Outer diameter
Outer dia. D in [mm]

❸ Disc width
Disc width T in [mm]

❹ Bore diameter
Bore dia. H in [mm]

❺ PFERD product line
Universal Line PSF
Performance Line SG

The PFERD description corresponds to the designation in accordance with EN 13236.

Shape DS



Shape DG



Shape DG FL



5

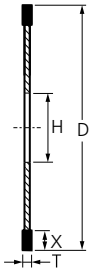
The fast way to the best tool

Application ▶	Material ▶	Tools ▶		Page
Aggressive, fast cutting	■ Concrete (medium-hard, reinforced, hard) ■ Aerated concrete ■ Pumice ■ Brick ■ Soft clinker brick ■ Sand-lime brick	Cut-off wheels of the type DS PSF and SG		50
Easy cutting with high cutting quality	■ Fresh concrete ■ Screed ■ Firebrick	Cut-off wheels of the type DG SG		50
	■ Sandstone ■ Clay brick ■ Slate ■ Granite ■ Marble	Cut-off wheels of the type DG PSF and SG		51
	■ Glazed tiles ■ Ceramic tiles ■ Porcelain stoneware ■ Slate ■ Marble	Cut-off wheels of the type DG FL PSF and SG		52

Diamond cut-off wheels for the construction industry

Segmented type for fast cutting





DS PSF type

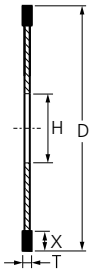
Multi-purpose segmented tool for aggressive, fast cutting with high cutting performance and a long tool life.

Recommendations for use:

- Suitable for use on angle grinders of all output levels.

D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	2.2	641361	22.23	7	13,300	1	DS 115 x 2,2 x 22,23 PSF
125	2.2	641378	22.23	7	12,200	1	DS 125 x 2,2 x 22,23 PSF
178	2.4	641385	22.23	7	8,600	1	DS 178 x 2,4 x 22,23 PSF
230	2.4	641392	22.23	7	6,600	1	DS 230 x 2,4 x 22,23 PSF





DS SG type

High-performance segmented tool for aggressive, fast cutting of hard materials with high cutting performance and very long tool life.

Recommendations for use:

- The maximum operating speed for diamond cut-off wheels DS type with a diameter of 300 to 400 mm is 100 m/s.
- Suitable for use on angle grinders of all output levels.

Ordering notes:

- All diamond cut-off wheels with a centre hole diameter of 25.4 mm are supplied with a reducing ring to 22.23 mm for use on angle grinders.

D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	2.4	801086	22.23	10	13,300	1	DS 115 x 2,4 x 22,23 SG
125	2.4	801093	22.23	10	12,200	1	DS 125 x 2,4 x 22,23 SG
178	2.6	801109	22.23	10	8,600	1	DS 178 x 2,6 x 22,23 SG
230	2.8	801116	22.23	10	6,600	1	DS 230 x 2,8 x 22,23 SG
300	2.8	801123	20.0	10	6,400	1	DS 300 x 2,8 x 20,0 SG
		801147	25.4 (22.23)	10	6,400	1	DS 300 x 2,8 x 25,4 SG
350	2.8	801154	20.0	10	5,400	1	DS 350 x 2,8 x 20,0 SG
		801161	25.4 (22.23)	10	5,400	1	DS 350 x 2,8 x 25,4 SG
400	3.2	801178	25.4 (22.23)	10	4,800	1	DS 400 x 3,2 x 25,4 SG



DG PSF type

Multi-purpose continuous rim tool for easy cutting with high cutting performance and long tool life.

Recommendations for use:
- Suitable for use on angle grinders of all output levels.



D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	2.1	641408	22.23	7	13,300	1	DG 115 x 2,1 x 22,23 PSF
125	2.1	641415	22.23	7	12,200	1	DG 125 x 2,1 x 22,23 PSF
178	2.4	641422	22.23	7	8,600	1	DG 178 x 2,4 x 22,23 PSF
230	2.6	641439	22.23	7	6,600	1	DG 230 x 2,6 x 22,23 PSF

DG SG type

High-performance continuous rim tool for easy cutting with high cutting performance and very long tool life.

Recommendations for use:
- Suitable for use on angle grinders of all output levels.



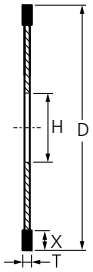
D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	2.2	801000	22.23	8	13,300	1	DG 115 x 2,2 x 22,23 SG
125	2.2	801024	22.23	8	12,200	1	DG 125 x 2,2 x 22,23 SG
178	2.5	801031	22.23	8	8,600	1	DG 178 x 2,5 x 22,23 SG
230	2.8	801048	22.23	8	6,600	1	DG 230 x 2,8 x 22,23 SG



Diamond cut-off wheels for the construction industry

Continuous rim type for very fine cutting





DG FL PSF type

Multi-purpose continuous rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and long tool life.

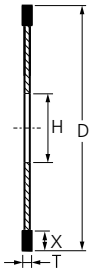


Recommendations for use:

- Suitable for use on angle grinders of all output levels.

D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	1.6	800973	22.23	7	13,300	1	DG 115 x 1,6 x 22,23 FL PSF
125	1.6	800980	22.23	7	12,200	1	DG 125 x 1,6 x 22,23 FL PSF





DG FL SG type

High-performance continuous rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and very long tool life.

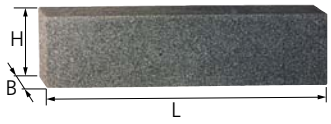


Recommendations for use:

- Suitable for use on angle grinders of all output levels.

D [mm]	T [mm]	EAN 4007220	H [mm]	X [mm]	Max. RPM		Description
115	1.4	801055	22.23	8	13,300	1	DG 115 x 1,4 x 22,23 FL SG
125	1.4	801079	22.23	8	12,200	1	DG 125 x 1,4 x 22,23 FL SG

Sharpening block



Sharpening block DSB

The sharpening block is used to resharpen metal-bonded diamond cut-off wheels (e.g. after cutting lubricating materials).

Type:
Silicon carbide abrasive, soft polyurethane bond

Recommendations for use:

- Cutting off thin slices of the sharpening block quickly restores the sharpness of your grinding disc.

L [mm]	B [mm]	H [mm]	Grit size 80 EAN 4007220		Description
200	50	25	168332	1	DSB 2005025

Cut-off wheels, flap discs and grinding wheels

PFERD

6



Cut-off wheels, flap discs and grinding wheels
Table of contents

General information 3

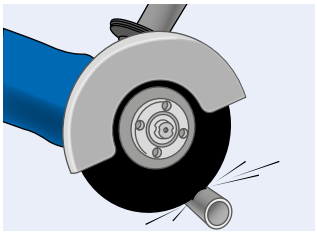
The fast way to the best tool 4

Solutions for stainless steel (INOX) and aluminium 6

Technical information and safety notes 7

Cutting

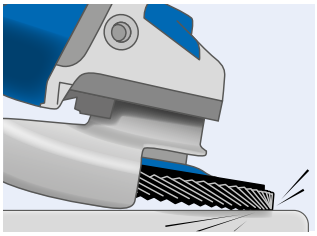




Cut-off wheels 10

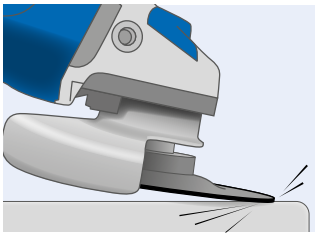
Grinding/Roughing





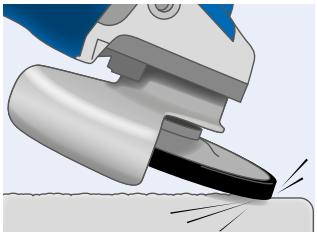
POLIFAN flap discs 31





CC-GRIND grinding discs 43





Grinding wheels 52

Cup wheels 62

Snagging wheels 63



Fine grinding and polishing tools for the perfect surface finish (e.g. fibre discs, COMBICLICK, POLIVLIES flap discs, mounted flap wheels, etc.) can be found in catalogue section 4.



Diamond cut-off wheels for processing stone and concrete, grey and nodular cast iron, as well as plastics can be found in catalogue section 5.

All tools and more information:
www.pferd.com

Quality

All PFERD tools are developed, manufactured and tested in accordance with the strictest quality requirements. As a founding member of the "Organization for the Safety of Abrasives (oSa)", PFERD has committed to conform to tougher inspection requirements that even go beyond EN 12413 and EN 13743.

PFERD quality management is certified according to ISO 9001.



Support and training

PFERD offers you individual targeted support to solve your application problems. The experienced sales representatives and technical advisers at PFERD will be pleased to assist you. Our worldwide sales addresses can be found at: **www.pferd.com**

In the **PFERD**AKADEMIE, we provide highly specialized and practical knowledge from the world of grinding and cutting. The seminar blocks follow on from each other and enable you to become a PFERD tool specialist.



PFERDTOOL-CENTER

On the **PFERD**TOOL-CENTER, you will find all the important information required in order to select the most appropriate grinding tool. Your local retailer or a PFERD sales representative will be glad to answer any questions you might have. To find an expert PFERD retailer near you, visit: **www.pferd.com**



Products made to order

If you cannot find the solution for your particular application in our standard product range, PFERD can produce tailor-made cut-off wheels, flap discs and reinforced grinding wheels specifically for your application on request.

Taking into account the processing objective, the material to be worked and the conditions, we offer individual advice with the aim of finding the best and most economical solution for you.

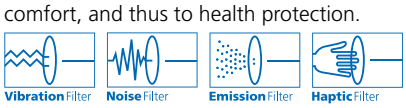


PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

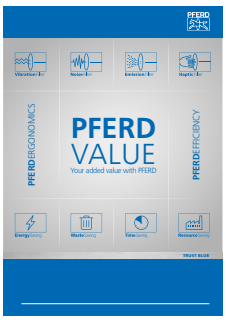
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.

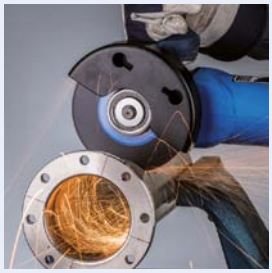


For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



Cut-off wheels, flap discs and grinding wheels
The fast way to the best tool

Tool selection

Cutting	Grinding/Roughing		
	Coated abrasives		Bonded abrasives
			
Cut-off wheels for	**POLIFAN flap discs** page 31	**CC-GRIND grinding discs** page 43	**Grinding wheels** page 52
Angle grinders page 10			**Cup wheels** page 62
Straight grinders page 26			**Snagging wheels** page 63
Petrol cutters page 28			

Product lines and colour coding

Universal Line PSF ★★☆☆



The entry-level range Universal Line PSF includes **robust tools** for processing the **most common materials**. Universal Line PSF tools achieve **good results** with **high economic efficiency**.

Performance Line SG ★★★☆



The broad Performance Line SG range offers **a high-performance tool solution for every application and every material**. Performance Line SG tools achieve **optimum results** with **maximum economic efficiency**.

Special Line SGP ★★★★

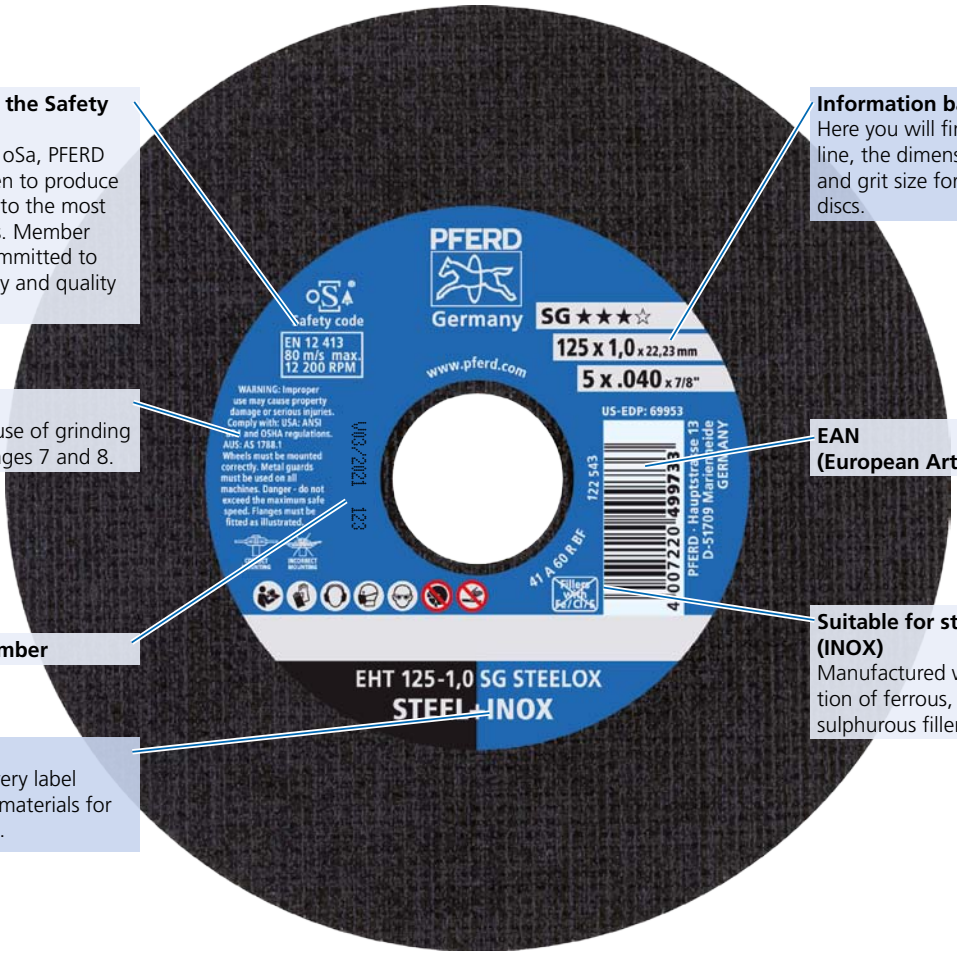


Special Line SGP tools are specially developed for **specific tasks** and offer the user **key advantages over conventional products**. Furthermore, the Special Line SGP includes tools that, due to their particularly high performance during use, offer **ultimate economic efficiency**.

Materials and colour coding

Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels, e.g. **Names** **EN** **AISI** V2A 1.4301 304 V2A 1.4310 301 V4A 1.4401 316 V4A 1.4571 316Ti
Aluminium	Non-hardening and hardening wrought alloys, cast aluminium alloys with low silicon content, cast aluminium alloys without silicon	
Other non-ferrous metals	Non-ferrous metals, soft	Brass, copper, zinc
	Non-ferrous metals, hard	Bronze, titanium
	High-temperature-resistant materials	Inconel, Hastelloy
Cast iron	Grey cast iron	Cast iron with flake graphite EN-GJL (GG), cast iron with nodular graphite/nodular cast iron EN-GJS (GGG)
	Annealed cast iron	White annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)
Stone	Asphalt, cotto, pumice, light concrete, sandstone, concrete, reinforced concrete, concrete blocks, roofing tiles, granite, clinker, exposed aggregate concrete, tiles, ceramic tiles, slate	

Label



oSa – Organization for the Safety of Abrasives
As a founder member of oSa, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards. Member companies of oSa are committed to continuous product safety and quality monitoring.

Safety information
Information on the safe use of grinding tools can be found on pages 7 and 8.

Expiry date and lot number

Material information
The bottom section of every label indicates the material or materials for which the tool is suitable.

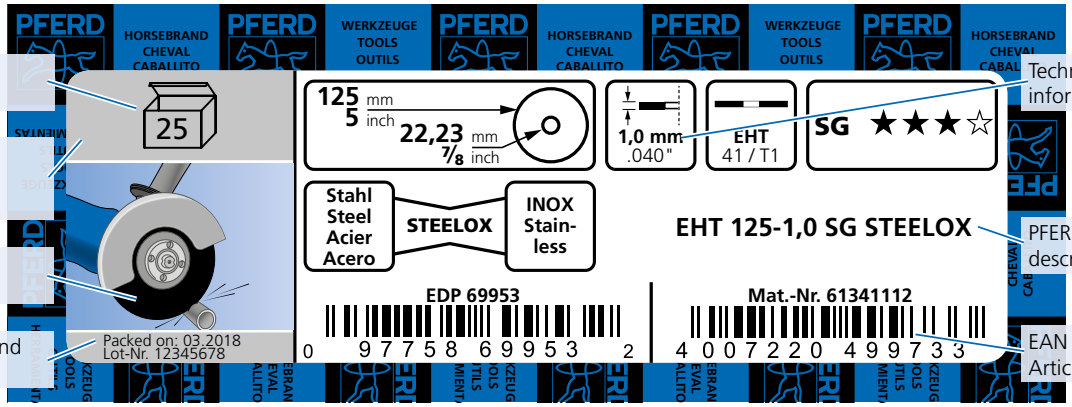
Information bar
Here you will find the product line, the dimensions and abrasive and grit size for POLIFAN flap discs.

EAN (European Article Number)

Suitable for stainless steel (INOX)
Manufactured without addition of ferrous, chlorinated or sulphurous fillers

Packaging

PFERD supplies cut-off wheels, flap discs and grinding wheels in robust industrial packaging that protects the tools against damage. All important technical and ordering information can be found on the packaging label.



Packaging unit

Product line (colour coding system)

Tool type

Packing date and lot number

Technical information

PFERD description

EAN (European Article Number)

Cut-off wheels, flap discs and grinding wheels
Solutions for stainless steel (INOX) and aluminium

Machining of stainless steel (INOX)

Stainless steel (INOX) is characterized in particular by its corrosion resistance, but also its toughness, high mechanical strength and exceptional aesthetics. Due to its outstanding material properties, stainless steel offers many application possibilities, but also places particular demands on grinding tools.

PFERD offers a wide range of specially developed tools that do not contaminate the workpiece and create lower heat build-up than conventional products. This prevents corrosion.



8 tips for preventing corrosion

Use the right grinding tool!

1. 

Only use grinding tools **without** ferrous (Fe), chlorinated (Cl) or sulphurous (S) fillers that are specifically designed for stainless steel (INOX). This prevents unwanted residues that can result in corrosion. Suitable tools feature the symbol above and the addition of **INOX** or **STEELOX** (steel + INOX).
2. To prevent signs of corrosion, the heat build-up in the workpiece must be reduced. Use grinding tools specially developed for use on stainless steel (INOX) and the largest possible grit size.

Observe during use!

3. Work with less contact pressure and oscillating movement to prevent heat discolouration, particularly with thin-walled workpieces.
4. Tools that have previously been used on steel must no longer be used for work on stainless steel (INOX). Adhering steel particles can cause impurities and therefore corrosion.
5. Ensure that, as far as possible, no sparks fall on the workpiece and no swarf is left on the workpiece.

Important: Proceed straight to finish machining!

6. Proceed straight to finish machining to achieve the desired surface quality. Suitable products can be found in catalogue section 4 "Fine grinding and polishing tools".
7. If heat discolouration/oxidation occurs during grinding, this must be removed using the following fine grinding process.
8. Clean each workpiece thoroughly after completion of all the mechanical work.

Machining of aluminium

The term "aluminium" refers to a series of alloys in which the chemical element aluminium is the main component. These range from soft to tough and hard aluminium alloys.

Normal grinding tools for steel often cannot be used for work on aluminium. Particularly with soft, lubricating alloys, adhesion of materials and clogging of the grinding tool could occur. PFERD has therefore developed a series of special tools for processing aluminium.

These products also contain no fillers that could leave unwanted residues on the workpiece. The surfaces can therefore be welded immediately after cutting or grinding.



Specialized products for use on aluminium



SG ALU grinding wheels



POLIFAN flap discs **A-COOL SG ALU + INOX** (with a specially developed coating that prevents chips from adhering)



POLIFAN flap discs **A SGP CURVE ALU** for fillet weld grinding (the only flap disc with flaps on the circumference and a specially developed coating that prevents chips from adhering)



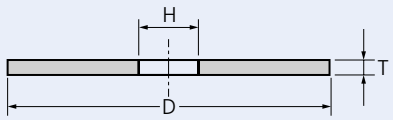
SG ALU and **PSF ALU + STONE** cut-off wheels



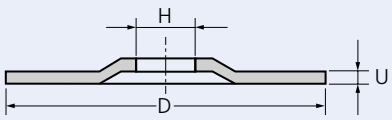


The innovative **ALU**MASTER High Speed Disc can be found in catalogue section 2.

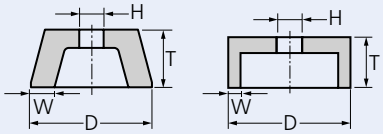
Overview of shapes and letter symbols



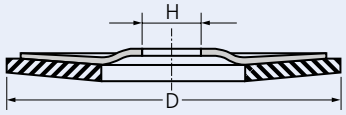
Cut-off wheel, flat type EHT (shape 41)



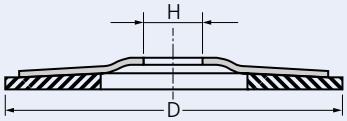
Grinding wheel E (shape 27) or cut-off wheel, depressed-centre type EH (shape 42)



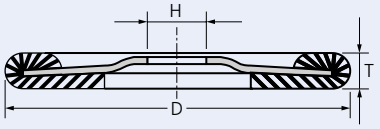
Conical (shape 11) and cylindrical (shape 6) cup wheel ETT



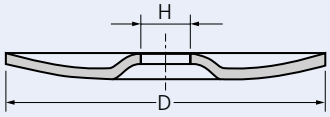
Flap disc, conical type PFC (shape B)



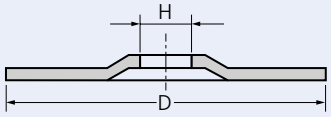
Flap disc, flat type PFF (shape A)



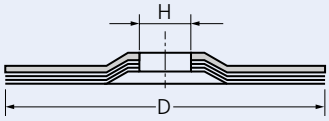
Flap disc, radial type PFR (CURVE)



CC-GRIND-SOLID



CC-GRIND-FLEX



CC-GRIND-STRONG

Safety during cutting and grinding



Grinding tool manufacturers, machine manufacturers and users contribute equally to ensuring safety during cutting and grinding.

PFERD produces all its tools according to the specified safety regulations. During cutting and grinding, the user is responsible for correct use of the tool drive as well as correct handling and use of the tools.

The information required for the safe use of grinding wheels, cut-off wheels, cup wheels, flap wheels, POLIFAN flap discs and CC-GRIND grinding discs from PFERD is summarized here. In addition to this, user information relating to the grinding machine used, as well as the applicable provisions on health and safety at work, should always be observed.

Explanation of the labelling of grinding tools

- Always observe the instructions on the grinding tool, the grinding machine and all accompanying user information.
- Only use grinding tools that meet current safety standards. These products carry the relevant EN standard number and the "oSa" mark:
  - EN 12413 for grinding tools with bonded abrasives (grinding wheels, cut-off wheels, cup wheels and snagging wheels)
  - EN 13743 for coated abrasives (POLIFAN flap discs, CC-GRIND grinding discs)
- Use a grinding tool that is suitable for the respective application. A tool that cannot be clearly identified should never be used.
- Grinding tools for hand-held grinding with bond types B (e.g. cup wheels) and BF (grinding wheels, cut-off wheels and snagging wheels) must not be used after the indicated expiry date in accordance with EN 12413. The expiry date is stated as the month and year, e.g. 04/2021. The bond type is always marked on the label.
- Observe any use restrictions, warnings and safety instructions:

 = Not permitted for hand-held grinding!

 = Not permitted for face grinding!

 = Not permitted for wet grinding!

 = Do not use if damaged!

 = Follow the safety instructions!

 = Wear eye protection!

 = Wear hearing protection!

 = Wear gloves!

 = Wear a dust mask!



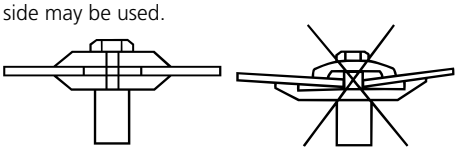
= Observe the minimum contact angle!

Storage of grinding tools

- Grinding tools should be stored in such a way as to prevent any adverse effects caused by moisture, frost or large temperature variations so as to avoid mechanical damage. Do not use resinoid-bonded grinding tools or grinding tools using coated abrasives that have been exposed to severe humidity, damp or high temperatures.

Mounting of grinding tools

- Only use grinding machines that are intended for use with the relevant tool.
- Never use a grinding machine that is not in good condition.
- Use only grinding tools with an outer diameter and bore diameter and/or thread that match the specifications of the grinding machine.
- Do not use damaged grinding tools. Grinding tools must be visually inspected and checked for any possible damage before each use.
- Keep mounting components clean and in good mechanical condition. Replace them if they become damaged or worn. If the manufacturer of the grinding machine provides devices for securing the grinding tool (e.g. a key), then these must be used. Tighten the clamping mechanism by hand.
- In principle, only clamping flanges with a contact surface with the same outer diameter and that are identically shaped on the contact side may be used.



- Use blotters between the grinding tool and clamping components, if provided.
- Prevent the grinding machine from accidentally turning on, before mounting or changing the grinding tool by disconnecting the power supply.
- Never exceed the maximum operating speed of a grinding tool. Make sure that the rotational speed of the grinding machine (rev/min, 1/min, RPM or min^{-1}) does not exceed the maximum permissible speed given on the grinding tool, the accompanying label or packaging. The remounting of worn grinding tools on smaller grinding machines is not permitted.
- Do not make any unauthorized changes to grinding tools.
- Each time that a tool is mounted, perform a trial run at operating speed, with the protective cover properly installed, for at least 30 seconds. During the trial run, hold the grinding machine in such a way that in the event of any failure of the grinding tool, you will not be struck by any fragments.
- Stationary cut-off wheels must only be used on appropriate stationary cut-off grinding machines. They are not permitted for hand-held or manually guided grinding. If a maximum power output of the machine is indicated on the cut-off wheel, it must never be exceeded.

Use of grinding tools

- Use a grinding tool that is suitable for the respective application. A tool that cannot be clearly identified should never be used.
- Always be aware of the potential dangers during use of grinding tools.
- Always use protective equipment and covers in compliance with the operating instructions for the grinding machine and make sure they are properly mounted and in good condition before you switch on the grinding machine. The protective cover must always be positioned in such a way that it is located between the operator and the tool. Sparks should not fly in the direction of the operator.
- The workpiece must be fixed without tension by appropriate clamping devices or by its own weight.
- The grinding machine must always be turned on before the grinding tool comes into contact with the workpiece.
- Always bring grinding tools carefully into contact with the workpiece surface.
- Always guide cut-off wheels in a straight line. No lateral load should be applied to the cut-off wheel and it should not be used for face grinding.
- Grinding machines may only be put down once they have been turned off and have come to a complete stop.

Hazards due to tool breakage, abrasive particles, sparks, dust, fumes, noise, vibration and bodily contact with the grinding tool

- The use of appropriate personal protective equipment is required for all grinding operations to provide protection against mechanical impacts, abrasive particles, sparks, dust and fumes, noise and vibration. This includes eye protection, hearing protection, respiratory protection and hand protection. Long-sleeved, flame-resistant clothing and appropriate safety footwear must be worn. Tie back long hair and do not wear loose clothing, ties or jewellery. These rules not only apply to the operator of the grinding machine but also to any other persons in the working environment.
- Inhalation of grinding dust can lead to lung damage. Make sure that sufficient extraction or other appropriate measures are provided during grinding work.
- Do not use grinding tools in the vicinity of flammable materials. Flammable and explosive substances must be removed from the working environment before starting work. This includes, for example, dust deposits (especially aluminium dust), cardboard, packaging material, textiles, wood and wood chips, as well as flammable liquids and gases.
- Ensure appropriate extraction and avoid sources of ignition, as explosive dusts can be created when cutting and grinding aluminium. Grinding dusts from steels and aluminium must not be mixed.
- In the event of excessive vibrations stop the grinding machine and investigate the cause of the vibration. Take immediate action, when using a grinding tool, if you begin to experience tingling, stinging or numbness in the hand or arms.
- Never remove fitted safety devices from grinding machines and ensure that they are in good condition and properly installed before starting the grinding machine.
- After switching off the grinding machine, ensure that it has come to a complete stop before leaving it unattended.

Disposal of grinding tools

- Worn or defective grinding tools must be disposed of according to all applicable regulations.
- Note that grinding tools may become contaminated by work on certain materials.
- Grinding tools for disposal should be destroyed in a clearly visible manner in order to prevent re-use.
- Further information can be obtained from your supplier's voluntary product information and safety data sheets.



Do you have any questions?

Our experienced sales representatives and technical advisers here at PFERD will be pleased to assist you. Our worldwide sales addresses can be found at: **www.pferd.com**

PFERD

Cut-off wheels



6

Product group selection

Tool drive	Application	Product line	Steel (STEEL)	Stainless steel (INOX)	Aluminium (ALU)	Cast iron (CAST)	Stone (STONE)
Angle grinder	Cutting	Universal Line PSF ★★☆☆	 PSF STEEL Page 13  PSF STEELOX Page 14	 PSF STEELOX Page 14	 PSF ALU+STONE Page 16		 PSF ALU+STONE Page 16
		Performance Line SG ★★★☆	 SG STEEL Page 17  SG STEELOX Page 18	 SG INOX Page 19  SG STEELOX Page 18	 SG ALU Page 20	 Foundry cut-off wheels from page 23	
		Special Line SGP ★★★★	 SGP CERAMIC STEEL Page 21  SGP STEELOX Page 22	 SGP STEELOX Page 22			
	Cutting and grinding	Universal Line PSF ★★☆☆	 PSF DUO STEELOX Page 15	 PSF DUO STEELOX Page 15			
		Performance Line SG ★★★☆				 (ZIRKON) SG DUO CAST Page 25	
Straight grinder (< 100 mm)	Cutting	Performance Line SG ★★★☆	 SG STEELOX Page 26	 SG STEELOX Page 26	 SG STEELOX Page 26	 SG STEELOX Page 26	
Petrol cutter and cut-off grinder (> 230 mm)	Cutting	Performance Line SG ★★★☆	 SG STEEL Page 28			 SG CAST + STONE Page 29	 SG STONE Page 29  SG CAST + STONE Page 29

Cut-off wheel width selection

Diameter 76–125 mm			PFERDVALUE
Thin cut-off wheels	0.8 mm	Maximum precision and cutting quality for sheet metal work	Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving
	1.0 mm	Universal width with a focus on speed, comfort and cutting quality	
	1.3 and 1.6 mm	Universal width with a focus on tool life and comfort	
Cut-off wheels	≥ 1.9 mm	Heavy-duty use	-

Diameter 150–230 mm			PFERDVALUE
Thin cut-off wheels	≤ 2.0 mm	Universal width with a focus on speed, comfort and cutting quality	Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving
Cut-off wheels	2.5 mm	Universal width with a focus on tool life and comfort	-
	≥ 2.9 mm	Heavy-duty use	-

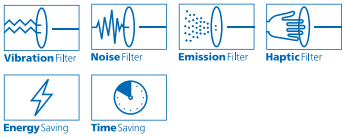


Thin cut-off wheels – flat type EHT (shape 41)

Below is a concise summary of the thin cut-off wheels of all product lines. Detailed information on the individual cut-off wheels can be found on the following product pages.

Advantages:
- Thin cuts with minimized burr formation.
- Maximum efficiency thanks to fast cutting.
- Convenient and safe.

PFERDVALUE:



D [mm]	T [mm]	Steel		Stainless steel	Aluminium
		STEEL	STEELOX	INOX	ALU
		EAN 4007220			
Universal Line PSF ★★☆☆					
105	1.0	976135	098493		-
115	1.0	560242	560266		669310
	1.6	538111	538135		669297
125	1.0	560259	560372		804278
	1.6	538128	538142	← STEELOX	804308
150	1.6	953341	581223		-
180	1.6	581209	581230		-
230	1.9	581339	581216		-
	2.0	STEELOX →	702239		-
Performance Line SG ★★★☆					
105	1.0	953358	039755	953372	885222
	1.3	STEELOX →	953396	← STEELOX	-
115	0.8	-	-	095751	-
	1.0	499719	499702	095799	804964
	1.6	522813	355442	095805	804988
125	0.8	-	-	095812	-
	1.0	499740	499733	095829	804995
	1.6	522691	355459	095898	805008
150	1.6	953365	581179	095904	953426
	2.0	STEELOX →	096178	← STEELOX	-
180	1.6	581155	807729	095911	805015
	2.0	STEELOX →	702321	← STEELOX	-
230	1.9	581162	807736	095942	097922
	2.0	STEELOX →	957592	← STEELOX	-
Special Line SGP ★★★★					
105	0.8	STEELOX →	953464		-
	1.0	STEELOX →	953471		-
	1.3	103883	-		-
115	0.8	STEELOX →	835357		-
	1.0	103890	538074		-
	1.6	103906	538081	← STEELOX	-
125	0.8	STEELOX →	835364		-
	1.0	103920	538098		-
	1.6	103937	538104		-
150	1.6	103951	953488		-
180	1.6	103968	357873		-
230	1.9	103982	522776		-



You can find clamping flange sets for thin 180/230 mm cut-off wheels for increasing lateral stability and precise guidance on page 22.

Quick and easy:
The thin cut-off wheels at a glance.
Detailed information can be found on the following pages.



PSF STEEL ★★☆☆

Cut-off wheel for steel with high cutting performance and long tool life.



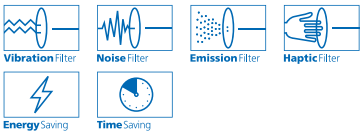
Advantages:
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.

Materials that can be worked:
steel

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
Aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
100	2.4	321256	16.0	15,300	25	EHT 100-2,4 PSF STEEL/16,0
105	1.0	976135	16.0	14,500	25	EHT 105-1,0 PSF STEEL/16,0
115	1.0	560242	22.23	13,300	25	EHT 115-1,0 PSF STEEL
	1.6	538111	22.23	13,300	25	EHT 115-1,6 PSF STEEL
	2.4	669174	22.23	13,300	25	EHT 115-2,4 PSF STEEL
125	1.0	560259	22.23	12,200	25	EHT 125-1,0 PSF STEEL
	1.6	538128	22.23	12,200	25	EHT 125-1,6 PSF STEEL
	2.4	669167	22.23	12,200	25	EHT 125-2,4 PSF STEEL
150	1.6	953341	22.23	10,200	25	EHT 150-1,6 PSF STEEL
180	1.6	581209	22.23	8,500	25	EHT 180-1,6 PSF STEEL
	3.0	163474	22.23	8,500	25	EHT 180-3,0 PSF STEEL
230	1.9	581339	22.23	6,600	25	EHT 230-1,9 PSF STEEL
	3.0	163498	22.23	6,600	25	EHT 230-3,0 PSF STEEL
Depressed-centre type EH (shape 42)						
100	2.4	163511	16.0	15,300	25	EH 100-2,4 PSF STEEL/16,0
115	2.4	163528	22.23	13,300	25	EH 115-2,4 PSF STEEL
	3.2	522998	22.23	13,300	25	EH 115-3,2 PSF STEEL
125	2.4	163429	22.23	12,200	25	EH 125-2,4 PSF STEEL
	3.2	523001	22.23	12,200	25	EH 125-3,2 PSF STEEL
180	3.0	163436	22.23	8,500	25	EH 180-3,0 PSF STEEL
230	3.0	163450	22.23	6,600	25	EH 230-3,0 PSF STEEL



Cut-off wheels
Universal Line PSF ★★☆☆



PSF STEELOX ★★☆☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and long tool life.

Advantages:
- Universally suitable for steel and stainless steel (INOX).
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.
- Thin cut-off wheels are ideal for cordless angle grinders.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
Aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
76	0.8	060889	10.0	20,100	25	EHT 76-0,8 PSF STEELOX/10,0
	1.0	060940	10.0	20,100	25	EHT 76-1,0 PSF STEELOX/10,0
105	1.0	098493	16.0	14,500	25	EHT 105-1,0 PSF STEELOX/16,0
115	1.0	560266	22.23	13,300	25	EHT 115-1,0 PSF STEELOX
	1.6	538135	22.23	13,300	25	EHT 115-1,6 PSF STEELOX
	2.4	523025	22.23	13,300	25	EHT 115-2,4 PSF STEELOX
125	1.0	560372	22.23	12,200	25	EHT 125-1,0 PSF STEELOX
	1.6	538142	22.23	12,200	25	EHT 125-1,6 PSF STEELOX
	2.0	667958	22.23	12,200	25	EHT 125-2,0 PSF STEELOX
	2.4	523049	22.23	12,200	25	EHT 125-2,4 PSF STEELOX
150	1.6	581223	22.23	10,200	25	EHT 150-1,6 PSF STEELOX
180	1.6	581230	22.23	8,500	25	EHT 180-1,6 PSF STEELOX
	2.5	523063	22.23	8,500	25	EHT 180-2,5 PSF STEELOX
230	1.9	581216	22.23	6,600	25	EHT 230-1,9 PSF STEELOX
	2.0	702239	22.23	6,600	25	EHT 230-2,0 PSF STEELOX
	2.5	523087	22.23	6,600	25	EHT 230-2,5 PSF STEELOX
Depressed-centre type EH (shape 42)						
100	2.4	523018	16.0	15,300	25	EH 100-2,4 PSF STEELOX/16,0
115	2.4	523032	22.23	13,300	25	EH 115-2,4 PSF STEELOX
125	2.4	523056	22.23	12,200	25	EH 125-2,4 PSF STEELOX
180	2.5	523070	22.23	8,500	25	EH 180-2,5 PSF STEELOX
230	2.5	523094	22.23	6,600	25	EH 230-2,5 PSF STEELOX



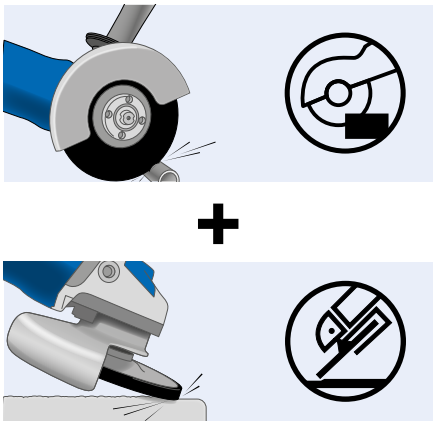


DUODISC

The DUODISC combination wheel is the solution for safe cutting and grinding with just one tool. It meets all the requirements of EN 12413 for cutting and grinding wheels.

Advantages:

- Safe, standard-compliant solution for cutting and face grinding with just one tool.
- Time savings due to fewer wheel changes.
- Universally suitable for steel and stainless steel (INOX).
- Widths 1.4 and 1.9 mm also ideal for cordless angle grinders.
- Problem solver for grinding work on scale.
- Unlike cut-off wheels, can also be used with protective cover open.



PSF DUODISC STEELOX combination wheel ★★☆☆

Combination wheel for steel and stainless steel (INOX) with high cutting performance and long tool life.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting, deburring, surface grinding, work on fillet welds, grouting, weld dressing

Abrasive:
Aluminium oxide A

PFERDVALUE:
TimeSaving



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type E						
76	1.4	068274	10.0	20,100	25	E 76-1,4 PSF DUO STEELOX/10,0
Depressed-centre type E (shape 27)						
100	1.9	845578	16.0	15,300	10	E 100-1,9 PSF DUO STEELOX/16,0
	2.8	952733	16.0	15,300	10	E 100-2,8 PSF DUO STEELOX/16,0
115	1.9	835081	22.23	13,300	10	E 115-1,9 PSF DUO STEELOX
	2.8	754498	22.23	13,300	10	E 115-2,8 PSF DUO STEELOX
125	1.9	835098	22.23	12,200	10	E 125-1,9 PSF DUO STEELOX
	2.8	754504	22.23	12,200	10	E 125-2,8 PSF DUO STEELOX
150	3.5	952740	22.23	10,200	10	E 150-3,5 PSF DUO STEELOX
180	3.5	952764	22.23	8,500	10	E 180-3,5 PSF DUO STEELOX





Cut-off wheels
Universal Line PSF ★★☆☆



PSF ALU + STONE ★★☆☆

Cut-off wheel for non-ferrous metals and mineral materials with high cutting performance and long tool life.

Advantages:
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.
- Width of 1.0 mm is also ideal for cordless angle grinders.

Materials that can be worked:
aluminium, titanium, other non-ferrous metals, stone, concrete, tiles, duroplastics, fibre-reinforced duroplastics (GRP, CRP), cast iron

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
Silicon carbide C

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
115	1.0	669310	22.23	13,300	25	EHT 115-1,0 PSF ALU+STONE
	1.6	669297	22.23	13,300	25	EHT 115-1,6 PSF ALU+STONE
125	1.0	804278	22.23	12,200	25	EHT 125-1,0 PSF ALU+STONE
	1.6	804308	22.23	12,200	25	EHT 125-1,6 PSF ALU+STONE
180	3.2	163641	22.23	8,500	25	EHT 180-3,2 PSF ALU+STONE
230	3.2	163658	22.23	6,600	25	EHT 230-3,2 PSF ALU+STONE
Depressed-centre type EH (shape 42)						
100	2.4	523124	16.0	15,300	25	EH 100-2,4 PSF ALU+STONE/16,0
115	2.4	163665	22.23	13,300	25	EH 115-2,4 PSF ALU+STONE
125	2.4	163597	22.23	12,200	25	EH 125-2,4 PSF ALU+STONE
150	3.0	523131	22.23	10,200	25	EH 150-3,0 PSF ALU+STONE
180	3.2	163603	22.23	8,500	25	EH 180-3,2 PSF ALU+STONE
230	3.2	163627	22.23	6,600	25	EH 230-3,2 PSF ALU+STONE



You can find diamond cut-off wheels for cutting hard materials such as tungsten carbide or ceramics and fibre-reinforced plastics (GRP/CRP) in catalogue section 5.



You can find diamond cut-off wheels for cutting stone and concrete in catalogue section 5.





SG STEEL ★★★☆

Cut-off wheel for steel with high cutting performance and very long tool life.



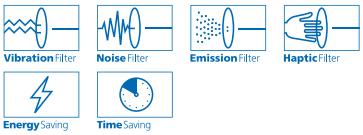
Advantages:
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
steel

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
High-performance aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
100	2.4	162590	16.0	15,300	25	EHT 100-2,4 SG STEEL/16,0
105	1.0	953358	16.0	14,500	25	EHT 105-1,0 SG STEEL/16,0
115	1.0	499719	22.23	13,300	25	EHT 115-1,0 SG STEEL
	1.6	522813	22.23	13,300	25	EHT 115-1,6 SG STEEL
	2.4	162637	22.23	13,300	25	EHT 115-2,4 SG STEEL
125	1.0	499740	22.23	12,200	25	EHT 125-1,0 SG STEEL
	1.6	522691	22.23	12,200	25	EHT 125-1,6 SG STEEL
	2.4	162231	22.23	12,200	25	EHT 125-2,4 SG STEEL
150	1.6	953365	22.23	10,200	25	EHT 150-1,6 SG STEEL
	3.0	162248	22.23	10,200	25	EHT 150-3,0 SG STEEL
180	1.6	581155	22.23	8,500	25	EHT 180-1,6 SG STEEL
	2.9	522639	22.23	8,500	25	EHT 180-2,9 SG STEEL
	3.2	162347	22.23	8,500	25	EHT 180-3,2 SG STEEL
230	1.9	581162	22.23	6,600	25	EHT 230-1,9 SG STEEL
	2.9	522677	22.23	6,600	25	EHT 230-2,9 SG STEEL
	3.2	162422	22.23	6,600	25	EHT 230-3,2 SG STEEL
Depressed-centre type EH (shape 42)						
100	2.4	162576	16.0	15,300	25	EH 100-2,4 SG STEEL/16,0
115	2.4	162606	22.23	13,300	25	EH 115-2,4 SG STEEL
	3.2	522424	22.23	13,300	25	EH 115-3,2 SG STEEL
125	2.4	162217	22.23	12,200	25	EH 125-2,4 SG STEEL
	3.2	522431	22.23	12,200	25	EH 125-3,2 SG STEEL
150	3.0	162255	22.23	10,200	25	EH 150-3,0 SG STEEL
180	2.9	522653	22.23	8,500	25	EH 180-2,9 SG STEEL
	3.2	162262	22.23	8,500	25	EH 180-3,2 SG STEEL
230	2.9	522684	22.23	6,600	25	EH 230-2,9 SG STEEL
	3.2	162309	22.23	6,600	25	EH 230-3,2 SG STEEL



Cut-off wheels
Performance Line SG ★★★☆



SG STEELOX ★★★☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and very long tool life.

Advantages:
- Universally suitable for steel and stainless steel (INOX).
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
High-performance aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
105	1.0	039755	16.0	14,500	25	EHT 105-1,0 SG STEELOX/16,0
	1.3	953396	16.0	14,500	25	EHT 105-1,3 SG STEELOX/16,0
115	1.0	499702	22.23	13,300	25	EHT 115-1,0 SG STEELOX
	1.6	355442	22.23	13,300	25	EHT 115-1,6 SG STEELOX
	2.4	522851	22.23	13,300	25	EHT 115-2,4 SG STEELOX
125	1.0	499733	22.23	12,200	25	EHT 125-1,0 SG STEELOX
	1.6	355459	22.23	12,200	25	EHT 125-1,6 SG STEELOX
	2.0	953419	22.23	12,200	25	EHT 125-2,0 SG STEELOX
	2.4	522875	22.23	12,200	25	EHT 125-2,4 SG STEELOX
150	1.6	581179	22.23	10,200	25	EHT 150-1,6 SG STEELOX
	2.0	096178	22.23	10,200	25	EHT 150-2,0 SG STEELOX
	2.5	096147	22.23	10,200	25	EHT 150-2,5 SG STEELOX
180	1.6	807729	22.23	8,500	25	EHT 180-1,6 SG STEELOX
	2.0	702321	22.23	8,500	25	EHT 180-2,0 SG STEELOX
	2.5	162378	22.23	8,500	25	EHT 180-2,5 SG STEELOX
230	1.9	807736	22.23	6,600	25	EHT 230-1,9 SG STEELOX
	2.0	957592	22.23	6,600	25	EHT 230-2,0 SG STEELOX
	2.5	162446	22.23	6,600	25	EHT 230-2,5 SG STEELOX
	3.2	475690	22.23	6,600	25	EHT 230-3,2 SG STEELOX
Depressed-centre type EH (shape 42)						
115	2.4	162613	22.23	13,300	25	EH 115-2,4 SG STEELOX
	3.2	522868	22.23	13,300	25	EH 115-3,2 SG STEELOX
125	2.4	162651	22.23	12,200	25	EH 125-2,4 SG STEELOX
	3.2	522882	22.23	12,200	25	EH 125-3,2 SG STEELOX
180	2.5	162279	22.23	8,500	25	EH 180-2,5 SG STEELOX
230	2.5	162316	22.23	6,600	25	EH 230-2,5 SG STEELOX





SG INOX ★★★☆

Cut-off wheel for stainless steel (INOX) with high cutting performance and very long tool life.

Advantages:
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
stainless steel (INOX)

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
High-performance aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
105	1.0	953372	16.0	14,500	25	EHT 105-1,0 SG INOX/16,0
115	0.8	095751	22.23	13,300	25	EHT 115-0,8 SG INOX
	1.0	095799	22.23	13,300	25	EHT 115-1,0 SG INOX
	1.6	095805	22.23	13,300	25	EHT 115-1,6 SG INOX
125	0.8	095812	22.23	12,200	25	EHT 125-0,8 SG INOX
	1.0	095829	22.23	12,200	25	EHT 125-1,0 SG INOX
	1.6	095898	22.23	12,200	25	EHT 125-1,6 SG INOX
150	1.6	095904	22.23	10,200	25	EHT 150-1,6 SG INOX
180	1.6	095911	22.23	8,500	25	EHT 180-1,6 SG INOX
	2.5	096208	22.23	8,500	25	EHT 180-2,5 SG INOX
230	1.9	095942	22.23	6,600	25	EHT 230-1,9 SG INOX
	2.5	096215	22.23	6,600	25	EHT 230-2,5 SG INOX
Depressed-centre type EH (shape 42)						
115	2.4	096222	22.23	13,300	25	EH 115-2,4 SG INOX
125	2.4	096239	22.23	12,200	25	EH 125-2,4 SG INOX
180	2.5	096246	22.23	8,500	25	EH 180-2,5 SG INOX
230	2.5	096253	22.23	6,600	25	EH 230-2,5 SG INOX





Cut-off wheels
Performance Line SG ★★★☆



SG ALU ★★★☆

Cut-off wheel for aluminium and other non-ferrous metals with high cutting performance and very long tool life.

Advantages:
- Special abrasive mixture and bond technology prevent the cut-off wheel clogging up, even on soft, tough aluminium.
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.
- Contains no fillers that could leave undesirable residues on the workpiece. The surface can therefore be welded immediately.

Materials that can be worked:
aluminium, other non-ferrous metals

Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

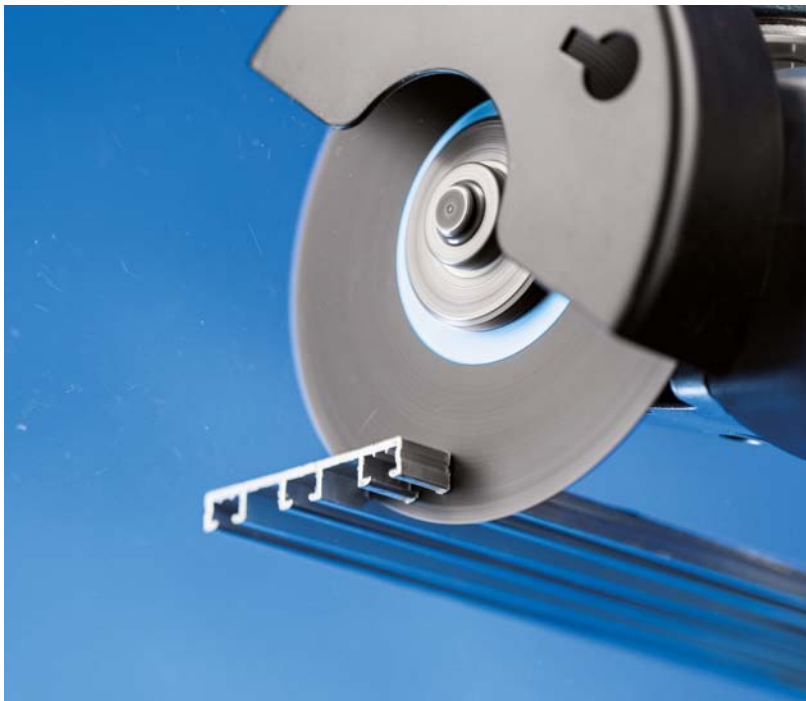
Abrasive:
High-performance aluminium oxide A and silicon carbide C

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
105	1.0	885222	16.0	14,500	25	EHT 105-1,0 SG ALU/16,0
115	1.0	804964	22.23	13,300	25	EHT 115-1,0 SG ALU
	1.6	804988	22.23	13,300	25	EHT 115-1,6 SG ALU
	2.4	617892	22.23	13,300	25	EHT 115-2,4 SG ALU
125	1.0	804995	22.23	12,200	25	EHT 125-1,0 SG ALU
	1.6	805008	22.23	12,200	25	EHT 125-1,6 SG ALU
	2.4	617786	22.23	12,200	25	EHT 125-2,4 SG ALU
150	1.6	953426	22.23	10,200	25	EHT 150-1,6 SG ALU
180	1.6	805015	22.23	8,500	25	EHT 180-1,6 SG ALU
	2.9	538487	22.23	8,500	25	EHT 180-2,9 SG ALU
230	1.9	097922	22.23	6,600	25	EHT 230-1,9 SG ALU
	2.9	538524	22.23	6,600	25	EHT 230-2,9 SG ALU
Depressed-centre type EH (shape 42)						
115	2.4	522936	22.23	13,300	25	EH 115-2,4 SG ALU
125	2.4	389027	22.23	12,200	25	EH 125-2,4 SG ALU
180	2.9	538517	22.23	8,500	25	EH 180-2,9 SG ALU
230	2.9	538548	22.23	6,600	25	EH 230-2,9 SG ALU





CERAMIC

Special cut-off wheel with ceramic oxide grain for steel with ultimate cutting performance and outstanding tool life. Optimized for use on steel workpieces with larger cross sections.

Advantages:

- Unprecedented cutting performance due to high-performance abrasive ceramic oxide grain in connection with a special bond technology, resulting in the fastest work progress even on large cross sections.
- Maximum efficiency due to excellent tool life.



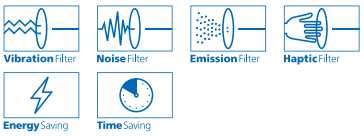
CERAMIC SGP STEEL ★★★★

Materials that can be worked:
steel

Applications:
cutting of large cross sections, cutting of profiles and solid material, cutting out holes

Abrasive:
Ceramic oxide grain CO

PFERDVALUE:
Thin cut-off wheels:





D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
100	1.3	103883	16.0	15,300	25	EHT 100-1,3 CERAMIC SGP STEEL/16,0
115	1.0	103890	22.23	13,300	25	EHT 115-1,0 CERAMIC SGP STEEL
	1.6	103906	22.23	13,300	25	EHT 115-1,6 CERAMIC SGP STEEL
	2.0	103913	22.23	13,300	25	EHT 115-2,0 CERAMIC SGP STEEL
125	1.0	103920	22.23	12,200	25	EHT 125-1,0 CERAMIC SGP STEEL
	1.6	103937	22.23	12,200	25	EHT 125-1,6 CERAMIC SGP STEEL
	2.0	103944	22.23	12,200	25	EHT 125-2,0 CERAMIC SGP STEEL
150	1.6	103951	22.23	10,200	25	EHT 150-1,6 CERAMIC SGP STEEL
180	1.6	103968	22.23	8,500	25	EHT 180-1,6 CERAMIC SGP STEEL
	2.5	103975	22.23	8,500	25	EHT 180-2,5 CERAMIC SGP STEEL
230	1.9	103982	22.23	6,600	25	EHT 230-1,9 CERAMIC SGP STEEL
	2.5	103999	22.23	6,600	25	EHT 230-2,5 CERAMIC SGP STEEL
Depressed-centre type EH (shape 42)						
115	1.6	104002	22.23	13,300	25	EH 115-1,6 CERAMIC SGP STEEL
125	1.6	104019	22.23	12,200	25	EH 125-1,6 CERAMIC SGP STEEL



SGP STEELOX ★★★★

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and an excellent tool life. Specially optimised for use on thin sheets and profiles.



Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of thin sheet metal and profiles, cutting out holes

Abrasive:
High-performance aluminium oxide A

PFERDVALUE:
Thin cut-off wheels:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

Advantages:
- Excellent tool life on thin sheet metal and profiles thanks to wear-resistant bond system.
- Universally suitable for steel and stainless steel (INOX).
- Fast work progress thanks to high cutting performance.

D [mm]	T [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
105	0.8	953464	16.0	14,500	25	EHT 105-0,8 SGP STEELOX/16,0
	1.0	953471	16.0	14,500	25	EHT 105-1,0 SGP STEELOX/16,0
115	0.8	835357	22.23	13,300	25	EHT 115-0,8 SGP STEELOX
	1.0	538074	22.23	13,300	25	EHT 115-1,0 SGP STEELOX
	1.6	538081	22.23	13,300	25	EHT 115-1,6 SGP STEELOX
	2.2	281956	22.23	13,300	25	EHT 115-2,2 SGP STEELOX
125	0.8	835364	22.23	12,200	25	EHT 125-0,8 SGP STEELOX
	1.0	538098	22.23	12,200	25	EHT 125-1,0 SGP STEELOX
	1.6	538104	22.23	12,200	25	EHT 125-1,6 SGP STEELOX
	2.2	281970	22.23	12,200	25	EHT 125-2,2 SGP STEELOX
150	1.6	953488	22.23	10,200	25	EHT 150-1,6 SGP STEELOX
	2.5	953495	22.23	10,200	25	EHT 150-2,5 SGP STEELOX
180	1.6	357873	22.23	8,500	25	EHT 180-1,6 SGP STEELOX
230	1.9	522776	22.23	6,600	25	EHT 230-1,9 SGP STEELOX
	2.3	522783	22.23	6,600	25	EHT 230-2,3 SGP STEELOX
	2.8	282014	22.23	6,600	25	EHT 230-2,8 SGP STEELOX

Clamping flanges



Clamping flange set for thin 180/230 mm cut-off wheels

Clamping flange set for increasing lateral stability and precise guidance, especially when using cut-off wheels from 1.6 to 2.0 mm in width with diameters of 180 and 230 mm. The set can be used with any standard angle grinder with an M14 or 5/8"-11 drive spindle.

For angle grinders with spindle	EAN 4007220	D [mm]		Description
M14	595275	76	1	SFS 76 M14
5/8"-11	895856	76	1	SFS 76 5/8"-11

Foundry cut-off wheels

For heavy-duty use in foundries and fettling shops, PFERD offers particularly robust cut-off wheels that guarantee the highest degree of safety and achieve top performance, even under these conditions. They are optimized for use on compressed-air turbine and high-frequency angle grinders.

PFERD offers you individual advice regarding all aspects of machining in foundries and fettling shops. The experienced sales representatives and technical advisers will be happy to assist you. Please contact us for further details.



SG CAST + STEEL ★★★☆

Cut-off wheel optimised for use in harsh conditions in foundries and fettling shops with high cutting performance, long tool life and high lateral stability.

Advantages:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.

Materials that can be worked:
cast iron, cast steel

Applications:
cutting

Abrasive:
Special aluminium oxide A



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
230	3.2	952542	22.23	6,600	25	EHT 230-3,2 SG CAST+STEEL
Depressed-centre type EH (shape 42)						
230	3.2	952535	22.23	6,600	25	EH 230-3,2 SG CAST+STEEL

SG CAST + INOX ★★★☆

Cut-off wheel optimised for use in harsh conditions in foundries and fettling shops with high cutting performance, long tool life and high lateral stability.

Advantages:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.

Materials that can be worked:
cast iron, stainless steel (INOX), cast steel

Applications:
cutting

Abrasive:
Special aluminium oxide A



D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
230	2.9	522899	22.23	6,600	25	EHT 230-2,9 SG CAST+INOX
Depressed-centre type EH (shape 42)						
230	2.9	522905	22.23	6,600	25	EH 230-2,9 SG CAST+INOX

Cut-off wheels
Performance Line SG ★★★☆



SG CAST + ALU ★★★☆

Cut-off wheel optimised for use in harsh conditions in foundries and fettling shops with high cutting performance, long tool life and high lateral stability.

Advantages:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress thanks to high cutting performance.
- High economic efficiency due to long tool life.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS), hard aluminium alloys

Applications:
cutting

Abrasive:
Special aluminium oxide A and silicon carbide C

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
230	3.2	522912	22.23	6,600	25	EHT 230-3,2 SG CAST+ALU
Depressed-centre type EH (shape 42)						
230	3.2	522929	22.23	6,600	25	EH 230-3,2 SG CAST+ALU



ZIRKON SG CAST ★★★☆

Cut-off wheel optimised for use in foundries and fettling shops with high cutting performance, very long tool life and high lateral stability.

Advantages:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS)

Applications:
cutting

Abrasive:
Zirconia alumina Z and silicon carbide C

D [mm]	T/U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Flat type EHT (shape 41)						
230	3.2	094983	22.23	6,600	25	EHT 230-3,2 ZIRKON SG CAST
Depressed-centre type EH (shape 42)						
230	3.2	340875	22.23	6,600	25	EH 230-3,2 ZIRKON SG CAST

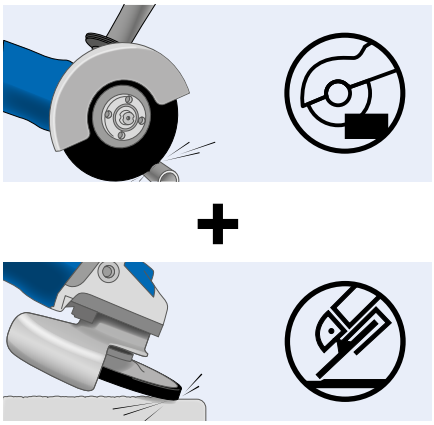


DUODISC for foundries and fettling shops

The DUODISC combination wheel is the solution for safe cutting and grinding with just one tool. It meets all the requirements of EN 12413 for cutting and grinding wheels.

Advantages:

- Safe, standard-compliant solution for cutting and face grinding with just one tool.
- Time savings due to fewer wheel changes.
- Unlike cut-off wheels, can also be used with protective cover open.







SG DUODISC CAST combination wheel ★★★☆

The DUODISC combination wheel is the solution for safe cutting and grinding in harsh conditions in foundries and fettling shops using just one tool. It meets all the requirements of EN 12413 for cutting and grinding wheels.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS)

Applications:
cutting, surface grinding, deburring

Abrasive:
Special aluminium oxide A and silicon carbide C

PFERDVALUE:
TimeSaving



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
230	3.8	105085	22.23	6,600	10	E 230-3,8 SG DUO CAST

ZIRKON SG DUODISC CAST combination wheel ★★★☆

The DUODISC combination wheel is the solution for safe cutting and grinding in harsh conditions in foundries and fettling shops using just one tool. It meets all the requirements of EN 12413 for cutting and grinding wheels.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS)

Applications:
cutting, surface grinding, deburring

Abrasive:
Zirconia alumina Z and silicon carbide C

PFERDVALUE:
TimeSaving



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
230	3.8	105092	22.23	6,600	10	E 230-3,8 ZIRKON SG DUO CAST

Cut-off wheels for straight grinders
Performance Line SG ★★★☆



SG STEELOX ★★★☆

Universal cut-off wheel for use on straight grinders with a high cutting performance and very long tool life.

Advantages:
- Ideal for hard-to-reach areas.
- Universal cut-off wheel for many different materials.
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
steel, stainless steel (INOX), nickel-based alloys (e.g. Inconel and Hastelloy), cast iron, aluminium, other non-ferrous metals

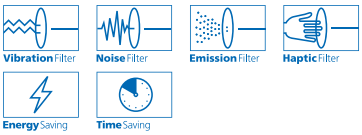
Applications:
cutting of sheet metal, profiles and solid material, cutting out holes

Abrasive:
High-performance aluminium oxide A

Ordering notes:
- Please order the matching arbor separately.

Safety notes:
- Observe the maximum rotational speed for the cut-off wheel and arbor – the lower speed takes precedence.
- When using cut-off wheels with diameter up from 50 mm on compressed-air straight grinders, a protective guard must be used (ISO 11148-7).
- When using cut-off wheels with diameter up from 55 mm on electric straight grinders, a protective guard must be used (EN 60745-2-3).

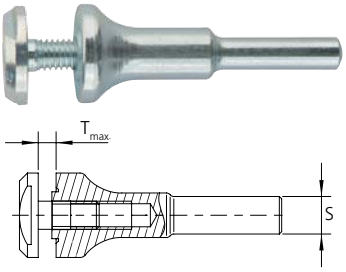
PFERDVALUE:
Thin cut-off wheels:



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Flat type EHT (shape 41)						
30	1.0	6.0	165621	51,000	50	EHT 30-1,0 SG STEELOX/6,0
	1.4	6.0	165638	51,000	50	EHT 30-1,4 SG STEELOX/6,0
40	1.0	6.0	165645	38,200	50	EHT 40-1,0 SG STEELOX/6,0
	2.0	6.0	165652	38,200	50	EHT 40-2,0 SG STEELOX/6,0
50	0.8	6.0	849156	30,600	50	EHT 50-0,8 SG STEELOX/6,0
	1.0	6.0	165669	30,600	50	EHT 50-1,0 SG STEELOX/6,0
	1.4	6.0	165676	30,600	50	EHT 50-1,4 SG STEELOX/6,0
	2.0	6.0	165683	30,600	50	EHT 50-2,0 SG STEELOX/6,0
	3.0	6.0	165690	30,600	50	EHT 50-3,0 SG STEELOX/6,0
65	0.8	6.0	849187	23,500	50	EHT 65-0,8 SG STEELOX/6,0
	0.8	10.0	849194	23,500	50	EHT 65-0,8 SG STEELOX/10,0
	1.0	6.0	165706	23,500	50	EHT 65-1,0 SG STEELOX/6,0
	1.0	10.0	165713	23,500	50	EHT 65-1,0 SG STEELOX/10,0
	1.4	10.0	165720	23,500	50	EHT 65-1,4 SG STEELOX/10,0
	2.0	10.0	165737	23,500	50	EHT 65-2,0 SG STEELOX/10,0
	3.0	10.0	165744	23,500	50	EHT 65-3,0 SG STEELOX/10,0
70	1.0	10.0	165751	21,800	50	EHT 70-1,0 SG STEELOX/10,0
	1.4	10.0	165768	21,800	50	EHT 70-1,4 SG STEELOX/10,0
	2.0	10.0	165775	21,800	50	EHT 70-2,0 SG STEELOX/10,0
	3.0	10.0	165782	21,800	50	EHT 70-3,0 SG STEELOX/10,0
76	0.8	6.0	849217	20,100	50	EHT 76-0,8 SG STEELOX/6,0
	0.8	10.0	849200	20,100	50	EHT 76-0,8 SG STEELOX/10,0
	1.0	6.0	165812	20,100	50	EHT 76-1,0 SG STEELOX/6,0
	1.0	10.0	165829	20,100	50	EHT 76-1,0 SG STEELOX/10,0
	1.4	10.0	165836	20,100	50	EHT 76-1,4 SG STEELOX/10,0
	2.0	10.0	165843	20,100	50	EHT 76-2,0 SG STEELOX/10,0
	3.0	10.0	165850	20,100	50	EHT 76-3,0 SG STEELOX/10,0

Arbors for small cut-off wheels

Accessory for mounting small cut-off wheels on straight grinders. Stable arrangement with very high shank breakage resistance.



Cut-off wheel diameter [mm]	Max. RPM
30	31,800
40	23,900
50	19,100
65	14,700
70	13,600
76	12,500

Safety notes:

- Observe the maximum rotational speed for the cut-off wheel and arbor – the lower speed takes precedence (see table).

S [mm]	Suitable for cut-off wheels with centre hole [mm]	$T_{max.}$ [mm]	EAN 4007220		Description
6	6	0–4	219119	1	BO 6/6 0-4
	10	0–4	219140	1	BO 6/10 0-4
6.35 (1/4")	6	0–4	219126	1	BO 6,35/6 0-4 (1/4)
	10	0–4	219133	1	BO 6,35/10 0-4 (1/4)
8	10	0–4	219157	1	BO 8/10 0-4



Cut-off wheels for petrol cutters and cut-off grinders

Performance Line SG ★★★☆



SG STEEL ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with a high cutting performance and very long tool life.

Advantages:
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

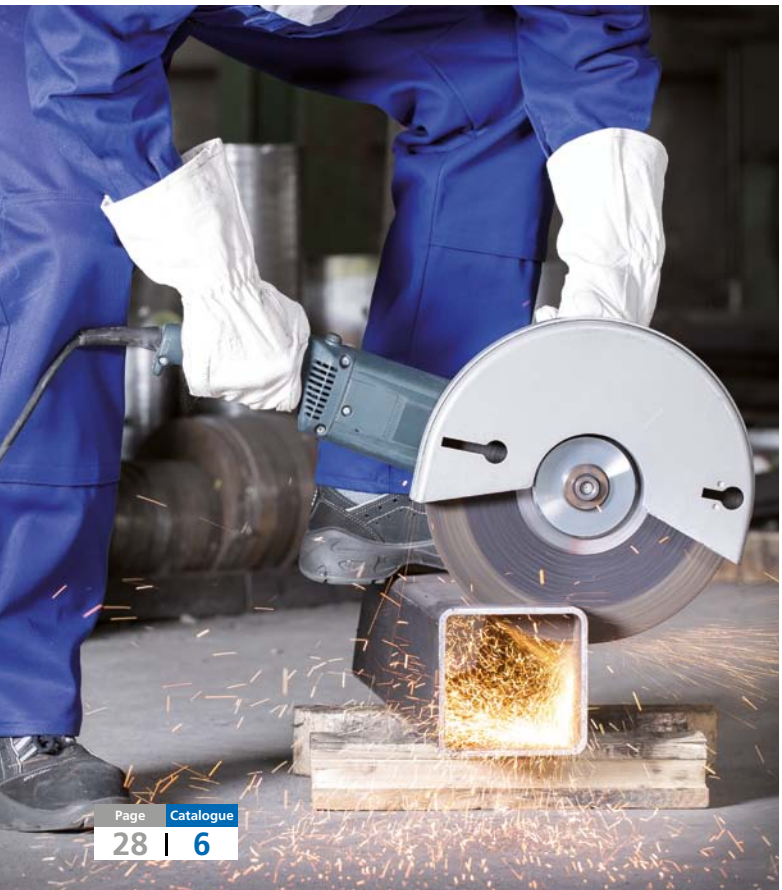
Materials that can be worked:
steel, cast iron

Applications:
cutting

Abrasive:
Special aluminium oxide A

Safety notes:
- Observe the maximum operating speed of the petrol cutter/cut-off grinder to select the suitable cut-off wheel (80 or 100 m/s).

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type EHT (shape 41)						
300	4.0	20.0	162460	5,100	20	80 EHT 300-4,0 SG STEEL/20,0
		22.23	162477	5,100	20	80 EHT 300-4,0 SG STEEL/22,23
		25.4	162484	5,100	20	80 EHT 300-4,0 SG STEEL/25,4
Maximum operating speed 100 m/s, flat type EHT (shape 41)						
300	4.0	20.0	540008	6,400	20	100 EHT 300-4,0 SG STEEL/20,0
		22.23	540015	6,400	20	100 EHT 300-4,0 SG STEEL/22,23
		25.4	540022	6,400	20	100 EHT 300-4,0 SG STEEL/25,4
350	4.5	20.0	540039	5,500	10	100 EHT 350-4,5 SG STEEL/20,0
		22.23	540046	5,500	10	100 EHT 350-4,5 SG STEEL/22,23
		25.4	540053	5,500	10	100 EHT 350-4,5 SG STEEL/25,4
400	4.8	20.0	953433	4,800	10	100 EHT 400-4,8 SG STEEL/20,0
		22.23	540060	4,800	10	100 EHT 400-4,8 SG STEEL/22,23
		25.4	540077	4,800	10	100 EHT 400-4,8 SG STEEL/25,4





SG STONE ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with a high cutting performance and very long tool life.





Advantages:
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
stone, cast iron, aluminium, other non-ferrous metals, concrete, asphalt

Applications:
cutting

Abrasive:
Silicon carbide C

Safety notes:
- Observe the maximum operating speed of the petrol cutter/cut-off grinder to select the suitable cut-off wheel (80 or 100 m/s).

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type EHT (shape 41)						
300	4.0	20.0	163177	5,100	20	80 EHT 300-4,0 SG STONE/20,0
		22.23	163184	5,100	20	80 EHT 300-4,0 SG STONE/22,23
		25.4	163191	5,100	20	80 EHT 300-4,0 SG STONE/25,4
Maximum operating speed 100 m/s, flat type EHT (shape 41)						
350	4.5	20.0	540145	5,500	10	100 EHT 350-4,5 SG STONE/20,0
		22.23	540152	5,500	10	100 EHT 350-4,5 SG STONE/22,23
		25.4	540169	5,500	10	100 EHT 350-4,5 SG STONE/25,4

SG CAST + STONE ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with a high cutting performance and very long tool life.



Advantages:
- Fast work progress thanks to high cutting performance.
- Maximum economic efficiency due to very long tool life.

Materials that can be worked:
cast iron, reinforced concrete, ductile cast iron

Applications:
cutting

Abrasive:
Special aluminium oxide A and silicon carbide C

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 100 m/s, flat type EHT (shape 41)						
300	4.0	20.0	540084	6,400	20	100 EHT 300-4,0 SG CAST+STONE/20,0
		22.23	540091	6,400	20	100 EHT 300-4,0 SG CAST+STONE/22,23
		25.4	540107	6,400	20	100 EHT 300-4,0 SG CAST+STONE/25,4
350	4.5	20.0	540114	5,500	10	100 EHT 350-4,5 SG CAST+STONE/20,0
		22.23	540121	5,500	10	100 EHT 350-4,5 SG CAST+STONE/22,23
		25.4	540138	5,500	10	100 EHT 350-4,5 SG CAST+STONE/25,4

POLIFAN flap discs



Product group selection

Application	Product line	Steel (STEEL)	Stainless steel (INOX)	Aluminium (ALU)
■ Surface grinding ■ Work on weld seams	Universal Line PSF ★★☆☆	 Z PSF STEELOX Page 33  A PSF STEELOX Page 33	 Z PSF STEELOX Page 33	
	Perfor-mance Line SG ★★★☆	 Z SG POWER STEELOX Page 35  A SG STEELOX Page 34	 CO-FREEZE SG INOX Page 37  A-COOL SG INOX + ALU Page 34	 A-COOL SG INOX + ALU Page 34
	Special Line SGP ★★★★	 Z SGP STRONG STEEL Page 38	 CO-FREEZE SGP STRONG INOX Page 39	
■ Chamfering ■ Deburring	Universal Line PSF ★★☆☆	 Z PSF STEELOX Page 33	 Z PSF STEELOX Page 33	
	Perfor-mance Line SG ★★★☆	 Z SG POWER STEELOX Page 35	 CO-COOL SG STEELOX Page 36  Z SG POWER STEELOX Page 35	 A-COOL SG INOX + ALU Page 34
	Special Line SGP ★★★★	 Z SGP STRONG STEEL Page 38		
■ Work on fillet welds	Special Line SGP ★★★★	 Z SGP CURVE STEELOX Page 40	 CO SGP CURVE STEELOX Page 41	 A SGP CURVE ALU Page 41

Abrasive: A = aluminium oxide, Z = zirconia alumina, CO = ceramic oxide grain
Coatings: COOL = Active grinding coating for cool grinding, FREEZE = Active grinding coating for ultra-cool grinding

Grit size selection

	Grit size			
	36/40	50/60	80	120
Application: Work on weld seams	■			
Application: Chamfering	■			
Application: Deburring		■		
Application: Surface grinding for refining the surface		■		

Note: With POLIFAN flap discs, grit that is one grade coarser can be selected in order to achieve the same surface as with fibre discs.

Shape selection

Shape	Application
Flat type PFF	Larger grinding area for surface grinding. Optimum exploitation of the abrasive flaps at a contact angle of 0–15°.
Conical type PFC	Narrower grinding area for work on weld seams, chamfering and deburring. Optimum exploitation of the abrasive flaps at a contact angle of 10-25°.
Radial type PFR (CURVE)	Specialist for work on fillet welds. After the circumference has worn down, it can still be used as a conventional flap disc.

POLIFAN flap discs
Highlights from the PFERD range



POLIFAN-POWER

For discerning users, the high-performance POLIFAN Z SG POWER flap disc is the first choice worldwide for the machining of steel. The versatile POLIFAN flap disc offers an optimal combination of an outstanding tool life and an extremely high stock removal rate.

Advantages:
- Fast work progress and maximum efficiency thanks to the aggressive stock removal rate.
- Maximum aggressiveness over the entire tool life.
- Fewer tool changes due to the outstanding tool life.

For more information please see page 35.



POLIFAN-STRONG

Users who rely on top performance choose the innovative POLIFAN STRONG flap disc. It noticeably surpasses conventional flap discs and redefines the highest levels of efficiency. Thanks to its patented and unique design, it achieves an unsurpassed stock removal rate. It also has an astonishingly longer tool life than conventional flap discs.

Advantages:
- Fast grinding through constant grinding aggressiveness down to the last abrasive grit.
- Ultimate economic efficiency thanks to maximum stock removal per time unit and less wear on discs.
- Extremely long tool life.

For more information please see page 38–39.



POLIFAN-CURVE

The patented flap disc POLIFAN-CURVE has been specially developed for work on fillet welds. It is the only flap disc in the world that has flaps on both the grinding side and on the rear side, as well as on the radius.

Advantages:
- High stock removal rate ensures fast work progress and therefore significant wage cost savings.
- Precise and optimum grinding of the fillet weld geometry.
- Outstanding tool life when working on fillet welds.

For more information please see page 40–41.







A PSF STEELOX ★★☆☆

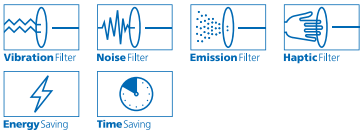
POLIFAN flap disc with high stock removal rate and long tool life.



Advantages:
- Fast work progress and high economic efficiency thanks to the high stock removal rate.
- Long tool life.
- Also ideal for cordless angle grinders.

Abrasive:
Aluminium oxide A

PFERDVALUE:



Materials that can be worked:
steel, stainless steel (INOX)

Applications:
surface grinding, weld dressing

D [mm]	Grit size 40	60	80	120	H [mm]	Max. RPM		Description
	EAN 4007220							
Flat type PFF								
115	512388	512395	512401	512418	22.23	13,300	10	PFF 115 A ... PSF STEELOX
125	512425	512432	512449	512456	22.23	12,200	10	PFF 125 A ... PSF STEELOX
180	512463	-	-	-	22.23	8,500	10	PFF 180 A ... PSF STEELOX
Conical type PFC								
115	444559	444566	444573	444580	22.23	13,300	10	PFC 115 A ... PSF STEELOX
125	444603	444610	444627	444634	22.23	12,200	10	PFC 125 A ... PSF STEELOX
180	444689	444696	-	-	22.23	8,500	10	PFC 180 A ... PSF STEELOX

Z PSF STEELOX ★★☆☆

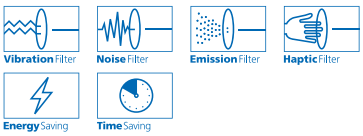
POLIFAN flap disc with aggressive stock removal rate and long tool life.



Advantages:
- Fast work progress and high economic efficiency thanks to the aggressive stock removal rate.
- Long tool life.
- Also suitable for low-power angle grinders.

Abrasive:
Zirconia alumina Z

PFERDVALUE:



Materials that can be worked:
steel, stainless steel (INOX)

Applications:
surface grinding, weld dressing, chamfering, deburring

D [mm]	Grit size 40	60	80	120	H [mm]	Max. RPM		Description
	EAN 4007220							
Flat type PFF								
100	750117	750124	750131	-	16.0	15,300	10	PFF 100 Z ... PSF STEELOX/16,0
115	512487	512494	512500	-	22.23	13,300	10	PFF 115 Z ... PSF STEELOX
125	512517	512524	512531	-	22.23	12,200	10	PFF 125 Z ... PSF STEELOX
180	512548	512555	-	-	22.23	8,500	10	PFF 180 Z ... PSF STEELOX
Conical type PFC								
100	953273	953280	953297	953303	16.0	15,300	10	PFC 100 Z ... PSF STEELOX/16,0
115	377352	444597	377369	934203	22.23	13,300	10	PFC 115 Z ... PSF STEELOX
125	377345	444078	377338	934210	22.23	12,200	10	PFC 125 Z ... PSF STEELOX
150	805923	805930	-	-	22.23	10,200	10	PFC 150 Z ... PSF STEELOX
180	377321	444085	934227	934234	22.23	8,500	10	PFC 180 Z ... PSF STEELOX

POLIFAN flap discs
Performance Line SG ★★★☆



A SG STEELOX ★★★☆

POLIFAN flap disc with high stock removal rate and very long tool life.

Advantages:
- Fast work progress and high economic efficiency thanks to the high stock removal rate.
- Fewer tool changes due to the very long tool life.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
surface grinding, weld dressing

Abrasive:
Aluminium oxide A

PFERDVALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving

D [mm]	Grit size 40	60	80	120	H [mm]	Max. RPM		Description
	EAN 4007220							
Flat type PFF								
100	262719	262733	262740	262757	16.0	15,300	10	PFF 100 A ... SG STEELOX/16,0
115	167496	167526	167557	167588	22.23	13,300	10	PFF 115 A ... SG STEELOX
125	167502	167533	167564	167595	22.23	12,200	10	PFF 125 A ... SG STEELOX
180	167519	167540	167571	167601	22.23	8,500	10	PFF 180 A ... SG STEELOX
Conical type PFC								
115	167809	167830	167861	167892	22.23	13,300	10	PFC 115 A ... SG STEELOX
125	167816	167847	167878	167908	22.23	12,200	10	PFC 125 A ... SG STEELOX
180	167823	167854	167885	167915	22.23	8,500	10	PFC 180 A ... SG STEELOX



A-COOL SG INOX + ALU ★★★☆

POLIFAN flap disc with particularly cool grinding on materials with poor thermal conduction such as stainless steel (INOX) and aluminium.

Advantages:
- Less heat build-up in the workpiece compared with other flap discs.
- The active grinding abrasive coating prevents clogging, for example on soft aluminium.

Materials that can be worked:
stainless steel (INOX), aluminium, other non-ferrous metals

Applications:
surface grinding, weld dressing, chamfering, deburring

Abrasive:
Aluminium oxide A with active grinding, cooling coating (COOL)

Recommendations for use:
- Use only grit sizes 40 and 60 for aluminium.

PFERDVALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving

D [mm]	Grit size 40	60	80	H [mm]	Max. RPM		Description
	EAN 4007220						
Flat type PFF							
100	262764	262771	262788	16.0	15,300	10	PFF 100 A-COOL ... SG INOX+ALU/16,0
115	222737	222744	222751	22.23	13,300	10	PFF 115 A-COOL ... SG INOX+ALU
125	232910	232934	232958	22.23	12,200	10	PFF 125 A-COOL ... SG INOX+ALU
180	222768	232989	233009	22.23	8,500	10	PFF 180 A-COOL ... SG INOX+ALU
Conical type PFC							
115	232880	232897	232903	22.23	13,300	10	PFC 115 A-COOL ... SG INOX+ALU
125	232927	232941	232965	22.23	12,200	10	PFC 125 A-COOL ... SG INOX+ALU
180	232972	232996	233016	22.23	8,500	10	PFC 180 A-COOL ... SG INOX+ALU

Z SG POWER STEELOX ★★★☆



The flap disc POLIFAN Z SG POWER stands out due to its aggressive stock removal rate and excellent tool life while achieving the highest level of efficiency. It is the best conventional flap disc for steel.

Advantages:
- Fast work progress and maximum economic efficiency thanks to the aggressive stock removal rate.
- Maximum aggressiveness over the entire tool life.
- Fewer tool changes due to the excellent tool life.

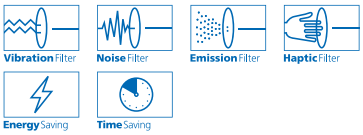
Materials that can be worked:
steel, stainless steel (INOX)

Applications:
weld dressing, chamfering, deburring

Abrasive:
Zirconia alumina Z

Recommendations for use:
- Also suitable for surface grinding on steel.

PFERDVALUE:



D [mm]	Grit size 40	60	80	120	H [mm]	Max. RPM		Description
	EAN 4007220							
Flat type PFF								
115	167618	167649	-	-	22.23	13,300	10	PFF 115 Z ... SG POWER STEELOX
125	167625	167656	-	-	22.23	12,200	10	PFF 125 Z ... SG POWER STEELOX
180	167632	167663	-	-	22.23	8,500	10	PFF 180 Z ... SG POWER STEELOX
Conical type PFC								
115	167922	167953	934241	934258	22.23	13,300	10	PFC 115 Z ... SG POWER STEELOX
125	167939	167960	934265	934272	22.23	12,200	10	PFC 125 Z ... SG POWER STEELOX
150	030363	030394	-	-	22.23	10,200	10	PFC 150 Z ... SG POWER STEELOX
180	167946	167977	-	-	22.23	8,500	10	PFC 180 Z ... SG POWER STEELOX





POLIFAN flap discs
Performance Line SG ★★★☆



CO-COOL SG STEELOX ★★★☆

POLIFAN flap disc with particularly cool grinding for materials that are difficult to machine such as high-alloy and rust-resistant steel, nickel-based alloys or titanium alloys.

Advantages:
- The self-sharpening action of the ceramic oxide grain guarantees optimal results, even on materials that are difficult to machine.
- Less heat build-up in the workpiece compared with other flap discs.

Materials that can be worked:
steel, mill scale, stainless steel (INOX), nickel-based alloys (e.g. Inconel and Hastelloy), hard aluminium alloys

Applications:
surface grinding, weld dressing, chamfering, deburring

Abrasive:
Ceramic oxide grain CO with active grinding, cooling coating (COOL)

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	Grit size 40	Grit size 60	H [mm]	Max. RPM		Description
	EAN 4007220					
Flat type PFF						
115	725436	793145	22.23	13,300	10	PFF 115 CO-COOL ... SG STEELOX
125	725450	793152	22.23	12,200	10	PFF 125 CO-COOL ... SG STEELOX
180	725474	-	22.23	8,500	10	PFF 180 CO-COOL ... SG STEELOX
Conical type PFC						
115	725443	793169	22.23	13,300	10	PFC 115 CO-COOL ... SG STEELOX
125	725467	793176	22.23	12,200	10	PFC 125 CO-COOL ... SG STEELOX
180	725481	-	22.23	8,500	10	PFC 180 CO-COOL ... SG STEELOX



You can find POLIVLIES flap discs for fine grinding in catalogue section 4 “Fine grinding and polishing tools”.



CO-FREEZE SG INOX ★★★☆



POLIFAN flap disc specifically developed for stainless steel (INOX) with ultra-cool grinding. Due to the ceramic oxide grain CO with active grinding and cooling special coating (FREEZE), there is no heat discolouration (even in thermally unfavourable conditions), so no reworking is required.



Advantages:
- The FREEZE coating significantly reduces heat build-up in the workpiece compared with standard flap discs.
- Fast work progress and high economic efficiency thanks to the aggressive stock removal rate.
- Maximum aggressiveness over the entire tool life.
- Fewer tool changes due to the excellent tool life.
- The usual flying sparks are minimized. Damage to stainless steel workpieces from flying glowing sparks is therefore almost entirely ruled out.

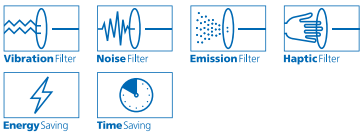
Materials that can be worked:
stainless steel (INOX), nickel-based alloys (e.g. Inconel and Hastelloy)

Applications:
surface grinding, weld dressing

Abrasive:
Ceramic oxide grain CO with active grinding, cooling special coating (FREEZE)

Recommendations for use:
- Even during the first use of the POLIFAN CO-FREEZE SG INOX, the flaps exhibit an exceptional wear pattern after just a few seconds. The highly effective fillers form a shiny cooling film on the flaps (no "vitrification"). This provides the basis for ultra-cool grinding.

PFERDVALUE:



D [mm]	Grit size 36	50	80	H [mm]	Max. RPM		Description
	EAN 4007220						
Flat type PFF							
115	104040	104057	104064	22.23	13,300	10	PFF 115 CO-FREEZE ... SG INOX
125	104071	104088	104095	22.23	12,200	10	PFF 125 CO-FREEZE ... SG INOX
Conical type PFC							
115	104101	104118	104125	22.23	13,300	10	PFC 115 CO-FREEZE ... SG INOX
125	104132	104149	104156	22.23	12,200	10	PFC 125 CO-FREEZE ... SG INOX
180	104163	104170	-	22.23	8,500	10	PFC 180 CO-FREEZE ... SG INOX

CO-FREEZE SG INOX flap disc

Typical wear pattern with the characteristic shiny cooling film (no "vitrification").



Optimum results: no blue discolouration thanks to low thermal load.



Flap disc with conventional abrasive belt

Heat discolouration/oxidation due to high heat build-up. Subsequent fine grinding is required, otherwise there is a high risk of corrosion.

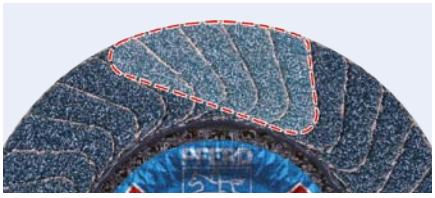


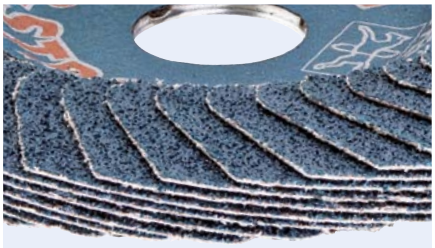
POLIFAN-STRONG STEEL

The innovative POLIFAN-STRONG flap disc is a unique tool with a particularly high performance level. Due to its patented design, it offers significantly higher efficiency compared to conventional flap discs.

Advantages:

- Fast grinding through constant grinding aggressiveness down to the last abrasive grit.
- Ultimate economic efficiency thanks to maximum stock removal per time unit and less wear on discs.
- Extremely long tool life.





Long, compactly arranged flaps



Z SGP STRONG STEEL ★★★★

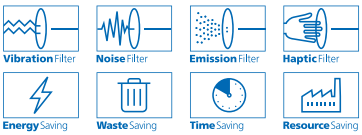
Materials that can be worked:
steel

Applications:
weld dressing, chamfering, deburring

Abrasive:
Zirconia alumina Z

Recommendations for use:
- Grit size 36 is ideal for a high stock removal rate, e.g. during work on weld seams.
- Grit size 50 is ideal for work on edges, e.g. chamfering or for producing a fine finish.

PFERDVALUE:

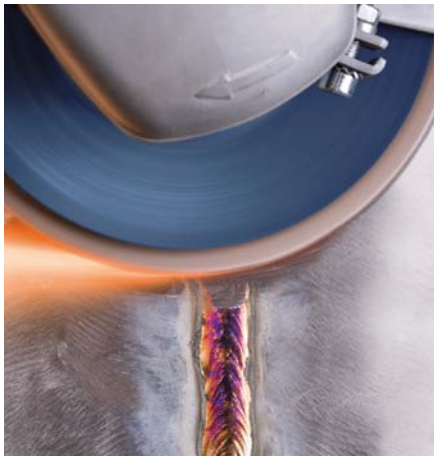


D [mm]	Grit size 36	Grit size 50	H [mm]	Max. RPM		Description
	EAN 4007220					
Conical type PFC						
115	777862	777879	22.23	13,300	10	PFC 115 Z ... SGP STRONG STEEL
125	777886	777893	22.23	12,200	10	PFC 125 Z ... SGP STRONG STEEL
180	827468	827482	22.23	8,500	10	PFC 180 Z ... SGP STRONG STEEL



POLIFAN-STRONG INOX

Special POLIFAN flap disc combining the patented STRONG design and its long, compact flaps with an innovative abrasive. Due to the ceramic oxide grain CO with active grinding and cooling special coating (FREEZE), there is no heat discolouration (even in thermally unfavourable conditions), so no reworking is required.



Advantages:

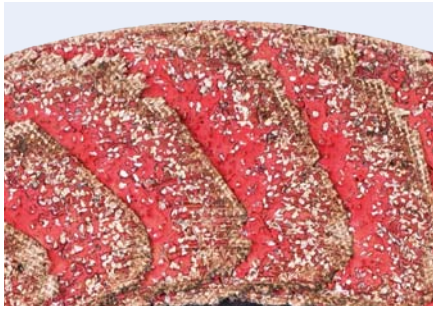
- The self-sharpening action of the ceramic oxide grain, together with the active grinding FREEZE special coating, enables ultra-cool grinding and minimizes heat build-up on materials which do not conduct heat well, such as stainless steel (INOX).
- The usual flying sparks are minimized. Damage to stainless steel workpieces from flying glowing sparks is therefore almost entirely ruled out.

Special features:

Even during the first use of the POLIFAN-STRONG INOX, the flaps exhibit an exceptional wear pattern after just a few seconds. The highly effective fillers form a shiny cooling film on the flaps (no "vitrification"). This provides the basis for ultra-cool grinding.

POLIFAN-STRONG INOX flap disc

Typical wear pattern with the characteristic shiny cooling film (no "vitrification").



Optimum results: no blue discolouration thanks to low thermal load.



Conventional flap disc

Heat discolouration/oxidation due to high heat build-up. Subsequent fine grinding is required, otherwise there is a high risk of corrosion.



CO-FREEZE SGP STRONG INOX ★★★★

Materials that can be worked:
stainless steel (INOX), nickel-based alloys (e.g. Inconel and Hastelloy), cobalt-based alloys

Applications:
surface grinding, weld dressing

Abrasive:
Ceramic oxide grain CO with active grinding, cooling special coating (FREEZE)

Recommendations for use:
- Grit size 36 is ideal for a high stock removal rate, e.g. during work on weld seams.
- Grit size 50 is ideal for producing a fine finish.

PFERDVALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter
Energy Saving · Waste Saving · Time Saving · Resource Saving



D [mm]	Grit size 36	Grit size 50	H [mm]	Max. RPM		Description
	EAN 4007220					
Conical type PFC						
115	835296	835302	22.23	13,300	10	PFC 115 CO-FREEZE ... SGP STRONG INOX
125	835319	835326	22.23	12,200	10	PFC 125 CO-FREEZE ... SGP STRONG INOX



POLIFAN-CURVE

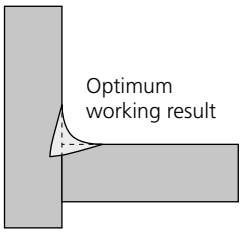
The patented flap disc POLIFAN-CURVE has been specially developed for work on fillet welds. It is the only flap disc in the world that has flaps on both the grinding side and on the rear side, as well as on the radius.

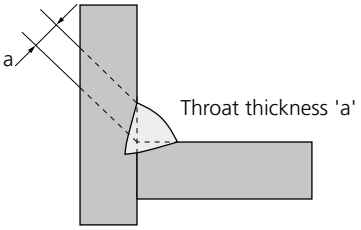
Advantages:

- High stock removal rate ensures fast work progress and therefore significant wage cost savings.
- Outstanding tool life when working on fillet welds.
- Precise and optimum grinding of the fillet weld geometry.

Recommendations for use:

- Type M:
  For fillet weld radii > 5 mm or throat thickness ≤ 6 mm with 90° joint, width at the radius: 11 mm or 14 mm with diameter 150 mm.
- Type L:
  For fillet weld radii > 8 mm or throat thickness > 6 mm with 90° joint, width at the radius: 14 mm or 16 mm with diameter 150/180 mm.







Z SGP CURVE STEELOX ★★★★

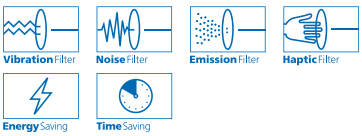
High-performance flap disc for maximum stock removal on steel and stainless steel (INOX).

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
work on fillet welds, weld dressing, chamfering, deburring

Abrasive:
Zirconia alumina Z

PFERDVALUE:



D [mm]	Fillet weld radius [mm]	Grit size 40 EAN 4007220	Width	H [mm]	Max. RPM		Description
Radial type PFR							
115	> 5	821671	M (11 mm)	22.23	13,300	10	PFR 115-M Z 40 SGP CURVE STEELOX
	> 8	821695	L (14 mm)	22.23	13,300	10	PFR 115-L Z 40 SGP CURVE STEELOX
125	> 5	790151	M (11 mm)	22.23	12,200	10	PFR 125-M Z 40 SGP CURVE STEELOX
	> 8	790175	L (14 mm)	22.23	12,200	10	PFR 125-L Z 40 SGP CURVE STEELOX
150	> 5	844939	M (14 mm)	22.23	10,200	10	PFR 150-M Z 40 SGP CURVE STEELOX
	> 8	844946	L (16 mm)	22.23	10,200	10	PFR 150-L Z 40 SGP CURVE STEELOX
180	> 8	881248	L (16 mm)	22.23	8,500	10	PFR 180-L Z 40 SGP CURVE STEELOX



CO SGP CURVE STEELOX ★★★★



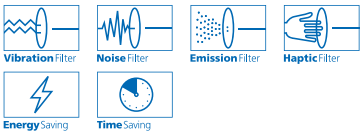
High-performance flap disc for achieving fine finishes on steel and stainless steel (INOX).

Materials that can be worked:
stainless steel (INOX), steel

Applications:
work on fillet welds, weld dressing, chamfering, deburring

Abrasive:
Ceramic oxide grain CO with active grinding, cooling coating

PFERDVALUE:



D [mm]	Fillet weld radius [mm]	Grit size 60 EAN 4007220	Width	H [mm]	Max. RPM		Description
Radial type PFR							
115	> 5	827444	M (11 mm)	22.23	13,300	10	PFR 115-M CO 60 SGP CURVE STEELOX
	> 8	827451	L (14 mm)	22.23	13,300	10	PFR 115-L CO 60 SGP CURVE STEELOX
125	> 5	790168	M (11 mm)	22.23	12,200	10	PFR 125-M CO 60 SGP CURVE STEELOX
	> 8	790182	L (14 mm)	22.23	12,200	10	PFR 125-L CO 60 SGP CURVE STEELOX

A SGP CURVE ALU ★★★★



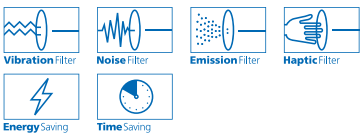
Special flap disc for work on fillet welds on aluminium.

Materials that can be worked:
aluminium, other non-ferrous metals

Applications:
work on fillet welds, weld dressing, chamfering, deburring

Abrasive:
Aluminium oxide A with active grinding, cooling coating

PFERDVALUE:



D [mm]	Fillet weld radius [mm]	Grit size 40 EAN 4007220	Width	H [mm]	Max. RPM		Description
Radial type PFR							
115	> 8	851968	L (14 mm)	22.23	13,300	10	PFR 115-L A 40 SGP CURVE ALU
125	> 8	851975	L (14 mm)	22.23	12,200	10	PFR 125-L A 40 SGP CURVE ALU





CC-GRIND grinding discs

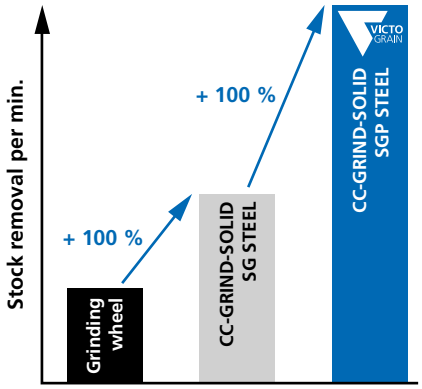


CC-GRIND-SOLID

With the CC-GRIND-SOLID, PFERD offers a modern, high-performance and ergonomic alternative to conventional grinding wheels.

Advantages:
- The fastest work progress due to highly aggressive abrasive.
- Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50 %, dust by 80 %.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a conventional grinding wheel.
- Clearly superior surface compared to conventional grinding wheels.

For more information please see page 45 (SG ★★★☆) and 49 (SGP ★★★★).







CC-GRIND-FLEX

The CC-GRIND-FLEX is the semi-flexible addition to the CC-GRIND-SOLID. It was specially developed for work on weld seams. Butt welds can be smoothed completely flat. This gets rid of any dents and bumps that are visible, particularly after painting or varnishing.

Advantages:
- The fastest work progress due to highly aggressive abrasive.
- Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50 %, dust by 80 %.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a conventional grinding wheel.
- Complete smoothing of butt welds – without dents or bumps.
- Clearly superior surface compared to conventional grinding wheels.

For more information please see page 46 (SG ★★★☆) and 50 (SGP ★★★★).



CC-GRIND-STRONG

The CC-GRIND-STRONG is the stepping stone between the classic conventional grinding wheel (the backing pad also grinds) and the modern alternative CC-GRIND-SOLID (fast, ergonomic grinding).

Advantages:
- Three times the tool life compared to CC-GRIND-SOLID SG STEEL due to backing pad that also grinds and three abrasive layers that can be worked through one by one.
- The fastest work progress due to highly aggressive abrasive.
- Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50 %, dust by 70 %.
- Clearly superior surface compared to conventional grinding wheels.

For more information please see page 47.





Product group selection

Application	Product line	Steel (STEEL)			Stainless steel (INOX)
		...-SOLID	...-FLEX	...-STRONG	...-SOLID
■ Surface grinding ■ Levelling ■ Work on weld seams ■ Chamfering ■ Deburring	Performance Line SG ★★★☆	 CC-GRIND-SOLID SG STEEL Page 45		 CC-GRIND-STRONG SG STEEL Page 47	 CC-GRIND-SOLID SG INOX Page 45
	Special Line SGP ★★★★	 CC-GRIND-SOLID SGP STEEL Page 49			 CC-GRIND-SOLID SGP INOX Page 49
■ Levelling butt welds	Performance Line SG ★★★☆		 CC-GRIND-FLEX SG STEEL Page 46		
	Special Line SGP ★★★★		 CC-GRIND-FLEX SGP STEEL Page 50		


The CC-GRIND-SOLID-DIAMOND can be found in catalogue section 5.


The CERAMIC COMFORT grinding wheel can be found on page 56.



CC-GRIND-SOLID SG STEEL ★★★☆

Materials that can be worked:
steel

Applications:
surface grinding, weld dressing, chamfering, deburring

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving



D [mm]	EAN 4007220	H [mm]	Max. RPM		Description
SOLID					
100	919682	16.0	15,300	10	CC-GRIND-SOLID 100 SG STEEL/16,0
115	887059	22.23	13,300	10	CC-GRIND-SOLID 115 SG STEEL
125	887073	22.23	12,200	10	CC-GRIND-SOLID 125 SG STEEL
150	952894	22.23	10,200	10	CC-GRIND-SOLID 150 SG STEEL
180	887080	22.23	8,500	10	CC-GRIND-SOLID 180 SG STEEL

CC-GRIND-SOLID SG INOX ★★★☆

Materials that can be worked:
stainless steel (INOX)

Applications:
weld dressing, chamfering, deburring

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving



D [mm]	EAN 4007220	H [mm]	Max. RPM		Description
SOLID					
115	900895	22.23	13,300	10	CC-GRIND-SOLID 115 SG INOX
125	900901	22.23	12,200	10	CC-GRIND-SOLID 125 SG INOX
180	900918	22.23	8,500	10	CC-GRIND-SOLID 180 SG INOX

CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle and thus maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.



Suitable for angle grinders	EAN 4007220		Description
Metric			
100 mm, M10 spindle	932209	1	SFS CC-GRIND 100 M10
115 / 125 mm, M14 spindle	887578	1	SFS CC-GRIND 115/125 M14
150 / 180 mm, M14 spindle	887585	1	SFS CC-GRIND 150/180 M14
Imperial			
115 / 125 mm, 5/8"-11 spindle	887592	1	SFS CC-GRIND 115/125 5/8"
150 / 180 mm, 5/8"-11 spindle	887608	1	SFS CC-GRIND 150/180 5/8"

CC-GRIND grinding discs
Performance Line SG ★★★☆



CC-GRIND-FLEX SG STEEL ★★★☆

Materials that can be worked:
steel

Applications:
weld dressing, surface grinding

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Time Saving

D [mm]	Grit size FINE	Grit size COARSE	H [mm]	Max. RPM		Description
	EAN 4007220					
FLEX						
115	032800	032824	22.23	13,300	10	CC-GRIND-FLEX 115 ... SG STEEL
125	032817	032831	22.23	12,200	10	CC-GRIND-FLEX 125 ... SG STEEL



CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle and thus maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.

Suitable for angle grinders	EAN 4007220		Description
Metric			
115 / 125 mm, M14 spindle	887578	1	SFS CC-GRIND 115/125 M14
Imperial			
115 / 125 mm, 5/8"-11 spindle	887592	1	SFS CC-GRIND 115/125 5/8"



CC-GRIND-STRONG

The CC-GRIND-STRONG is the stepping stone between the classic grinding wheel (the backing pad also grinds) and the modern alternative CC-GRIND-SOLID (fast, ergonomic grinding).

Advantages:

- Three times the tool life compared to CC-GRIND-SOLID SG STEEL due to backing pad that also grinds and three abrasive layers that can be worked through one by one.
- The fastest work progress due to highly aggressive abrasive.
- Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50 %, dust by 70 %.
- Clearly superior surface compared to conventional grinding wheels.



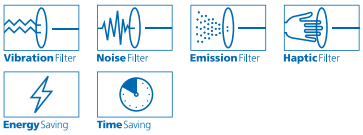


CC-GRIND-STRONG SG STEEL ★★★☆

Materials that can be worked:
steel, scale

Applications:
surface grinding, weld dressing, chamfering, deburring

PFERDVALUE:





D [mm]	EAN 4007220	H [mm]	Max. RPM		Description
STRONG					
115	104477	22.23	13,300	10	CC-GRIND-STRONG 115 SG STEEL
125	104484	22.23	12,200	10	CC-GRIND-STRONG 125 SG STEEL



CC-GRIND grinding discs
Special Line SGP ★★★★

High-performance tools with VICTOGRAIN abrasive grain

VICTOGRAIN products are some of the most effective grinding tools in the world.
PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

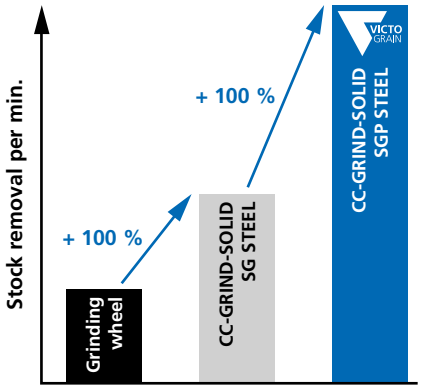
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

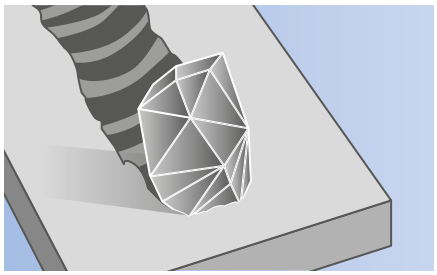
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides.
This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

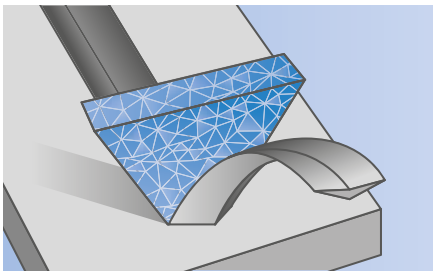
The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

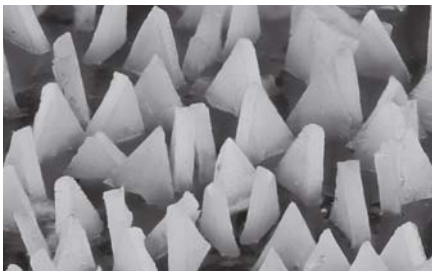
By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.

The **VICTO**GRAIN products, CC-GRIND-SOLID SGP and CC-GRIND-FLEX SGP, unite the best available abrasive with innovative, state-of-the-art PFERD tool designs:
- Providing the ultimate in aggressive performance for super-fast working.
- Although the **VICTO**GRAIN tools only come with a single coating of abrasive grit, they offer an outstanding tool life which exceeds that of conventional grinding wheels and many flap discs.
- Significantly more ergonomic than a conventional grinding wheel: noise and vibrations are reduced by 50 %, dust by 80 %.
- The layered structure of the glass fibre backing pad guarantees that it is just as durable and safe to use as a conventional grinding wheel.
- Clearly superior surface compared to conventional grinding wheels.




Conventional abrasive grit


VICTOGRAIN abrasive grit


The **VICTO**GRAIN abrasive grit is optimally aligned



CC-GRIND-SOLID SGP STEEL ★★★★

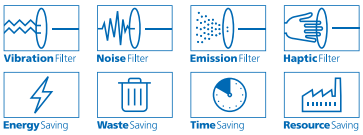
Materials that can be worked:
steel

Applications:
surface grinding, weld dressing, chamfering, deburring

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:





D [mm]	EAN 4007220	H [mm]	Max. RPM		Description
SOLID					
100	104965	16.0	15,300	10	CC-GRIND-SOLID 100 SGP STEEL/16,0
115	104972	22.23	13,300	10	CC-GRIND-SOLID 115 SGP STEEL
125	104989	22.23	12,200	10	CC-GRIND-SOLID 125 SGP STEEL
150	104996	22.23	10,200	10	CC-GRIND-SOLID 150 SGP STEEL
180	105009	22.23	8,500	10	CC-GRIND-SOLID 180 SGP STEEL

CC-GRIND-SOLID SGP INOX ★★★★

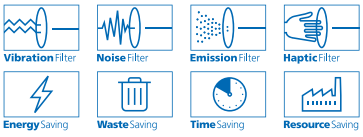
Materials that can be worked:
stainless steel (INOX)

Applications:
weld dressing, chamfering, deburring

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:





D [mm]	EAN 4007220	H [mm]	Max. RPM		Description
SOLID					
115	105016	22.23	13,300	10	CC-GRIND-SOLID 115 SGP INOX
125	105023	22.23	12,200	10	CC-GRIND-SOLID 125 SGP INOX
180	105030	22.23	8,500	10	CC-GRIND-SOLID 180 SGP INOX

CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle and thus maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.



Suitable for angle grinders	EAN 4007220		Description
Metric			
100 mm, M10 spindle	932209	1	SFS CC-GRIND 100 M10
115 / 125 mm, M14 spindle	887578	1	SFS CC-GRIND 115/125 M14
150 / 180 mm, M14 spindle	887585	1	SFS CC-GRIND 150/180 M14
Imperial			
115 / 125 mm, 5/8"-11 spindle	887592	1	SFS CC-GRIND 115/125 5/8"
150 / 180 mm, 5/8"-11 spindle	887608	1	SFS CC-GRIND 150/180 5/8"

CC-GRIND grinding discs
Special Line SGP ★★★★



CC-GRIND-FLEX SGP STEEL ★★★★

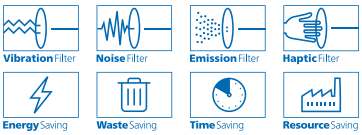
Materials that can be worked:
steel

Applications:
weld dressing, surface grinding

Recommendations for use:
- For optimum results, use with a flat contact angle and the SFS CC-GRIND clamping flange set.
- Only use the face of the disc, not suitable for peripheral grinding.

Ordering notes:
- Please order clamping flange set SFS separately.

PFERDVALUE:



D [mm]	Grit size COARSE EAN 4007220	H [mm]	Max. RPM		Description
FLEX					
115	105047	22.23	13,300	10	CC-GRIND-FLEX 115 COARSE SGP STEEL
125	105054	22.23	12,200	10	CC-GRIND-FLEX 125 COARSE SGP STEEL



CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND-SOLID and -FLEX in the angle grinder protective guard. This allows a very flat contact angle and thus maximum efficiency.

The black backing pad is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.

Suitable for angle grinders	EAN 4007220		Description
Metric			
115 / 125 mm, M14 spindle	887578	1	SFS CC-GRIND 115/125 M14
Imperial			
115 / 125 mm, 5/8"-11 spindle	887592	1	SFS CC-GRIND 115/125 5/8"



PFERD

Grinding wheels



6

Product group selection

Application	Product line	Steel (STEEL)			Stainless steel (INOX)		Aluminium (ALU)	Cast iron (CAST)
■ Surface grinding ■ Work on weld seams ■ Chamfering ■ Deburring ■ Fillet weld grinding ■ Root seam processing ■ Grouting	Universal Line PSF ★★☆☆	 PSF STEEL Page 53	 PSF STEELOX Page 53		 PSF STEELOX Page 53			
	Performance Line SG ★★★☆	 SG STEEL Page 54	 CERAMIC SG COMFORT STEEL Page 56		 SG INOX Page 55		 SG ALU Page 55	 Foundry grinding wheels from page 60
	Special Line SGP ★★★★	 CERAMIC SGP STEELOX Page 59	 ZIRKON SGP STEEL Page 58	 WHISPER SGP STEELOX Page 57	 CERAMIC SGP STEELOX Page 59	 WHISPER SGP STEELOX Page 57		


CC-GRIND grinding discs can be found on page 44.


The DUODISC combination wheels for cutting and deburring can be found on page 15.


The DUODISC combination wheels for cutting and deburring grey/nodular cast iron can be found on page 25.


Cup wheels can be found on page 62.


Snagging wheels can be found on page 63.

CERAMIC SGP STEELOX grinding wheel

High-performance grinding wheel with ceramic oxide grain for quick and economical grinding.

Advantages:
- Ultimate aggressiveness and outstanding tool life due to the self-sharpening effect of the high-performance abrasive ceramic oxide grain in connection with a special bond technology.
- Labour cost savings due to much faster work progress compared to conventional grinding wheels.
- Labour-saving work.

For more information please see page 59.



CERAMIC SG COMFORT STEEL grinding wheel

The CERAMIC SG COMFORT is a hybrid grinding wheel for steel. It combines a layer of coated abrasives and a classic grinding wheel.

Advantages:
- Due to the combination of an abrasive layer with optimally oriented grit and a grinding wheel with a high grinding performance, the CERAMIC SG COMFORT offers very fast work progress and maximum economic efficiency
- Fewer tool changes due to very long tool life.
- No use restrictions – can also be used on the circumference.
- Significantly lower noise emissions and less vibration than with conventional grinding wheels.

For more information please see page 56.



PSF STEEL ★★☆☆

Grinding wheel for steel with high grinding performance and long tool life.

Advantages:
- Fast work progress and high economic efficiency thanks to the high grinding performance.
- Long tool life.
- Also suitable for low-power angle grinders. Soft grinding characteristics, achieves particularly high stock removal rates even at low contact pressure.

Materials that can be worked:
steel, cast iron

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Aluminium oxide A



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
100	6.3	653944	16.0	15,300	10	E 100-6 PSF STEEL/16,0
115	7.2	470510	22.23	13,300	10	E 115-7 PSF STEEL
125	7.2	471142	22.23	12,200	10	E 125-7 PSF STEEL
150	7.2	952726	22.23	10,200	10	E 150-7 PSF STEEL
180	7.2	470527	22.23	8,500	10	E 180-7 PSF STEEL
	8.3	470534	22.23	8,500	10	E 180-8 PSF STEEL
230	7.2	470541	22.23	6,600	10	E 230-7 PSF STEEL
	8.3	470558	22.23	6,600	10	E 230-8 PSF STEEL

PSF STEELOX ★★☆☆

Grinding wheel for steel and stainless steel (INOX) with high grinding performance and long tool life.

Advantages:
- Universally suitable for steel and stainless steel (INOX).
- Fast work progress and high economic efficiency thanks to the high grinding performance.
- Long tool life.
- Also suitable for low-power angle grinders. Soft grinding characteristics, achieves particularly high stock removal rates even at low contact pressure.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Aluminium oxide A

Recommendations for use:
- Widths of 4.1 and 4.6 mm are ideal for work on root seams.



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
100	6.3	643273	16.0	15,300	10	E 100-6 PSF STEELOX/16,0
115	4.1	640869	22.23	13,300	10	E 115-4,1 PSF STEELOX
	7.2	640852	22.23	13,300	10	E 115-7 PSF STEELOX
125	4.1	643068	22.23	12,200	10	E 125-4,1 PSF STEELOX
	7.2	640883	22.23	12,200	10	E 125-7 PSF STEELOX
150	4.1	807774	22.23	10,200	10	E 150-4,1 PSF STEELOX
	7.2	641002	22.23	10,200	10	E 150-7 PSF STEELOX
180	4.1	640753	22.23	8,500	10	E 180-4,1 PSF STEELOX
	4.6	807781	22.23	8,500	10	E 180-4,6 PSF STEELOX
	7.2	640999	22.23	8,500	10	E 180-7 PSF STEELOX
	8.3	470589	22.23	8,500	10	E 180-8 PSF STEELOX
230	7.2	640951	22.23	6,600	10	E 230-7 PSF STEELOX
	8.3	470602	22.23	6,600	10	E 230-8 PSF STEELOX



SG STEEL ★★★☆

Grinding wheel for steel with high grinding performance and very long tool life.

Advantages:
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Fewer tool changes due to the very long tool life.

Materials that can be worked:
steel

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Special aluminium oxide A

Recommendations for use:
- Width of 4.1 mm is ideal for work on root seams.

D [mm]	U [mm]	EAN 4007220	*	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)							
70	6.3	471067	*	10.0	21,800	10	E 70-6 SG STEEL/10,0
76	6.3	471081	*	10.0	20,200	10	E 76-6 SG STEEL/10,0
100	4.1	471104	-	16.0	15,300	10	E 100-4,1 SG STEEL/16,0
	6.3	471111	-	16.0	15,300	10	E 100-6 SG STEEL/16,0
115	4.1	640845	-	22.23	13,300	10	E 115-4,1 SG STEEL
	7.2	468944	-	22.23	13,300	10	E 115-7 SG STEEL
125	4.1	457696	-	22.23	12,200	10	E 125-4,1 SG STEEL
	7.2	468951	-	22.23	12,200	10	E 125-7 SG STEEL
150	4.1	529225	-	22.23	10,200	10	E 150-4,1 SG STEEL
	7.2	640791	-	22.23	10,200	10	E 150-7 SG STEEL
180	4.1	478752	-	22.23	8,500	10	E 180-4,1 SG STEEL
	7.2	470145	-	22.23	8,500	10	E 180-7 SG STEEL
	8.3	470152	-	22.23	8,500	10	E 180-8 SG STEEL
230	7.2	470169	-	22.23	6,600	10	E 230-7 SG STEEL
	8.3	470176	-	22.23	6,600	10	E 230-8 SG STEEL

* Also suitable for stainless steel (INOX).



SG INOX ★★★☆

Grinding wheel for stainless steel (INOX) with high grinding performance and very long tool life.

Advantages:
- Soft grinding characteristics for cool grinding on stainless steel (INOX).
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Fewer tool changes due to the very long tool life.

Materials that can be worked:
stainless steel (INOX)

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Special aluminium oxide A

Recommendations for use:
- Widths of 4.1 and 5.2 mm are ideal for work on root seams.



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	4.1	457627	22.23	13,300	10	E 115-4,1 SG INOX
	7.2	470244	22.23	13,300	10	E 115-7 SG INOX
125	4.1	457689	22.23	12,200	10	E 125-4,1 SG INOX
	5.2	520079	22.23	12,200	10	E 125-5,2 SG INOX
	7.2	470251	22.23	12,200	10	E 125-7 SG INOX
150	7.2	332245	22.23	10,200	10	E 150-7 SG INOX
180	4.1	475287	22.23	8,500	10	E 180-4,1 SG INOX
	7.2	470398	22.23	8,500	10	E 180-7 SG INOX
	8.3	470404	22.23	8,500	10	E 180-8 SG INOX
230	7.2	470411	22.23	6,600	10	E 230-7 SG INOX
	8.3	470428	22.23	6,600	10	E 230-8 SG INOX

SG ALU ★★★☆

Grinding wheel for aluminium and other non-ferrous metals with high grinding performance and very long tool life.

Advantages:
- Operates without the grinding wheel clogging, even on soft, lubricating materials.
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Fewer tool changes due to the very long tool life.
- Contains no fillers that could leave undesirable residues on the workpiece. The surface can therefore be welded immediately.

Materials that can be worked:
aluminium, other non-ferrous metals

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Special aluminium oxide A and silicon carbide C



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.2	475393	22.23	13,300	10	E 115-7 SG ALU
125	7.2	475409	22.23	12,200	10	E 125-7 SG ALU
150	7.2	952832	22.23	10,200	10	E 150-7 SG ALU
180	7.2	475416	22.23	8,500	10	E 180-7 SG ALU
230	7.2	617793	22.23	6,600	10	E 230-7 SG ALU

CERAMIC COMFORT

The CERAMIC SG COMFORT is a hybrid grinding wheel for steel. It combines a layer of coated abrasives and a classic grinding wheel.



Advantages:

- Due to the combination of an abrasive layer with optimally arranged grit and a grinding wheel with a high grinding performance, the CERAMIC SG COMFORT offers very fast work progress and maximum economic efficiency.
- Fewer tool changes due to very long tool life.
- No use restrictions – can also be used on the circumference.
- Significantly lower noise emissions and less vibration than with conventional grinding wheels.



CERAMIC SG COMFORT STEEL ★★★☆

Materials that can be worked:
steel

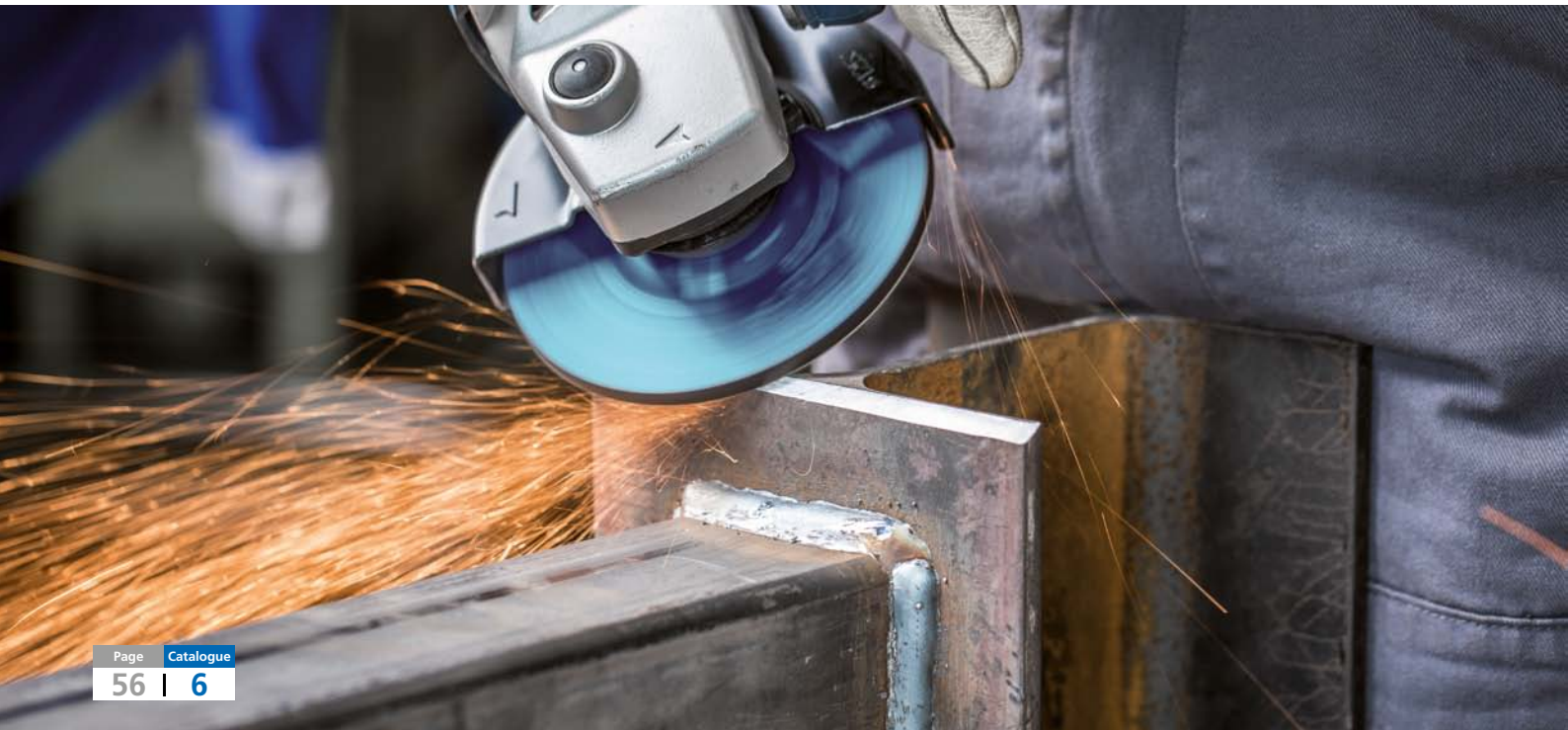
Applications:
surface grinding, weld dressing, chamfering, deburring

Abrasive:
Ceramic oxide grain CO and special aluminium oxide A

PFERDVALUE:

Vibration Filter · Noise Filter · Haptic Filter · Energy Saving · Time Saving

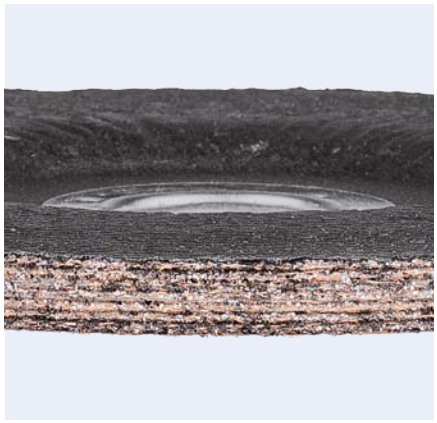
D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.6	104491	22.23	13,300	10	E 115-7 CERAMIC SG COMFORT STEEL
125	7.6	104507	22.23	12,200	10	E 125-7 CERAMIC SG COMFORT STEEL



WHISPER

Due to its patented multi-layer design, the WHISPER grinding wheel generates significantly less vibration and substantially less noise than conventional grinding wheels. The noise exposure is decreased by up to 12 dB(A), which corresponds to a reduction of more than 90 %.

Furthermore, the flexible tool structure enables soft, comfortable grinding with outstanding surface quality.



Advantages:

- Universally suitable for steel and stainless steel (INOX).
- Significantly lower noise emissions and less vibration than with conventional grinding wheels.
- Comfortable grinding.
- Problem solver for scale.

SGP WHISPER STEELOX ★★★★

Materials that can be worked:
steel, scale, stainless steel (INOX)

Applications:
surface grinding, weld dressing, work on fillet welds

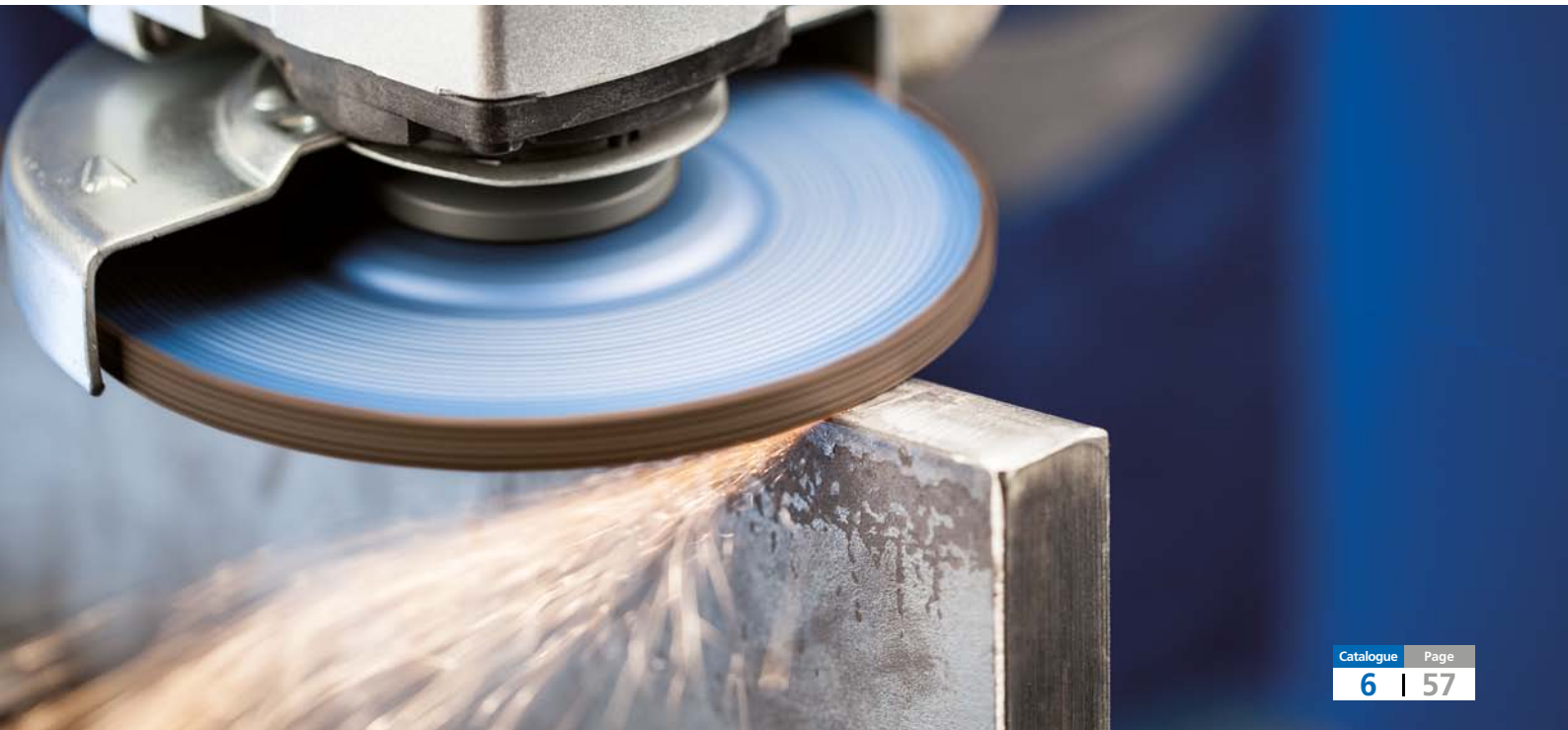
Abrasive:
Special aluminium oxide A

PFERDVALUE:

Vibration Filter | Noise Filter | Haptic Filter



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.4	827505	22.23	13,300	10	E 115-7 SGP WHISPER STEELOX
125	7.4	827512	22.23	12,200	10	E 125-7 SGP WHISPER STEELOX





ZIRKON SGP STEEL ★★★★

Zirconia alumina grinding wheel with a very good grinding performance and an excellent tool life.

Advantages:
- Very fast work progress and maximum economic efficiency thanks to the very good grinding performance.
- Fewer tool changes due to the excellent tool life.

Materials that can be worked:
steel

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Zirconia alumina Z and special aluminium oxide A

PFERDVALUE:
WasteSaving TimeSaving

D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.2	640913	22.23	13,300	10	E 115-7 ZIRKON SGP STEEL
125	7.2	640920	22.23	12,200	10	E 125-7 ZIRKON SGP STEEL
150	7.2	640784	22.23	10,200	10	E 150-7 ZIRKON SGP STEEL
180	7.2	640937	22.23	8,500	10	E 180-7 ZIRKON SGP STEEL
230	7.2	640944	22.23	6,600	10	E 230-7 ZIRKON SGP STEEL



CERAMIC

High-performance grinding wheel with ceramic oxide grain for quick and economical grinding.



Advantages:

- Ultimate aggressiveness and outstanding tool life due to the self-sharpening effect of the high-performance abrasive ceramic oxide grain in connection with a special bond technology.
- Labour cost savings due to much faster work progress compared to conventional grinding wheels.
- Labour-saving work.

CERAMIC SGP STEELOX ★★★★

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Ceramic oxide grain CO

Recommendations for use:
- Width of 4.1 mm is ideal for work on root seams.

PFERDVALUE:

HapticFilter

TimeSaving



D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	4.1	094105	22.23	13,300	10	E 115-4,1 CERAMIC SGP STEELOX
	7.2	007112	22.23	13,300	10	E 115-7 CERAMIC SGP STEELOX
125	4.1	094112	22.23	12,200	10	E 125-4,1 CERAMIC SGP STEELOX
	7.2	007129	22.23	12,200	10	E 125-7 CERAMIC SGP STEELOX
150	4.1	094136	22.23	10,200	10	E 150-4,1 CERAMIC SGP STEELOX
	7.2	068267	22.23	10,200	10	E 150-7 CERAMIC SGP STEELOX
180	4.1	094143	22.23	8,500	10	E 180-4,1 CERAMIC SGP STEELOX
	7.2	011690	22.23	8,500	10	E 180-7 CERAMIC SGP STEELOX
230	4.1	094150	22.23	6,600	10	E 230-4,1 CERAMIC SGP STEELOX
	7.2	019948	22.23	6,600	10	E 230-7 CERAMIC SGP STEELOX



Foundry grinding wheels

For heavy-duty use in foundries and fettling shops, PFERD offers particularly robust grinding wheels that guarantee the highest degree of safety and achieve top performance, even under these conditions. They are optimized for use on compressed-air turbine and high-frequency angle grinders.

PFERD offers you individual advice regarding all aspects of machining in foundries and fettling shops. The experienced sales representatives and technical advisers will be happy to assist you. Please contact us for further details.





SG CAST + ALU ★★★☆

Grinding wheel optimised for use in foundries and fettling shops for cast iron and aluminium with high grinding performance and very long tool life.

Advantages:
- Very fast work progress and high economic efficiency thanks to the high grinding performance.
- Very long tool life.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS), casting scale with sand contamination and metal contamination, hard aluminium alloys

Applications:
surface grinding, chamfering, deburring

Abrasive:
Special aluminium oxide A and silicon carbide C

D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
180	7.2	520208	22.23	8,500	10	E 180-7 SG CAST+ALU
230	7.2	520215	22.23	6,600	10	E 230-7 SG CAST+ALU



SG CAST + STONE ★★★☆

Grinding wheel optimised for use in foundries and fettling shops for cast iron (also: casting scale) and hard aluminium alloys with high grinding performance and very long tool life.

Advantages:
- Very fast work progress and high economic efficiency thanks to the high grinding performance.
- Very long tool life.

Materials that can be worked:
cast iron, casting scale, concrete, hard aluminium alloys

Applications:
surface grinding, chamfering, deburring

Abrasive:
Silicon carbide C

D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.2	471135	22.23	13,300	10	E 115-7 SG CAST+STONE
125	7.2	643303	22.23	12,200	10	E 125-7 SG CAST+STONE
180	7.2	471173	22.23	8,500	10	E 180-7 SG CAST+STONE
230	7.2	329290	22.23	6,600	10	E 230-7 SG CAST+STONE

ZIRKON SG CAST + STEEL ★★★☆

Zirconia alumina grinding wheel optimised for use in foundries and fettling shops for cast iron and steel with excellent grinding performance and very long tool life.



Advantages:
- Very fast work progress and high economic efficiency thanks to the high grinding performance.
- Very long tool life.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS), steel

Applications:
surface grinding, weld dressing, work on fillet welds, grouting, chamfering, deburring

Abrasive:
Zirconia alumina Z and special aluminium oxide A

Recommendations for use:
- Widths of 4.1 and 5.2 mm are ideal for work on root seams.

D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
115	7.2	802359	22.23	13,300	10	E 115-7 ZIRKON SG CAST+STEEL
125	7.2	802380	22.23	12,200	10	E 125-7 ZIRKON SG CAST+STEEL
180	7.2	470435	22.23	8,500	10	E 180-7 ZIRKON SG CAST+STEEL
	8.3	470480	22.23	8,500	10	E 180-8 ZIRKON SG CAST+STEEL
230	4.1	640760	22.23	6,600	10	E 230-4,1 ZIRKON SG CAST+STEEL
	5.2	640876	22.23	6,600	10	E 230-5,2 ZIRKON SG CAST+STEEL
	7.2	470459	22.23	6,600	10	E 230-7 ZIRKON SG CAST+STEEL
	8.3	470503	22.23	6,600	10	E 230-8 ZIRKON SG CAST+STEEL

ZIRKON SG CAST ★★★☆

Zirconia alumina grinding wheel optimised for use in foundries and fettling shops for cast iron with excellent grinding performance and tool life.



Advantages:
- The fastest work progress and high economic efficiency thanks to the outstanding grinding performance.
- Excellent tool life.

Materials that can be worked:
grey/nodular cast iron (GG/GJL, GGG/GJS), casting scale

Applications:
surface grinding, chamfering, deburring

Abrasive:
Zirconia alumina Z, special aluminium oxide A and silicon carbide C

D [mm]	U [mm]	EAN 4007220	H [mm]	Max. RPM		Description
Depressed-centre type E (shape 27)						
180	7.2	640906	22.23	8,500	10	E 180-7 ZIRKON SG CAST
	8.3	802403	22.23	8,500	10	E 180-8 ZIRKON SG CAST
230	7.2	640890	22.23	6,600	10	E 230-7 ZIRKON SG CAST
	8.3	802410	22.23	6,600	10	E 230-8 ZIRKON SG CAST



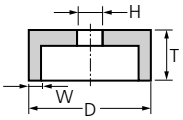
You can find the DUODISC combination wheels for cutting and deburring grey/nodular cast iron on page 25.

Cup wheels
Performance Line SG ★★★☆

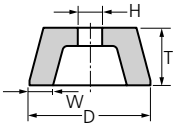
Product group selection

Application	Steel (STEEL)	Stainless steel (INOX)	Cast iron (CAST)	Stone (STONE)
Surface grinding	SG STEELOX A 16	SG STEELOX A 16	SG CAST + STONE C 16	SG CAST + STONE C 16–80
Work on weld seams			-	-
Chamfering	SG STEELOX A 24	SG STEELOX A 24	SG CAST + STONE C 24	SG CAST + STONE C 60/80
Deburring	SG STEELOX A 36/80	SG STEELOX A 36/80	SG CAST + STONE C 30	-





Form 6



Form 11

SG STEELOX ★★★☆

Cup wheel with high grinding performance and long tool life.



Advantages:
- High grinding performance.
- Long tool life.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
weld dressing, chamfering, deburring, surface grinding

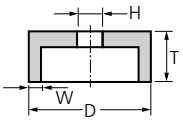
Abrasive:
Aluminium oxide A

Recommendations for use:
- Place at a slight incline to work on weld seams.

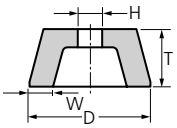
Safety notes:
- The permissible maximum operating speed is 50 m/s.

D [mm]	Grit size	EAN 4007220	H [mm]/ thread	T [mm]	W [mm]	Max. RPM		Description
Cylindrical cup wheel ETT (shape 6)								
80	36	698419	22.23	27	8	11,900	5	50 ETT 80-8 A 36 SG STEELOX
	80	164785	22.23	27	8	11,900	5	50 ETT 80-8 A 80 SG STEELOX
Conical cup wheel ETT (shape 11)								
110	16	164730	22.23	55	20	8,600	2	50 ETT 110-20 A 16 SG STEELOX
	24	803103	22.23	55	20	8,600	2	50 ETT 110-20 A 24 SG STEELOX
	36	803127	22.23	55	20	8,600	2	50 ETT 110-20 A 36 SG STEELOX
125	16	164747	M14	51	25	7,600	2	50 ETT 125-25 A 16 SG STEELOX/M14





Form 6



Form 11

SG CAST + STONE ★★★☆

Cup wheel with high grinding performance and long tool life.

Advantages:
- High grinding performance.
- Long tool life.

Materials that can be worked:
cast iron, casting scale, concrete, stone

Applications:
chamfering, deburring, surface grinding

Abrasive:
Silicon carbide C

Safety notes:
- The permissible maximum operating speed is 50 m/s.

D [mm]	Grit size	EAN 4007220	H [mm]	T [mm]	W [mm]	Max. RPM		Description
Cylindrical cup wheel ETT (shape 6)								
80	80	164822	22.23	27	8	11,900	5	50 ETT 80-8 C 80 SG CAST+STONE
Conical cup wheel ETT (shape 11)								
110	16	164808	22.23	55	20	8,600	2	50 ETT 110-20 C 16 SG CAST+STONE
	24	803134	22.23	55	20	8,600	2	50 ETT 110-20 C 24 SG CAST+STONE
	30	164815	22.23	55	20	8,600	2	50 ETT 110-20 C 30 SG CAST+STONE
	60	803141	22.23	55	20	8,600	2	50 ETT 110-20 C 60 SG CAST+STONE

SG STEEL + INOX + CAST ★★★☆

Snagging wheel with high grinding performance and long tool life for work in hard-to-reach areas.





Advantages:
- High grinding performance.
- Long tool life.

Materials that can be worked:
steel, cast steel, stainless steel (INOX), cast iron

Applications:
weld dressing, chamfering, deburring, grouting

Abrasive:
Aluminium oxide A

Ordering notes:
- Please order the matching arbor separately.

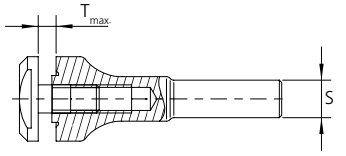
Safety notes:
- Can be used with mounted arbor on straight grinders up to the maximum rotational speed of the arbor.
- Use only for peripheral grinding.
- When using snagging wheels with diameter up from 50 mm on compressed-air straight grinders, a protective guard must be used (ISO 11148-7).
- When using snagging wheels with diameter up from 55 mm on electric straight grinders, a protective guard must be used (EN 60745-2-3).

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM	Suitable arbors		Description
ER (shape 1) type							
30	4.2	6.0	165423	51,000	BO 6/6 3-10	20	ER 30-4 SG STEEL+INOX+CAST/6,0
	6.2	6.0	165430	51,000	BO 6/6 3-10	20	ER 30-6 SG STEEL+INOX+CAST/6,0
40	4.2	6.0	165447	38,200	BO 6/6 3-10	20	ER 40-4 SG STEEL+INOX+CAST/6,0
	6.2	6.0	165454	38,200	BO 6/6 3-10	20	ER 40-6 SG STEEL+INOX+CAST/6,0
50	6.2	6.0	165461	30,600	BO 6/6 3-10	20	ER 50-6 SG STEEL+INOX+CAST/6,0
	10.5	6.0	165485	30,600	BO 6/6 3-10	20	ER 50-10 SG STEEL+INOX+CAST/6,0
	10.5	10.0	165492	30,600	BO 8/10 6-20	20	ER 50-10 SG STEEL+INOX+CAST/10,0
70	6.2	10.0	165508	21,800	BO 8/10 6-20, BO 8/10 4-8	20	ER 70-6 SG STEEL+INOX+CAST/10,0
	8.7	10.0	165805	21,800	BO 8/10 6-20, BO 8/10 4-8	20	ER 70-8 SG STEEL+INOX+CAST/10,0
	10.5	10.0	165515	21,800	BO 8/10 6-20	20	ER 70-10 SG STEEL+INOX+CAST/10,0
	15.7	10.0	165539	21,800	BO 8/10 6-20	20	ER 70-15 SG STEEL+INOX+CAST/10,0

Arbors for snagging wheels

Accessory for mounting snagging wheels on straight grinders. Stable arrangement with very high shank breakage resistance.





Grinding wheel diameter [mm]	Max. RPM
30	31,800
40	23,900
50	19,100
70	13,600

Safety notes:
- Observe the maximum rotational speed for the snagging wheel and arbor – the lower speed takes precedence (see table).

S [mm]	Suitable for snagging wheels with centre hole [mm]	$T_{max.}$ [mm]	EAN 4007220		Description
6	6	3–10	297650	1	BO 6/6 3-10
8	10	6–20	297667	1	BO 8/10 6-20
		4–8	103623	1	BO 8/10 4-8

SELF**EXPLANATORY**!



PFERD grinding tools available in a new design

PFERD

www.pferd.com

Cut-off wheels for stationary applications

PFERD

7



7

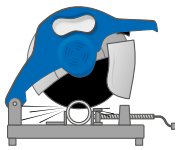
Cut-off wheels for stationary applications
Table of contents

General information 3

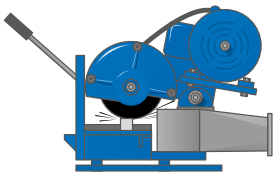
Safety notes 5

Packaging, transport and storage 6

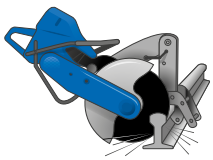
The fast way to the best tool 8

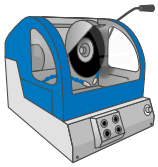
CHOPSAW
dia. 300–400 mm 10

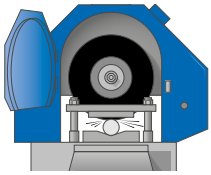
CHOPSAW HD
dia. 300–400 mm 12

RAIL
dia. 300–400 mm 14

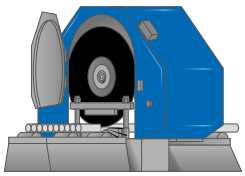
LABOR
dia. 150–400 mm 15

HEAVY DUTY
dia. 250–600 mm 16



Reducing rings 18

Products made to order
dia. 250–2,000 mm 19

Cut-off wheels for stationary applications
General information

Quality

Stationary cut-off wheels from PFERD are developed, manufactured and tested in accordance with the strictest quality requirements.

Research and development, our own machine and plant construction, and the continuous testing and further development of the quality and safety standards in our own laboratories all guarantee the high PFERD quality.

PFERD quality management is certified according to ISO 9001.



Support and service

PFERD offers you individual targeted support to solve your application problems. The experienced field staff of PFERD will be pleased to assist you.

With their expertise, our technical advisers will also help you to solve complex problems related to applications and use.

Due to our many years of collaboration with manufacturers of cut-off grinding machines in Germany and abroad, we can also advise you on the design of appropriate machining equipment.

Please do not hesitate to contact us for further information.



Advantages of stationary cut-off grinding

- Universal cutting process for all steels and castings, non-ferrous metal alloys, special alloys such as nickel and titanium-based alloys, as well as materials on which sawing and flame cutting are difficult or impossible.
- Due to smooth cutting surfaces and blank cuts in cold cutting-off, no post-processing is required.
- Short cutting times regardless of the material quality.
- Significantly lower burr formation with hot cutting-off than with hot sawing.
- Lower noise levels than with hot sawing, for example:
  Hot cutting-off: 85 to 95 dBA
  Hot sawing: 105 to 110 dBA
- Consistent cutting quality over the entire life of the cut-off wheel due to its continuous self-sharpening qualities.
- Cutting of already cooled rolled or forged parts in hot cut lines is possible.

Applications

Cut-off grinding is one of the most powerful and cost-effective cutting processes and is used in the following areas:

- Rolling mills
- Foundries
- Machine engineering
- Steel construction
- Maintenance of rails
- Forging plants and their finishing processes
- Laboratories

Products made to order

If you cannot find the solution for your particular application in our catalogue range, we produce PFERD premium-quality stationary cut-off wheels up to a diameter of 2,000 mm, tailor-made to meet the requirements of your job. For more information please see page 19.



Cut-off wheels for stationary applications
General information

Differentiation of cut-off grinding

A differentiation is made between cold, warm and hot cutting-off, depending on the material temperature of the workpieces.

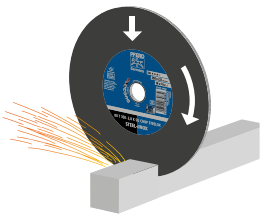
Operating conditions / Operating parameters	Cold cut-off	Warm cut-off	Hot cut-off
Material temperature T	up to 100°C	100 to 600°C	600 to above 1,000°C
Peripheral speed V_s*	80 to 100 m/s	80 to 100 m/s	80 to 100 m/s
Specific cutting performance Z	4 to 15 cm²/s	8 to 20 cm²/s	15 to 35 cm²/s

* Please adhere to the maximum operating speed of the cut-off wheel.

Cut-off processes

According to the material and the application, cut-off processes differ depending on the positioning and relative motion of the cut-off wheel and workpiece.

Chop stroke cut

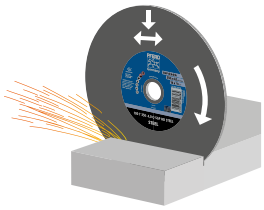


Application area:
- For cutting individual workpieces as well as small or slim material layers.
- Very common cut-off process.

Cutting process:
- Cut-off wheel cuts the workpiece in a radial movement over a joint mid-point.

Advantages:
- Low vibration.
- Short cutting times.
- Less load on cut-off wheels for smaller material dimensions.

Oscillation cut

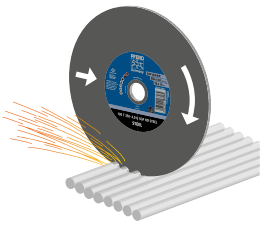


Application area:
- For cutting sprues and risers in foundries.
- Demanding tasks in wet cut-off grinding.

Cutting process:
- Cut-off wheel moves into the work-piece to be cut with additional forward and backward movements in the horizontal cut.

Advantages:
- Lower drive output required.
- Low workpiece temperature.
- Optimum removal of chips.

Horizontal cut

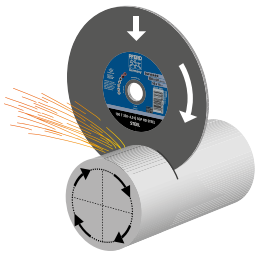


Application area:
- For cutting multiple adjacent work-pieces, as well as slabs, plates and sheets.
- In particular on the approach side of the rolling mill after the cooling bed.

Cutting process:
- Cut-off wheel cuts the entire layer width of different cross sections in one cycle.

Advantages:
- Short cutting times.
- Very high throughput capacity.

Index cut

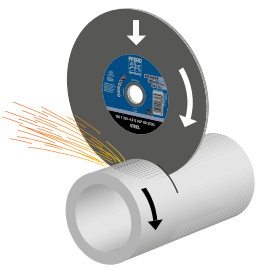


Application area:
- For cutting very large round solid material and blocks.
- In particular in steel works and foundries.

Cutting process:
- The workpiece is cut with several partial cuts. After each partial cut, the workpiece is rotated (2–4 partial cuts, 180–90° rotation, depending on the material dimensions).

Advantages:
- Working on very large material cross sections is possible with smaller wheel diameters.

Rotary cut



Application area:
- For cutting very large pipes as well as round solid materials.

Cutting process:
- The workpiece is continuously rotated during the cutting process.

Advantages:
- Use of small wheel diameters is possible.
- Lower drive output required.
- Low workpiece temperature.

PFERD is a founder member of oSa

Together with other renowned manufacturers, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards.
Member companies of oSa (the Organization for Safety of Abrasives) are committed to continuous product safety and quality monitoring. PFERD tools carry the oSa mark.

Safety standard

PFERD cut-off wheels conform to the highest safety requirements and are marked according to EN 12413 for grinding tools made of bonded abrasives.

Maximum operating speed

The maximum permissible operating speed [m/s] can be found on the product labels and in the product tables of this catalogue. The maximum permissible rotational speed specification applies to the nominal diameter of the unused wheels. For safety reasons, these must never be exceeded.



Safety notes

= Wear eye protection!

= Wear hearing protection!

= Wear a dust mask!

= Wear gloves!

= Please read the safety notes!

= Do not use if damaged!

= Not permitted for hand-held or manually guided grinding!

German Abrasives Association

Please observe the safety notes of the German Abrasives Association (VDS). Further information can be found at:
www.pferd.com

VDS Verband Deutscher Schleifmittelwerke

User information

Please observe the user information provided with all products on the safe use of stationary cut-off wheels as well as the user information for the grinding machine used.


PFERD
Benutzerinformation
User information
使用
Información para el usuario
Informations à destination des utilisateurs
Informazione per utenti
Gebruikersinformatie
Informacja dla użytkownika
Instruções de utilização
Информация для пользователей
Användarinformation
Kullanıcı Bilgilendirme

FEPA

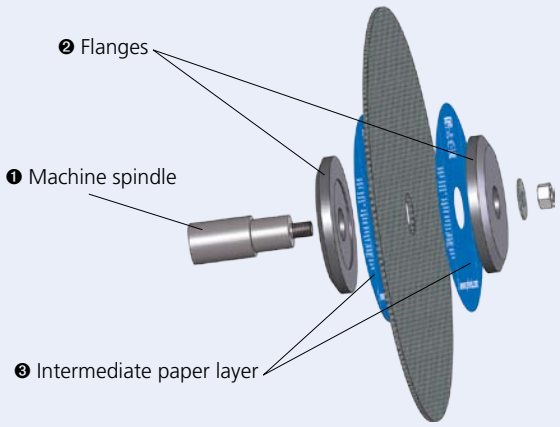
The FEPA safety recommendations can be downloaded at **www.pferd.com**.



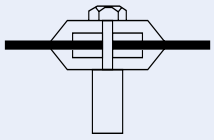
Proper clamping of cut-off wheels

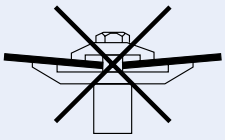
The correct clamping of the cut-off wheel is a prerequisite for optimum performance and is essential to ensure user safety. The adjacent illustration shows the right way to do it:

❶ Machine spindle with high concentricity.
❷ Equally sized flanges.
❸ Intermediate paper layers, if required for secure clamping and safe use.
Our recommendations:
- After every second wheel change, change the intermediate paper layers.
- As from a wheel diameter > 400 mm, always use intermediate paper layers.



Safety notes:
The safe use of PFERD tools depends largely on proper clamping systems. Both flanges between which a grinding tool is mounted must have the same outer diameter and same support area (according to EN 13218, ANSI B7.1, AS 1788.1).


correct


incorrect

Packaging

The packaging of stationary cut-off wheels is tailored to the requirements of the industry. It provides the tools with optimum protection against dirt and damage. Three packaging types are available.



Box

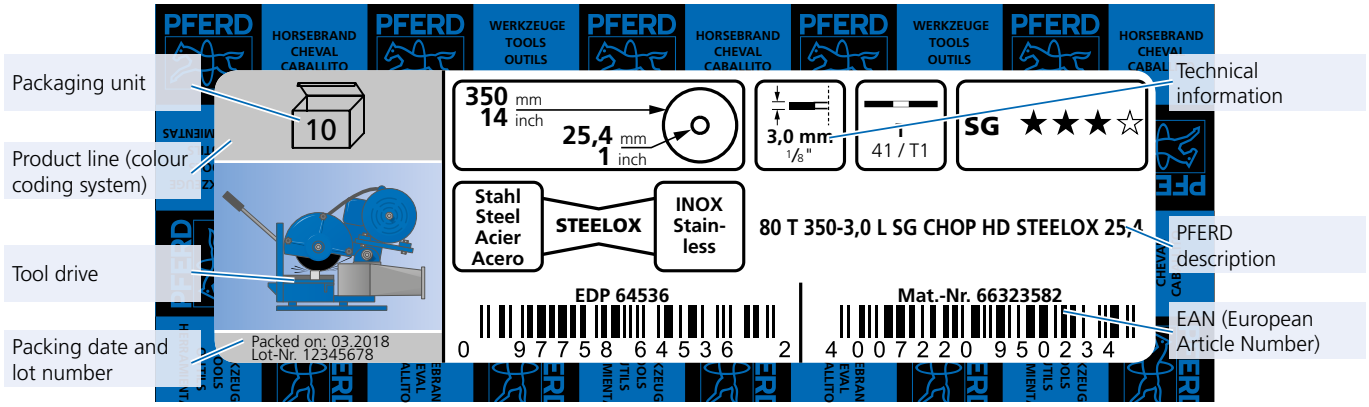


Crate



Pallet

Packaging label



Transport and storage

To avoid damage to the cut-off wheels through improper transport or adverse environmental influences during storage, e.g. UV radiation, temperature or humidity, please observe the following advice:

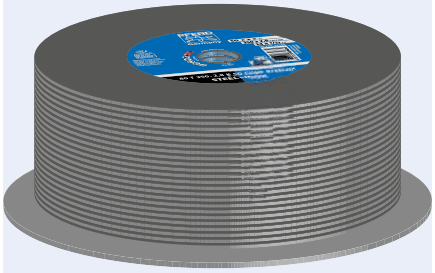
- As far as possible, transport and store cut-off wheels in their original packaging lying on a flat surface, e.g. on a shelf or vertically in racks.
- Avoid bending the tools.
- Ensure that the cut-off wheels are stored in dry, frost-free rooms with consistent temperatures.
- Use supplies in the order of their arrival.

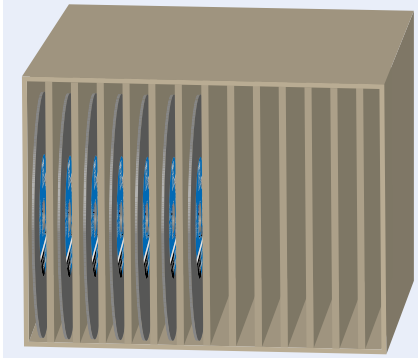
Recommendation:
Room temperature: 18–22°C
Relative humidity: 45–65%
No direct sunlight

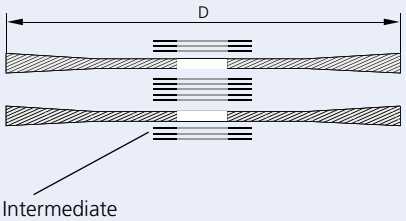


Advice on the storage of conical wheels (CT)
Conical cut-off wheels must be stacked with intermediate paper layers, so that the tapered area is supported and bending of the cut-off wheels is avoided.

PFERD supplies conical cut-off wheels with intermediate paper layers included.









Cut-off wheels for stationary applications
The fast way to the best tool

Product lines and colour coding

Universal Line PSF ★★☆☆



The entry-level range Universal Line PSF includes **robust tools** for processing the **most common materials**. Universal Line PSF tools achieve **good results** with **high economic efficiency**.

Performance Line SG ★★★☆



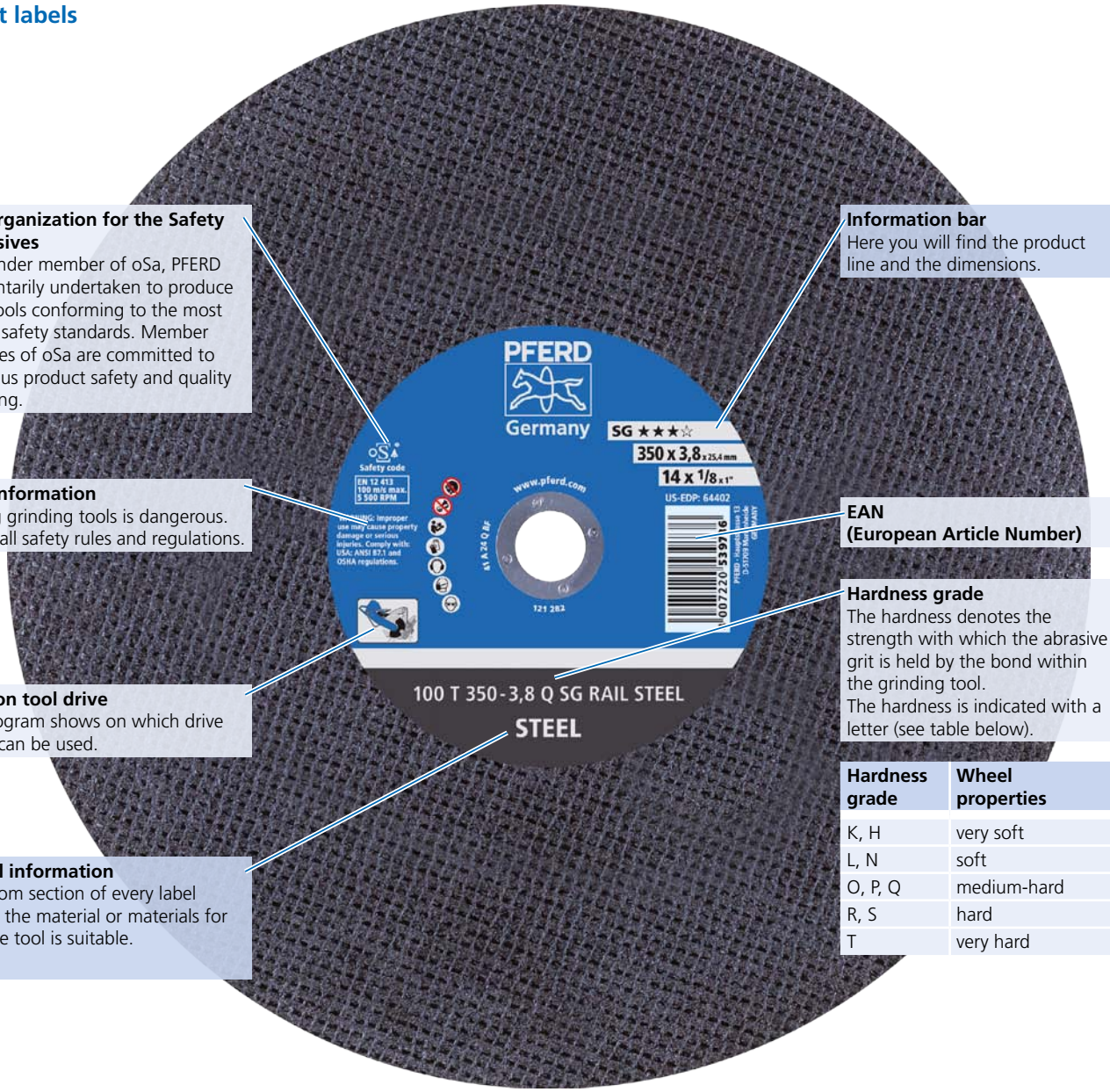
The broad Performance Line SG range offers **a high-performance tool solution for every application and every material**. Performance Line SG tools achieve **optimum results** with **maximum economic efficiency**.

Special Line SGP ★★★★



Special Line SGP tools are specially developed for **specific tasks** and offer the user **key advantages over conventional products**. Furthermore, the Special Line SGP includes tools that, due to their particularly high performance during use, offer **ultimate economic efficiency**.

Product labels



oSa – Organization for the Safety of Abrasives
As a founder member of oSa, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards. Member companies of oSa are committed to continuous product safety and quality monitoring.

Safety information
Handling grinding tools is dangerous. Observe all safety rules and regulations.

Advice on tool drive
The pictogram shows on which drive the tool can be used.

Material information
The bottom section of every label indicates the material or materials for which the tool is suitable.

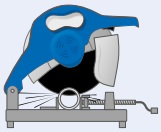
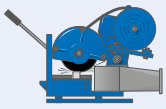
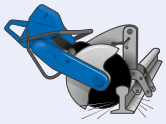
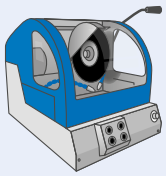
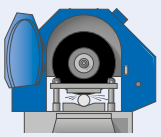
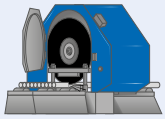
Information bar
Here you will find the product line and the dimensions.

EAN (European Article Number)

Hardness grade
The hardness denotes the strength with which the abrasive grit is held by the bond within the grinding tool.
The hardness is indicated with a letter (see table below).

Hardness grade	Wheel properties
K, H	very soft
L, N	soft
O, P, Q	medium-hard
R, S	hard
T	very hard

Product group selection

Tool drive	Application	Product line	Steel (STEEL)		Stainless steel (INOX)	Cast iron (CAST)	Stone (STONE)
CHOPSAW < 3 KW 	Cutting of solid material, profiles and pipes	**Universal Line PSF** ★★☆☆	PSF CHOP STEEL Hardness K Page 10	PSF CHOP STEELOX Hardness K Page 10	PSF CHOP STEELOX Hardness K Page 10		
		Performance Line SG ★★★☆	SG CHOP STEEL Hardness K Page 11	SG CHOP STEELOX Hardness K Page 11	SG CHOP STEELOX Hardness K Page 11		
CHOPSAW HD 	Cutting of solid material, profiles and pipes	**Performance Line SG** ★★★☆	SG CHOP HD STEEL Hardness L + O Page 12	SG CHOP HD STEELOX Hardness L Page 12	SG CHOP HD STEELOX Hardness L Page 12	SG CHOP HD CAST + STONE Hardness L Page 13	SG CHOP HD CAST + STONE Hardness L Page 13
RAIL 	Cutting of rails	**Performance Line SG** ★★★☆	SG RAIL STEEL Hardness Q Page 14				
LABOR 	Producing precision cuts, cutting of laboratory samples	**Performance Line SG** ★★★☆	SG LAB STEEL Hardness H Page 15	SG LAB HD STEELOX Hardness H Page 15	SG LAB HD STEELOX Hardness H Page 15		
HEAVY DUTY 	Cutting of solid material, profiles and pipes	**Special Line SGP** ★★★★	SGP HD STEEL Hardness L, N, Q + S Page 16	ZIRKON SGP HD CAST + STEEL Hardness P, R + T Page 17		ZIRKON SGP HD CAST + STEEL Hardness P, R + T Page 17	
Products made to order up to dia. 2,000 mm 	On request, we can produce stationary cut-off wheels in premium PFERD quality up to a diameter of 2,000 mm, tailor-made to meet the requirements of your special application. Please contact us for further information. Our experienced technical advisers will be pleased to assist you.						

 With a middle fabric for aggressive cutting with minimised burr formation

 With two outer fabrics for high lateral stability

Cut-off wheels for stationary applications

Universal Line PSF, CHOPSAW ★★☆☆



PSF CHOP STEEL ★★☆☆

Tool of hardness K, which cuts very easily, with a middle fabric. For aggressive cutting with minimized burr formation.

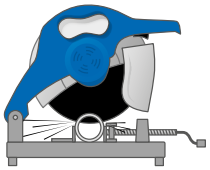
Advantages:
- High economic efficiency due to long tool life.
- Fast work progress thanks to high cutting performance.
- Cutting with minimized burr formation due to less lateral friction.
- For multi-purpose cutting work.

Materials that can be worked:
steel

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW up to 3 KW



Safety notes:
- Use only on stationary machines with an output of up to 3 KW.

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	2.8	25.4	832264	5,100	20	80 T 300-2,8 K PSF CHOP STEEL/25,4
350	2.8	25.4	817605	4,400	10	80 T 350-2,8 K PSF CHOP STEEL/25,4
400	3.8	25.4	832271	3,800	10	80 T 400-3,8 K PSF CHOP STEEL/25,4



PSF CHOP STEELOX ★★☆☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel and stainless steel (INOX). For aggressive cutting with minimized burr formation.

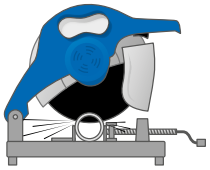
Advantages:
- High economic efficiency due to long tool life.
- Fast work progress thanks to high cutting performance.
- Cutting with minimized burr formation due to less lateral friction.
- For multi-purpose cutting work.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW up to 3 KW



Safety notes:
- Use only on stationary machines with an output of up to 3 KW.

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	2.8	25.4	950180	5,100	20	80 T 300-2,8 K PSF CHOP STEELOX/25,4
350	2.8	25.4	950197	4,400	10	80 T 350-2,8 K PSF CHOP STEELOX/25,4
400	3.8	25.4	950210	3,800	10	80 T 400-3,8 K PSF CHOP STEELOX/25,4



SG CHOP STEEL ★★★☆

Tool of hardness K, which cuts very easily, with a middle fabric. For aggressive cutting with minimized burr formation.



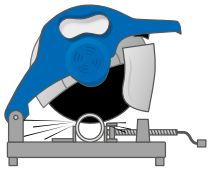
Advantages:
- Maximum economic efficiency due to very long tool life.
- The fastest work progress thanks to very high cutting performance.
- Cutting with minimized burr formation due to less lateral friction.
- For demanding cutting work.

Materials that can be worked:
steel

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW up to 3 KW



Safety notes:
- Use only on stationary machines with an output of up to 3 KW.

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	2.8	25.4	629123	5,100	20	80 T 300-2,8 K SG CHOP STEEL/25,4
		32.0	639573	5,100	20	80 T 300-2,8 K SG CHOP STEEL/32,0
350	2.8	25.4	629154	4,400	10	80 T 350-2,8 K SG CHOP STEEL/25,4
		32.0	639597	4,400	10	80 T 350-2,8 K SG CHOP STEEL/32,0
400	3.8	25.4	638675	3,800	10	80 T 400-3,8 K SG CHOP STEEL/25,4
		32.0	639610	3,800	10	80 T 400-3,8 K SG CHOP STEEL/32,0

SG CHOP STEELOX ★★★☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel and stainless steel (INOX). For aggressive cutting with minimized burr formation.



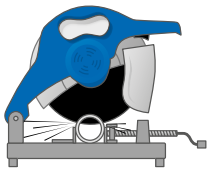
Advantages:
- Maximum economic efficiency due to very long tool life.
- The fastest work progress thanks to very high cutting performance.
- Cutting with minimized burr formation due to less lateral friction.
- For demanding cutting work.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW up to 3 KW



Safety notes:
- Use only on stationary machines with an output of up to 3 KW.

D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	2.8	25.4	803219	5,100	20	80 T 300-2,8 K SG CHOP STEELOX/25,4
350	2.8	25.4	639634	4,400	10	80 T 350-2,8 K SG CHOP STEELOX/25,4
400	2.8	25.4	669303	3,800	10	80 T 400-2,8 K SG CHOP STEELOX/25,4



Cut-off wheels for stationary applications
Performance Line SG, CHOPSAW HD ★★★☆



SG CHOP HD STEEL ★★★☆

Tool of hardness L or O with two outer fabrics. For cutting work that requires high stability.

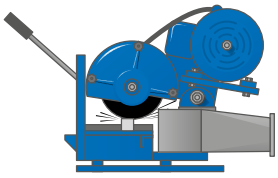
Advantages:
- High lateral stability thanks to reinforcing outer fabrics.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

Materials that can be worked:
steel

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW HD



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	3.0	25.4	629185	5,100	20	80 T 300-3,0 L SG CHOP HD STEEL/25,4
	3.0	32.0	639580	5,100	20	80 T 300-3,0 L SG CHOP HD STEEL/32,0
	3.4	25.4	540299	5,100	20	80 T 300-3,4 O SG CHOP HD STEEL/25,4
350	3.0	25.4	629130	4,400	10	80 T 350-3,0 L SG CHOP HD STEEL/25,4
	3.0	32.0	639603	4,400	10	80 T 350-3,0 L SG CHOP HD STEEL/32,0
	3.8	25.4	540329	4,400	10	80 T 350-3,8 O SG CHOP HD STEEL/25,4
400	4.0	25.4	638682	3,800	10	80 T 400-4,0 L SG CHOP HD STEEL/25,4
		32.0	639627	3,800	10	80 T 400-4,0 L SG CHOP HD STEEL/32,0
Maximum operating speed 100 m/s, flat type T (shape 41)						
350	4.2	25.4	540336	5,500	10	100 T 350-4,2 O SG CHOP HD STEEL/25,4



SG CHOP HD STEELOX ★★★☆

Tool of hardness L, which cuts very easily, with two outer fabrics for steel and stainless steel (INOX). For cutting work that requires high stability.

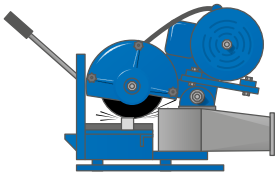
Advantages:
- High lateral stability thanks to reinforcing outer fabrics.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

Materials that can be worked:
steel, stainless steel (INOX)

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
CHOPSAW HD



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
300	3.0	25.4	950227	5,100	20	80 T 300-3,0 L SG CHOP HD STEELOX/25,4
350	3.0	25.4	950234	4,400	10	80 T 350-3,0 L SG CHOP HD STEELOX/25,4
400	4.0	25.4	950272	3,800	10	80 T 400-4,0 L SG CHOP HD STEELOX/25,4

SG CHOP HD CAST + STONE ★★★☆

Tool of hardness L, which cuts very easily, with two outer fabrics. For cutting work that requires high stability.



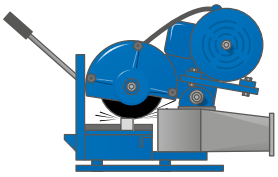
Advantages:
- High lateral stability thanks to reinforcing outer fabrics.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

Materials that can be worked:
cast iron, stone, plastics, aluminium, other non-ferrous metals

Applications:
cutting of solid material, sections and pipes

Abrasive:
Silicon carbide C

Matching tool drives:
CHOPSAW HD



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
350	3.4	25.4	540275	4,400	10	80 T 350-3,4 L SG CHOP HD CAST+STONE/25,4
400	4.0	25.4	540282	3,800	10	80 T 400-4,0 L SG CHOP HD CAST+STONE/25,4



Cut-off wheels for stationary applications

Performance Line SG, RAIL ★★★☆



SG RAIL STEEL ★★★☆

Tool of hardness Q for fast and economic cutting of rails.

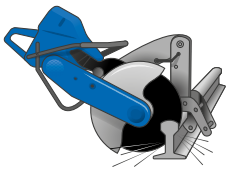
Advantages:
- The fastest work progress due to aggressive abrasive.
- Safe cutting work thanks to the optimum cutting quality.
- High economic efficiency due to optimal tool life.

Materials that can be worked:
steel

Applications:
cutting of rails

Abrasive:
Aluminium oxide A

Matching tool drives:
RAIL cutting machine



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 100 m/s, flat type T (shape 41)						
300	3.8	22.23	539705	6,400	20	100 T 300-3,8 Q SG RAIL STEEL/22,23
		25.4	539712	6,400	20	100 T 300-3,8 Q SG RAIL STEEL/25,4
350	3.8	22.23	539729	5,500	10	100 T 350-3,8 Q SG RAIL STEEL/22,23
		25.4	539736	5,500	10	100 T 350-3,8 Q SG RAIL STEEL/25,4
400	4.2	25.4	539743	4,800	10	100 T 400-4,2 Q SG RAIL STEEL/25,4



SG LAB STEEL ★★★☆



Tool of hardness H, which cuts very easily, with a middle fabric for steel and cast iron. For producing precision cuts and cutting laboratory samples quickly.

Advantages:
- Special tool for metallographic sampling thanks to aggressive abrasive.
- Safe cutting work thanks to the optimum cutting quality.
- High stability thanks to reinforcing middle fabric.

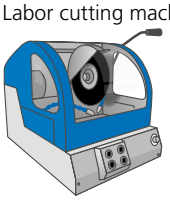
Materials that can be worked:
steel, cast iron

Applications:
Cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Recommendations for use:
- Also suitable for wet cutting applications.

Matching tool drives:
Labor cutting machine



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
250	2.0	32.0	093924	6,100	20	80 T 250-2,0 H SG LAB STEEL/32,0
300	2.0	32.0	804926	5,100	20	80 T 300-2,0 H SG LAB STEEL/32,0
350	2.5	32.0	805596	4,400	10	80 T 350-2,5 H SG LAB STEEL/32,0
400	3.0	32.0	805657	3,800	10	80 T 400-3,0 H SG LAB STEEL/32,0

SG LAB HD STEELOX ★★★☆



Tool of hardness H, which cuts very easily, with two outer fabrics for steel and stainless steel (INOX). For cutting work that requires high stability. For producing precision cuts and fast cutting of laboratory samples.

Advantages:
- Special tool for metallographic sampling thanks to aggressive abrasive.
- Safe cutting work thanks to the optimum cutting quality.
- Extremely sturdy thanks to reinforcing outer fabrics.

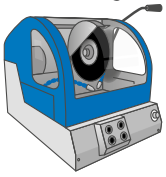
Materials that can be worked:
steel, stainless steel (INOX), cast iron

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Recommendations for use:
- Also suitable for wet cutting applications.

Matching tool drives:
Labor cutting machine



D [mm]	T [mm]	H [mm]	EAN 4007220	Max. RPM		Description
Maximum operating speed 80 m/s, flat type T (shape 41)						
150	1.0	22.23	804124	10,200	25	80 T 150-1,0 H SG LAB HD STEELOX/22,23
230	1.5	22.23	804865	6,600	25	80 T 230-1,5 H SG LAB HD STEELOX/22,23
250	1.8	32.0	804919	6,100	20	80 T 250-1,8 H SG LAB HD STEELOX/32,0

Cut-off wheels for stationary applications

Special Line SGP, HEAVY DUTY ★★★★



SGP HD STEEL ★★★★

Tool for the highest cutting work demands. Particularly suitable for use in finishing work.

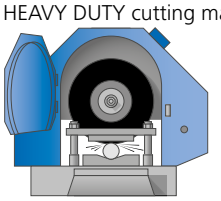
Advantages:
- Ultimate economic efficiency due to optimal tool life.
- Fast work progress thanks to excellent cutting characteristics.

Materials that can be worked:
steel

Applications:
cutting of solid material, sections and pipes

Abrasive:
Aluminium oxide A

Matching tool drives:
HEAVY DUTY cutting machine



D [mm]	T [mm]	H [mm]	Hardness grade L (soft)	N (soft)	Q (medium-hard)	S (hard)	Max. RPM		Description
			EAN 4007220						
Maximum operating speed 80 m/s, flat type T (shape 41)									
300	3.4	25.4	-	-	166185	-	5,100	20	80 T 300-3,4 Q SGP HD STEEL/25,4
350	3.8	25.4	-	-	166260	-	4,400	10	80 T 350-3,8 Q SGP HD STEEL/25,4
400	4.2	40.0	-	-	166307	-	3,800	10	80 T 400-4,2 Q SGP HD STEEL/40,0
500	5.5	40.0	-	-	166321	-	3,100	5	80 T 500-5,5 Q SGP HD STEEL/40,0
Maximum operating speed 100 m/s, flat type T (shape 41)									
250	1.8	30.0	-	-	539873	-	7,600	20	100 T 250-1,8 Q SGP HD STEEL/30,0
		32.0	-	-	803257	-	7,600	20	100 T 250-1,8 Q SGP HD STEEL/32,0
300	3.0	40.0	-	539842	-	-	6,400	20	100 T 300-3,0 N SGP HD STEEL/40,0
	3.6	40.0	-	-	166253	-	6,400	20	100 T 300-3,6 Q SGP HD STEEL/40,0
350	3.8	40.0	-	539859	-	-	5,500	10	100 T 350-3,8 N SGP HD STEEL/40,0
	4.0	25.4	-	-	166284	-	5,500	10	100 T 350-4,0 Q SGP HD STEEL/25,4
400	4.3	40.0	-	539866	-	-	4,800	10	100 T 400-4,3 N SGP HD STEEL/40,0
	4.6	40.0	-	-	-	166314	4,800	10	100 T 400-4,6 S SGP HD STEEL/40,0
	4.8	40.0	-	-	539880	-	4,800	10	100 T 400-4,8 Q SGP HD STEEL/40,0
500	5.8	40.0	-	539897	166338	539958	3,800	5	100 T 500-5,8 ... SGP HD STEEL/40,0
	6.3	40.0	803417	-	-	-	3,800	5	100 T 500-6,3 L SGP HD STEEL/40,0
600	7.6	60.0	-	166482	-	093931	3,200	5	100 T 600-7,6 ... SGP HD STEEL/60,0



ZIRKON SGP HD CAST + STEEL ★★★★

Tool for the highest cutting work demands. Particularly suitable for cutting risers and sprues. Specially developed for use in foundries.

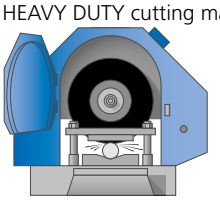
Advantages:
- Ultimate economic efficiency due to optimal tool life.
- Fast work progress thanks to excellent cutting characteristics.

Materials that can be worked:
cast iron, steel

Applications:
cutting of solid material, sections and pipes

Abrasive:
Zirconia alumina/aluminium oxide ZA

Matching tool drives:
HEAVY DUTY cutting machine





D [mm]	T [mm]	H [mm]	Hardness grade			Max. RPM		Description
			P (medium-hard)	R (hard)	T (very hard)			
			EAN 4007220					
Maximum operating speed 100 m/s, flat type T (shape 41)								
400	4.8	40.0	-	-	539965	4,800	10	100 T 400-4,8 ZIRKON T SGP HD CAST+STEEL/40,0
500	5.6	40.0	-	-	803462	3,800	5	100 T 500-5,6 ZIRKON T SGP HD CAST+STEEL/40,0
600	7.8	60.0	803486	-	-	3,200	5	100 T 600-7,8 ZIRKON P SGP HD CAST+STEEL/60,0
	8.0	60.0	-	166437	-	3,200	5	100 T 600-8,0 ZIRKON R SGP HD CAST+STEEL/60,0





Reducing rings

Reducing rings enable secure adjustment of the standard centre hole to a reduced centre hole dimension.

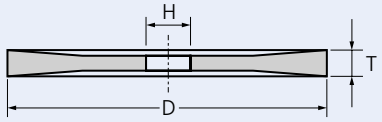
Advantages:
- Flexible adjustment to the prerequisites of the drive system.
- With stop collar, to prevent the ring from pushing through the centre hole of the cut-off wheel.

Safety notes:
- Ensure that the flanges on the drive system are backed off in order to mount the tool securely.

Outer dia. [mm]	Inside dia. [mm]	Width [mm]	EAN 4007220		Description
25.4	20	3.0	956205	5	RDR 25,4-20-3,0
	22.23	3.0	956212	5	RDR 25,4-22,2-3,0
40	25.4	3.0	956199	5	RDR 40-25,4-3,0
	25.4	4.5	176306	5	RDR 40-25,4-4,5
	30	3.0	956182	5	RDR 40-30-3,0
	30	4.5	176283	5	RDR 40-30-4,5
	32	3.0	956090	5	RDR 40-32-3,0
	32	4.5	176276	5	RDR 40-32-4,5
60	40	6.5	956229	5	RDR 60-40-6,5



Dimensions and designs to meet customer requirements

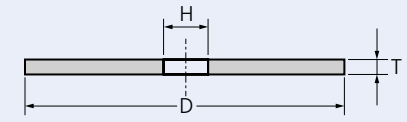


CT – Conical type

Application area:
- Particularly suitable for use in the steel industry.

Advantages:
- Less lateral friction.
- Particularly advantageous for deep cuts and traverse cutting.

Outer dia. D [mm]	Centre hole dia. H [mm]
2,000	80/100/127/152.4/200.3/ 203/230/250/280
1,840	80/100/127/152.4/200.3/ 203/230/250/280
1,600	80/100/127/152.4/200.3/ 203/230/250/280
1,500	80/100/127/152.4/200.3/ 203/230/250/280
1,380	80/100/127/152.4/200.3/ 203/230/250/280
1,250	80/100/127/152.4/200.3/ 203/230/250/280
1,000	80/100/127/152.4/200.3/ 203/230/250/280
800	80/100/127/152.4/200.3/ 203/230/250/280

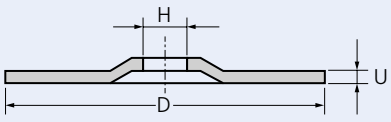


T – Flat type

Application area:
- Suitable for use in steel and plant construction, in the steel industry and in foundries.

Advantages:
- Suitable for universal use.

Outer dia. D [mm]	Centre hole dia. H [mm]
800	80/100/127/152.4/200.3/ 203/230/250/280
700	80/100/127/152.4/200.3/ 203/230/250/280
660	40/60/76.2/80/100
600	25.4/40/60/76.2/80/100
500	25.4/40/60/76.2/80/100
450	25.4/32/40/60/80
400	25.4/32/40/60/80
350	25.4/32/40
300	25.4/32/40
250	25.4/30/32



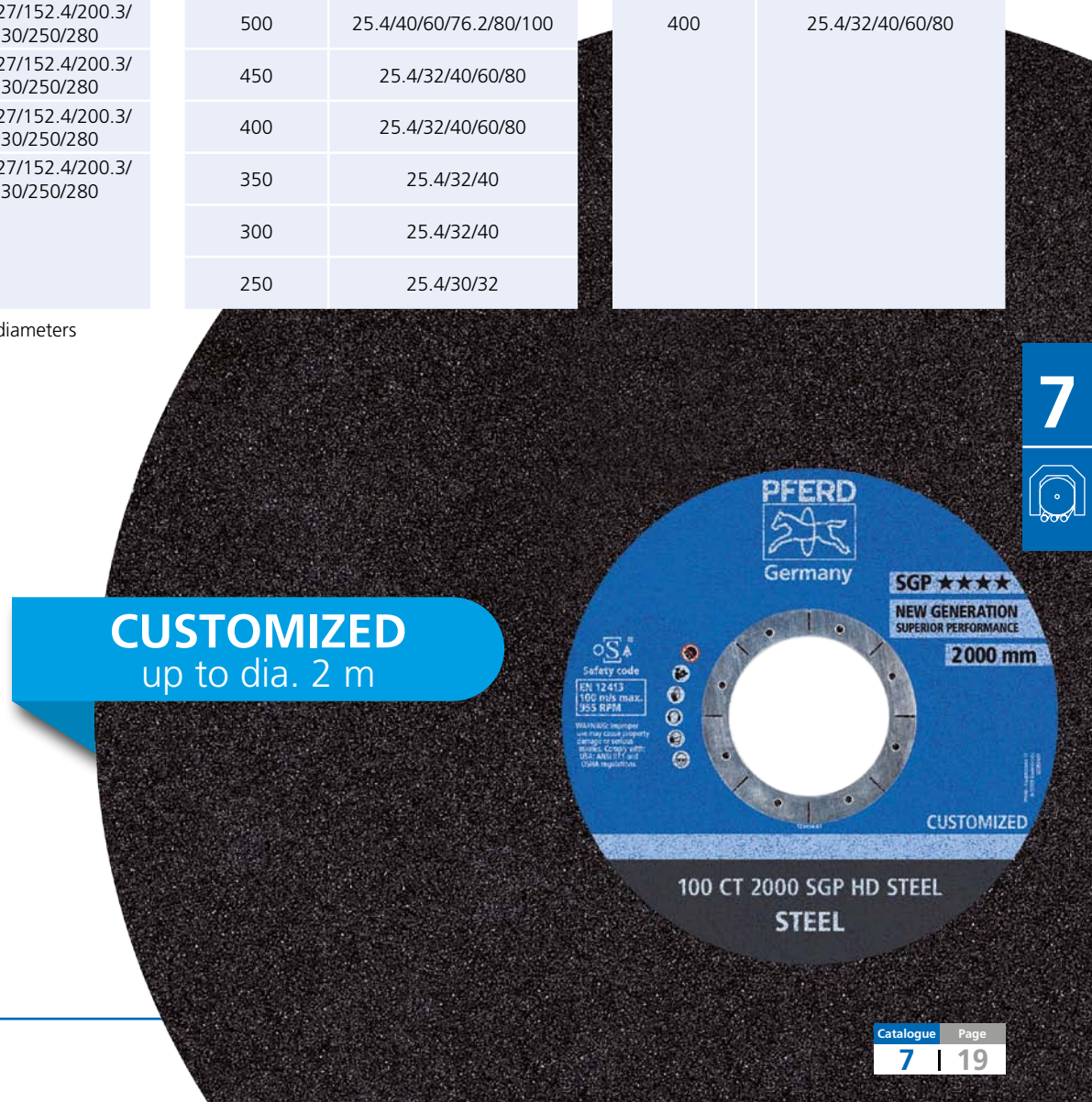
PT – Depressed-centre type

Application area:
- Particularly suitable for use in foundries.

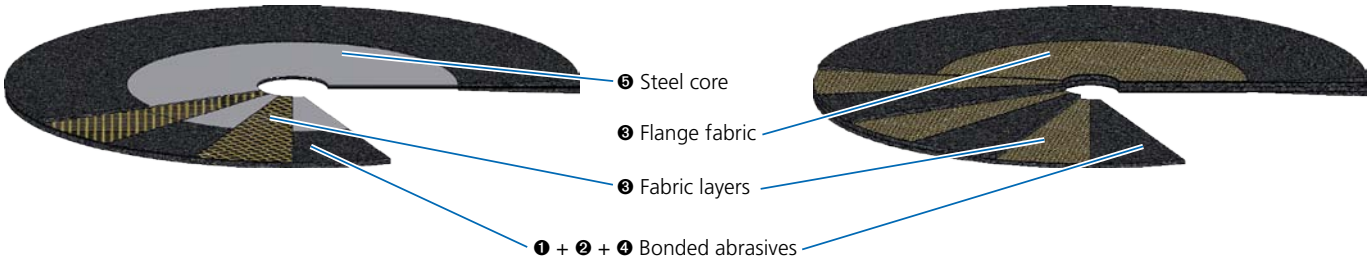
Advantages:
- Clamping flange does not protrude beyond the cut-off wheel.
- Flush cutting of risers from castings is possible.
- In general, no post-processing required.

Outer dia. D [mm]	Centre hole dia. H [mm]
800	80/100/127/152.4/200.3/ 203/230/250/280
700	80/100/127/152.4/200.3/ 203/230/250/280
600	25.4/40/60/76.2/80/100
500	25.4/40/60/76.2/80/100
400	25.4/32/40/60/80

Other types and centre hole diameters are available on request.
Please contact us for further information.



Cut-off wheels for stationary applications
METALCORE cut-off wheel



METALCORE type

The steel-core cut-off wheel, developed and **patented** by PFERD, is characterized, as compared to the conventional type, by its solid steel body ❺ constructed in layers which does not contain any abrasive.

The special tool structure has the following advantages:

1. Reduced cutting costs due to the use of smaller clamping flanges:
- Larger deployable grinding area.
- Cutting of larger material cross sections possible due to greater immersion depth of the cut-off wheel.
- Smaller wheel stub diameter.

2. Longer tool life due to:
- More stable cut with less vibration.

3. Reduced cut-off wheel width for chop stroke cut due to increased lateral stability:
- Shorter cutting times and higher material throughput rate with low-power cutting machines.
- Less loss of cut material.
- Reduced chips or cinder waste.

4. No cost for the disposal of the old wheel

Conventional type

For stationary cut-off grinding, resinoid-bonded, fibre-reinforced cut-off wheels are used, which are essentially composed of four components:
- ❶ Abrasives
- ❷ Bond, which holds the abrasive grit in the cut-off wheel
- ❸ Fabric layers/flange fabric, which ensure that the cut-off wheel is secure and stable
- ❹ Active grinding fillers



Solid steel body constructed in layers

Maximum utilisation of abrasives

Industrial power brushes

PFERD

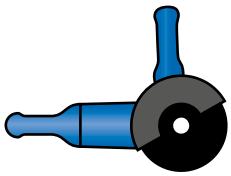
8

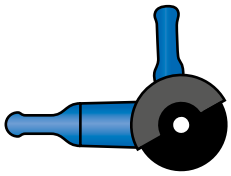


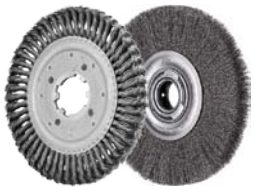
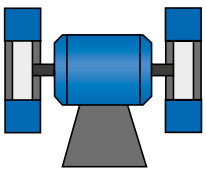
8

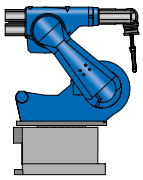
Industrial power brushes
Table of contents

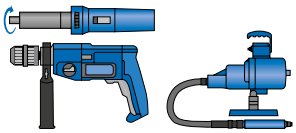
General information 4
Filament materials and their application 5
The fast way to the best tool 6
Safety notes and dimensions 8
Cutting speeds and recommendations for use 9
Information on processing stainless steel (INOX) 10
Well packed and presented 11

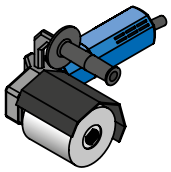


Cup and bevel brushes 12

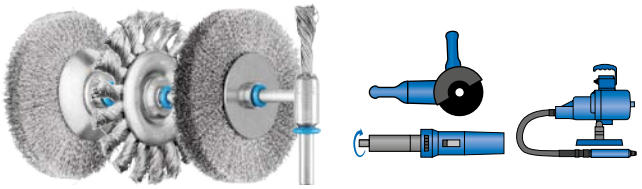


Wheel brushes 17



Wheel brushes with arbor hole 21

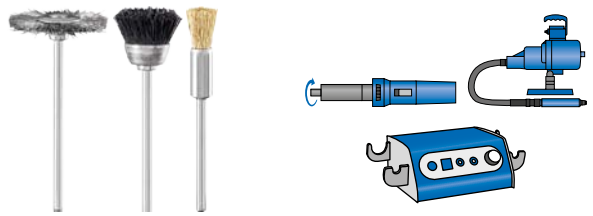


Composite brushes 27



Shank-mounted brushes 32

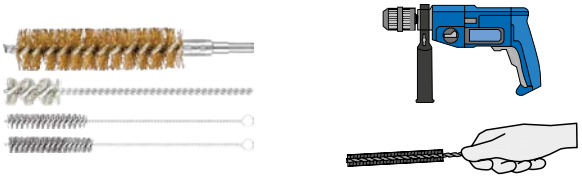


Wheel brushes for burnishing machines 41



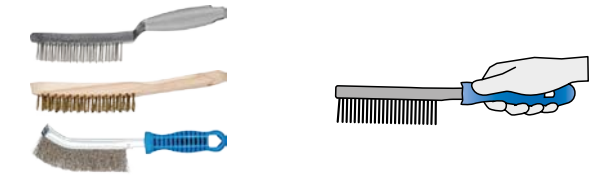
INOX-TOTAL 42



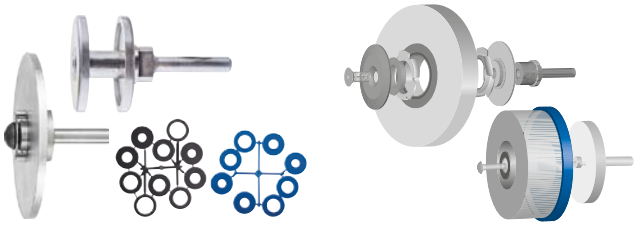
Miniature brushes 45



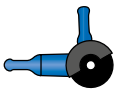
Tube brushes 48



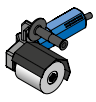
Scratch brushes 53



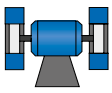
Accessories 55



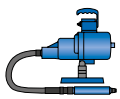
Angle grinder



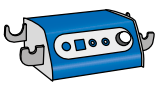
Burnishing machine/ drum grinder



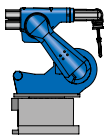
Machine tools



Flexible shaft drive



Micro motor



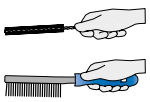
Robot



Power drill



Straight grinder



Manual application



All tools and more information:
www.pferd.com

Industrial power brushes
General information

Industrial power brushes from PFERD are top-quality tools for work on surfaces. PFERD offers a wide range of high-quality brushes for professional work on a large variety of materials and for many different applications. PFERD always has the right brush for any use, any application problem and any material.

The quality of PFERD tools has been certified according to ISO 9001.

Advantages:
- Long tool life due to PFERD special wires with high flexibility and bending fatigue strength.
- High concentricity due to even distribution and secure fixing of the filament material.
- Optimum finishing result due to close matching of main body and visible trim length.

PFERD knotted wheel and bevel brushes are manufactured using a special production process. The special fixing of the brush knots significantly improves performance.

Advantage:
- Greater efficiency due to 25 % longer tool life compared with conventional knotted brushes.



Ordering note

When ordering, please state the EAN or the complete description.

Ordering example:
EAN 4007220**153017**
RBU 3006/6 ST 0.20

Ordering example explanation:
RBU = Wheel brush, crimped
30 = Brush dia. D [mm]
06 = Filament width W_F [mm]
/6 = Shank dia. D_s [mm]
ST = Filament material steel
0.20 = Filament material dia. D_F [mm]

Customer support

Your PFERD representative can visit you to offer free and non-binding advice and will be happy to help resolve your application problem and answer any questions about using PFERD brushes safely.

Products made to order

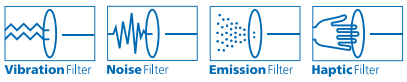
If you cannot find the solution for your particular application in our extensive catalogue range, we can produce brushes in premium PFERD quality specifically for your application on request. Products that can be made to order include different wire thicknesses and qualities, arbor holes or threads and other dimensions.

PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

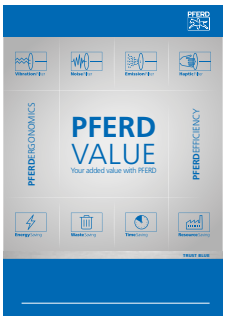
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



The fast way to the best tool

To help you find the optimum tool for your needs easily, we have summarized the appropriate brushes for the most important applications on pages 6 to 7.

❶ Select the filament material
The material that you are working with is key to determining the optimum filament material.

Steel wire	–	**grey**
Stainless steel wire	–	**blue**
Plastic filament	–	**red**
Brass wire	–	**yellow**
Natural bristles	–	**brown**

❷ Select the filament type
The brushing effect you want determines which filament type to choose.

❸ Select the tool
The application and geometry of the workpiece indicate the optimum brush.

Industrial power brushes are mainly used for:

- **Deburring**
  - Especially removal of secondary burrs produced by milling, grinding, turning or drilling
- **Cleaning**
  - Derusting, descaling
  - Work on weld seams
  - Cleaning, removal of paint
- **Structuring surfaces**
  - Matt finishing, satinizing
  - Roughening

Wire filament

- **Crimped brushes (wavy wire):** For work with particular requirements on the flexibility of the brushes, such as machining of highly contoured workpieces.
- **Knotted brushes (straight wire):** For work that requires aggressive brushing behaviour, such as work on weld seams.

Filament material	Temperature resistance	Advantages/properties
Steel wire (ST)	up to 300°C	■ PFERD special wire with high tensile strength and bending fatigue strength. ■ Guarantees long tool life, even when used for extreme brushing applications.
Stainless steel wire (INOX)	up to 450°C	■ Wire quality 1.4310 (V2A): stainless; does not leave corroding residues on the workpiece. ■ Used with low rotational speeds, compared to steel wire. ■ PFERD brushes with INOX filament are usually degreased.
Stainless steel wire (INOX)/Diamond (DIA)		■ Particularly well suited to applications that place particular demands on the aggressiveness of the brush. ■ Primarily used on materials with high material strength.
Further information about working with stainless steel (INOX) can be found on page 10.		
Brass wire (MES)	up to 180°C	■ Wire quality CuZn37: brass wire is softer than steel wire. ■ It is non-sparking and produces fine surface finishes.

Plastic filament

- Abrasive grains are embedded in flexible plastic filaments, which means that the filament works on the sides as well as at the tip.
- **Round filament:** for applications that place particular demands on the flexibility of the brush.
- **Rectangular filament (REC):** for applications that place particular demands on the aggressiveness of the brush.
- Recommendation for use: Use coolant for applications where large amounts of heat are produced.

Filament material	Temperature resistance	Advantages/properties
Silicon carbide (SiC)	up to 220°C	■ Particularly well suited to deburring work and for improving surfaces.
Aluminium oxide (AO)		■ Less sharp-edged and aggressive compared with SiC. ■ Primarily suitable for polishing and smoothing for finishing on soft metals.
Ceramic oxide grain (CO)		■ Offers good toughness and excellent sharpness. ■ For high stock removal values and aggressive brushing behaviour.
Diamond (DIA)		■ Particularly well suited to applications that place particular demands on the aggressiveness of the brush. ■ Primarily used on materials with high material strength.
Nylon		■ Particularly suited to working with materials that would otherwise be scratched or damaged, e.g. soft plastics.

Natural bristles (animal hair)

- Primarily suitable for light cleaning and dust removal, as well as for polishing (in combination with polishing pastes).

Filament material	Temperature resistance	Advantages/properties
White (SBW) and black (SBS) bristles	up to 150°C	■ Bristles are harder and less flexible than brushes with goat hair filaments.
Goat hair (ZHW)		■ Goat hair is more flexible and softer than bristle.

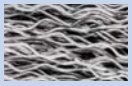
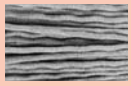
Selecting the filament material

Filament material	Material that can be worked						
	Steel	Stainless steel (INOX)	Non-ferrous metals			Cast iron	Plastics
			Aluminium	Soft non-ferrous metals Brass, copper, zinc	Hard non-ferrous metals Titanium, bronze, nickel-based and cobalt-based alloys		
Steel wire (ST)	●	-	-	-	-	●	○
Stainless steel wire (INOX)	○	●	●	○	○	-	-
Stainless steel wire (INOX) Diamond (DIA)	○	-	-	-	●	●	●
Brass wire (MES)	-	-	-	●	-	-	-
Silicon carbide (SiC)	●	●	●	-	○	●	●
Aluminium oxide (AO)	○	○	●	-	-	○	○
Ceramic oxide grain (CO)	●	○	○	-	●	●	-
Diamond (DIA)	○	-	-	-	●	●	●
Nylon	-	-	○	○	-	-	●
Bristle and goat hair (with polishing paste)	●	●	●	●	●	●	●

● = highly suitable ○ = suitable - = not suitable

Industrial power brushes
The fast way to the best tool

Materials that can be worked	Steel, cast iron, plastics			Stainless steel (INOX), aluminium, other non-ferrous metals
Filament material	Steel wire (ST) Colour code: grey			Stainless steel wire (INOX) Colour code: blue
Filament type	 knotted	 crimped	 encapsulated	 knotted
Desired effect	Aggressive brushing effect, less flexible	Light brushing effect, flexible	Very aggressive brushing effect, not flexible	Aggressive brushing effect, less flexible
Weld seam 	 RBG p. 18–19  RBG PIPE p. 20–21	 HBU p. 53  HBK p. 53	 RBV p. 39	 RBG p. 18–19  RBG PIPE p. 20–21
Structuring surfaces 		 RBU p. 22–26  RBU SC p. 17  WBU p. 41		
Edge deburring 	 KBG p. 15–16  RBG p. 18–19  RBG p. 40	 KBU p. 15, 37  RBU p. 17, 22, 24–26  RBU p. 38  RBU p. 47	 RBV p. 39	 KBG p. 15–16  RBG p. 18–19  RBG p. 40
Surface deburring 	 TBG p. 13–14	 TBU p. 12  TBU p. 36		 TBG p. 13–14
Interior deburring 	 PBG p. 35	 PBU p. 32–34  PBU p. 45  TBU p. 46  IBU p. 48, 50, 52	 PBV p. 33	PBG p. 35
Surface cleaning	TBG p. 13–14 KBG p. 15–16 RBG p. 18–19 RBG p. 40	TBU p. 12 KBU p. 15, 37 RBU p. 38 HBU p. 53 RBU p. 22–26		TBG p. 13–14 KBG p. 15–16 RBG p. 18–19 RBG p. 40
Interior cleaning	PBG p. 35	PBU p. 32–34 PBU p. 45 TBU p. 46 IBU p. 48, 50, 52	PBV p. 33	PBG p. 35
Polishing				

Stainless steel (INOX), aluminium, other non-ferrous metals	Steel, stainless steel (INOX), aluminium, non-ferrous metals, titanium, cast, plastics, wood	Brass, copper, other non-ferrous metals	Steel, stainless steel (INOX), non-ferrous metals, cast iron
Stainless steel wire (INOX) **Colour code: blue**	**Plastic filament (SiC, CO, nylon)** **Colour code: red**	**Brass wire (MES)** **Colour code: yellow**	**Natural materials** **Colour code: brown**
 **crimped**	 **crimped**	 **crimped**	 **crimped**
Light brushing effect, flexible	**Grinding brushing effect, very flexible**	**Light brushing effect, flexible**	**Light brushing effect (use with polishing pastes)**
 HBU p. 53  HBK p. 53		 HBU p. 53	
 RBU p. 17, 22, 24–26  WBU p. 41	 RBU p. 22–24, 26  RBUP p. 27–28  WBU p. 41		
 KBU p. 15, 37  RBU p. 22, 24–26  RBU p. 38  RBU p. 47	 RBU p. 22–24, 26  RBUP p. 27–28  RBU p. 39  RBU p. 47	 RBU p. 38  RBU p. 47	
 TBU p. 12  TBU p. 36	 TBU p. 12  DBU p. 29–30  TBU p. 36		
 PBU p. 32–34  PBU p. 45  TBU p. 46  IBU p. 48, 50, 52	 PBU p. 31–32  PBU p. 45  TBU p. 46  IBU p. 48, 51–52	 PBU p. 32  PBU p. 45  TBU p. 46  IBU p. 48, 50, 52	
 TBU p. 12 KBU p. 15, 37 RBU p. 38 HBU p. 53 RBU p. 17, 22, 24–26	TBU p. 12 RBU p. 22–24, 26 RBUP p. 27–28 DBU p. 29–30 TBU p. 36 RBU p. 39	RBU p. 38 HBU p. 53	
PBU p. 32–34 PBU p. 45 TBU p. 46 IBU p. 48, 50, 52	PBU p. 31–32 PBU p. 45 TBU p. 46 IBU p. 48, 51–52	PBU p. 32 IBU p. 48, 50, 52	PBU p. 45 TBU p. 46
			RBU p. 47 PBU p. 45 TBU p. 46

PFERD – safe tools are our speciality

PFERD industrial power brushes meet a high standard of quality and safety, which is constantly monitored and further developed in our own laboratories. As one of the leading manufacturers of brush tools, PFERD fulfils the requirements of European standard EN 1083.

Guidelines on the safe and economic use of PFERD brushes are supplied with every packaging unit. They help you to increase your level of personal work safety.



Safety notes:

 = Wear eye protection!

 = Wear hearing protection!

 = Wear a dust mask!

 = Wear gloves!

 = Read the safety notes!

 = Use a protective machine cover!

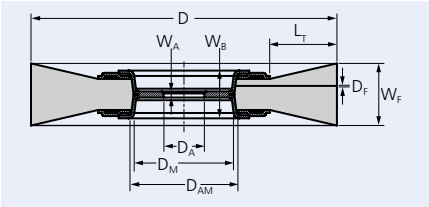
Maximum permitted rotational speed
In order to guarantee operating safety, the maximum permitted rotational speed indicated on the brush, label and in this catalogue must never be exceeded!
Please refer to our product information and product tables for further recommendations regarding optimum operating speeds. These give details of the recommended rotational speeds [RPM] for an optimum working result.

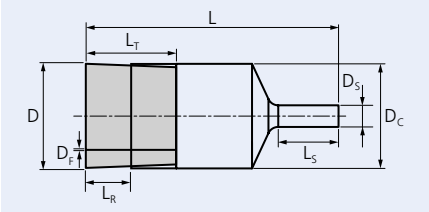
Brush diameter
In the case of hand-held tool drives, the brush diameter should never exceed 180 mm, regardless of the filament material.

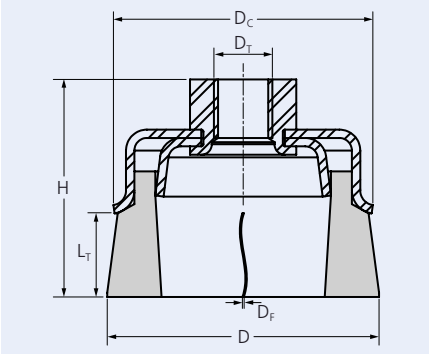
Minimum arbor hole diameter according to EN 1083
Brushes must comply with the minimum arbor hole diameters (D_A) listed below, depending on their total diameter (D).

Total dia. D of the brush [mm]	Minimum arbor hole dia. D_A [mm]
50	4.6
75	6.5
100	10
150	13
200	16
250	20
300	20
350	32

Explanation of dimensions







Abbreviation	Unit	Description
D	mm	Nominal outer diameter of the brush or the working surface for end brushes
D_A	mm	Hole diameter
D_{AM}	mm	Max. hole diameter in main body
D_C	mm	Max. diameter of the main body
D_F	mm	Nominal dimension of the filament material (wire thickness)
D_M	mm	Diameter in hole area
D_S	mm	Shank diameter in shank-mounted brushes, shaft diameter for wheel brushes for burnishing machines, stem diameter (core) for pipe brushes
D_T	mm	Nominal thread designation
H	mm	Nominal total height (incl. components for arbor hole or thread as well as shank)
L	mm	Nominal total length for end brushes (without guide pins) and pipe brushes
L_S	mm	Usable length for shank or stem, total length of the mounting shaft, usable thread length
L_T	mm	Nominal length of the filament material (free length of the filament material)
L_R	mm	Total length of the filament material (free length without bridle)
W_A	mm	Width of the main body at the hole / thread
W_B	mm	Installation width, widest point of the main body
W_F	mm	Nominal dimensions of the working width

Determining the recommended rotational speed

❶ Select brush type.
❷ Read the recommended cutting speed.
❸ Determine the rotational speed using the brush diameter and cutting speed.

The recommended cutting speed ranges [m/s] depend on the respective application and lie below the maximum permitted cutting speed.

❶ Brush type	❷ Cutting speed
End brushes	5–15 m/s
Cup brushes	15–45 m/s
Shank-mounted wheel brushes	15–40 m/s
Wheel/bevel brushes with arbor hole/ threaded	See diagram below

❷ Recommended cutting speed [m/s] for wheel/bevel brushes with arbor hole/threaded

Application	[m/s]	10	15	20	25	30	35	40	45	50	55
Deburring/ edge breaking	knotted						35–45 m/s				
						30–40 m/s					
	crimped				25–40 m/s						
			15–30 m/s								
			15–30 m/s								
Removal of scale/ mill scale	knotted						35–55 m/s				
						30–40 m/s					
Cleaning/ roughening of surfaces	knotted						35–40 m/s				
						30–35 m/s					
	crimped				20–40 m/s						
			15–35 m/s								
			15–30 m/s								
Weld dressing	knotted						35–55 m/s				
						30–40 m/s					
	crimped					30–45 m/s					
					25–40 m/s						

The colour bars correspond to the colour codes of the filament materials (see page 4).

❸ Recommended rotational speeds [RPM]

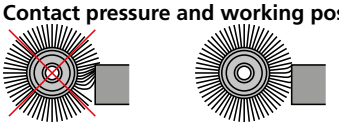
n [RPM]	Brush dia. D [mm]																	
	10	15	20	25	30	40	50	60	75	80	100	115	125	150	175	200	250	300
1,000	1	1	1	1	2	2	3	3	4	4	5	6	7	8	9	10	13	16
1,250	1	1	1	2	2	3	3	4	5	5	7	8	8	10	11	13	16	20
1,500	1	1	2	2	2	3	4	5	6	6	8	9	10	12	14	16	20	24
1,750	1	1	2	2	3	4	5	5	7	7	9	11	11	14	16	18	23	27
2,000	1	2	2	3	3	4	5	6	8	8	10	12	13	16	18	21	26	31
2,500	1	2	3	3	4	5	7	8	10	10	13	15	16	20	23	26	33	39
3,000	2	2	3	4	5	6	8	9	12	13	16	18	20	24	27	31	39	47
3,500	2	3	4	5	5	7	9	11	14	15	18	21	23	27	32	37	46	55
4,000	2	3	4	5	6	8	10	13	16	17	21	24	26	31	37	42	52	63
4,500	2	4	5	6	7	9	12	14	18	19	24	27	29	35	41	47	59	71
5,000	3	4	5	7	8	10	13	16	20	21	26	30	33	39	46	52	65	79
5,500	3	4	6	7	9	12	14	17	22	23	29	33	36	43	50	58	72	
6,000	3	5	6	8	9	13	16	19	24	25	31	36	39	47	55	63	79	
6,500	3	5	7	9	10	14	17	20	26	27	34	39	43	51	60	68		
7,000	4	5	7	9	11	15	18	22	27	29	37	42	46	55	64	73		
7,500	4	6	8	10	12	16	20	24	29	31	39	45	49	59	69	79		
8,000	4	6	8	10	13	17	21	25	31	34	42	48	52	63	73			
10,000	5	8	10	13	16	21	26	31	39	42	52	60	65	79				
12,000	6	9	13	16	19	25	31	38	47	50	63	72	79					
14,000	7	11	15	18	22	29	37	44	55	59	73							
16,000	8	13	17	21	25	34	42	50	63	67								
20,000	10	16	21	26	31	42	52	63	79									
22,000	12	17	23	29	35	46	58	69										
25,000	13	20	26	33	39	52	65	79										

Example:
RBG 11512 ST
Cleaning surfaces
Brush dia. D: 115 mm
Cutting speed: 39 m/s
Rotational speed: 6,500 RPM

$$\text{Cutting speed (v)} = \frac{\text{dia. (D)} \times \pi \times \text{rot. speed (n)}}{1{,}000 \times 60}$$

Recommendations for use:

Contact pressure and working position



Incorrect (1) Correct (2)
Only use the wire tips (Fig. 2).

Exception
In the case of brushes with plastic filament material, it is not only the wire tips that can be used, but 2–3 mm of the filaments. In the case of stationary brushes, machining should be carried out under the middle of the brush (see Fig. 2).

Visible trim lengths
Short visible trim lengths give a stiffer trim surface, resulting in more aggressive brushing action. Longer trim lengths are more flexible, giving a softer brush performance that produces a more uniform finish, even on irregular surfaces.

Self-sharpening effect
The self-sharpening effect can be improved during use by changing the brush operating direction.

Filament diameters
Thick filament
- An aggressive brushing effect with a coarse surface finish, as fewer wire tips are in contact with the surface of the workpiece at the same time.

Thin filament
- A soft brushing effect with a fine surface finish, as many wire tips are in contact with the surface of the workpiece at the same time.
- A longer tool life for the brush due to the higher level of flexibility of the filaments.

Solutions to problems

Problems	Possible solutions
Inadequate brushing effect	■ Increase rotational speed or use larger brush diameter at the same rotational speed. ■ Choose a brush with shorter trim length. ■ Use a brush with thicker filaments.
Brushing effect too great	■ Reduce rotational speed or use smaller brush diameter at the same rotational speed. ■ Reduce the contact pressure. ■ Choose a brush with longer trim length. ■ Use a brush with thinner filaments.
Surface is too rough and irregular	■ Use a wider brush. ■ Use a brush with thinner filaments. ■ Increase the rotational speed.
Surface is too finely polished and shiny	■ Use a brush with thicker filaments. ■ Choose a brush with shorter trim length. ■ Reduce the rotational speed.
Secondary burr formation	■ Change the working position of the brush in relation to the workpiece. ■ Choose a brush with shorter trim length. ■ Use a brush with thicker filaments.

Expertise in working with stainless steel (INOX)

PFERD offers an extensive range of tools that meets the demands of working with stainless steel (INOX).



The PRAXIS brochure "PFERD tools for use on stainless steel (INOX)" contains much valuable information on material properties and application recommendations.

PFERD wire qualities

In order to fulfil the particular requirements for working with stainless steel (INOX), PFERD uses wire quality 1.4310 (V2A) for all INOX brushes. Practical experience from industry has shown that this offers excellent corrosion resistance with an optimum tool life.

All PFERD brushes with INOX filaments are colour-coded in blue and are suitable for use on all stainless steels (INOX), such as V4A.

INOX and magnetism
The wire quality 1.4310 tends to become ferromagnetic in the case of cold working; i.e. it can be attracted using magnets. The reason for this is a change in the microstructure caused by deformation (e.g. during the wire drawing process). This does not have any impact on the quality and corrosion resistance of the INOX filament. The filament is still resistant to corrosion.

AISI	Code acc. to EN 10027-1	Material no. acc. to EN 10027-2
304	X5CrNi18-10	1.4301 (V2A)
301	X10CrNi18-8	1.4310 (V2A)
316	X5CrNiMo17-12-2	1.4401 (V4A)
316	X3CrNiMo17-13-3	1.4436 (V4A)
316Ti	X6CrNiMoTi17-12-2	1.4571 (V4A)

INOX-TOTAL brushes

For extremely difficult operating conditions, PFERD offers a range of "INOX-TOTAL" (IT) brushes. These are characterized by the fact that all parts of the brush are made of stainless steel in quality 1.4310 (V2A), which ensures optimum corrosion protection.
Detailed information and ordering data can be found on pages 42–44.



Recommendations for avoiding corrosion

Cause of corrosion	Solution
Change in the microstructure due to too much heat build-up.	Avoid heat build-up through: ■ Lower rotational speed ■ Reduced contact pressure ■ Oscillating brushing
Contact between the workpiece and the parts of the brush that are made of steel.	■ Use INOX-TOTAL type brushes. ■ Avoid contact between the face plates and workpiece. ■ Use end brushes with plastic protection.
Mixture of work on steel and stainless steel (INOX).	■ Do not use brushes that have already been used to work on steel, copper or other metals. ■ Do not work on steel in the vicinity of stainless steel (INOX) applications.
Wire particles are introduced into the surface (crevice corrosion).	■ Avoid a high contact pressure. ■ Use a low rotational speed.
Stock removal rate is too low.	Removal of deep structural changes by: ■ Extending the brushing time ■ Using grinding tools

Note:
To avoid possible problems, it makes sense to run preliminary tests to check the corrosion resistance of the workpiece. General cleaning of the workpieces after brushing is recommended in order to prevent loose particles sticking to the workpiece.

For workpieces that are used in a heavily corrosive environment, processing with grinding tools and etching or passivation is recommended. This also applies when not only stainless steel (INOX) but also non-alloyed steels are processed and it cannot be completely ruled out that abrasion particles will land on the stainless steel.



For detailed information and ordering data for fine grinding and polishing tools, please see catalogue section 4.

Industrial packaging

PFERD provides industrial brushes in industrial packaging as standard.

IP This symbol indicates all brushes in industrial packaging (IP).

Advantages:
- Robust, damage-resistant packaging.
- Packaging label containing all the important information such as item number, description, EAN code and technical details.
- Information on safe use of brushes included in each packaging unit.



POS packaging

PFERD provides wheel, cup, end and bevel brushes in sales-boosting individual packaging. Individually packed shank brushes are supplied in a practical cardboard box.

10x 1 This symbol and the addition of "POS" in the description are used to indicate all brushes in POS packaging.

An overview of all brushes in POS packaging is available here: www.pferd.com/pos-brushes

Advantages:
- Functional European standard hole mounting for optimum product presentation on the sales wall.
- Packaging label containing all the important information such as item number, description, EAN code and technical details.
- Product is easily recognizable through the viewing window.





PFERDTOOL-CENTER

You will find all the important information required in order to select the most appropriate tool on the **PFERD** TOOL-CENTER.

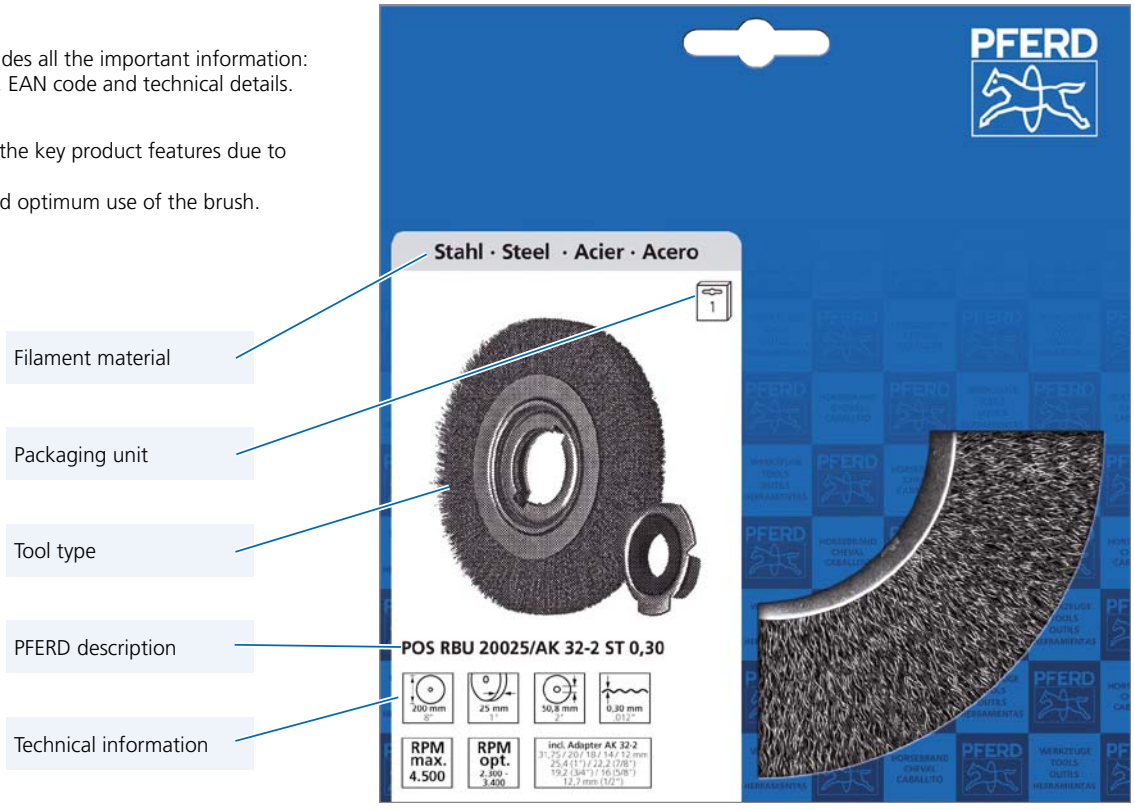
Your local retailer or PFERD sales representative will be glad to answer any questions you might have. To find an expert PFERD retailer near you, visit: www.pferd.com



Packaging label

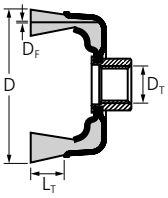
The packaging label provides all the important information: item number, description, EAN code and technical details.

Advantages:
- Quick identification of the key product features due to symbols.
- Information on safe and optimum use of the brush.



Threaded cup brushes
crimped





TBU

Excellent for medium-duty brushing such as deburring, cleaning and derusting on large surfaces.



Advantages:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

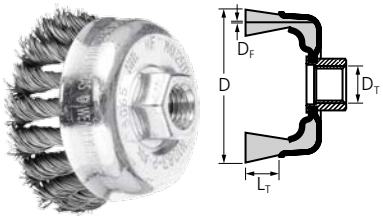
Recommendations for use:
- For optimum results, use on speed-adjustable angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".

D [mm]	L_T [mm]	D_T	D_F [mm]	Packaging 1	Packaging 5	Opt. RPM	Max. RPM	Description
				EAN 4007220				
Steel wire (ST)								
60	20	M14x2	0.30	153543	955192	6,300–9,400	12,500	POS TBU 60/M14 ST 0,30
75	25	M14x2	0.30	220849	955208	6,300–9,400	12,500	POS TBU 75/M14 ST 0,30
100	25	M14x2	0.30	153574	-	4,300–6,400	8,500	POS TBU 100/M14 ST 0,30
Stainless steel wire (INOX) All INOX brushes are degreased.								
60	20	M14x2	0.30	721742	955215	5,000–8,100	12,500	POS TBU 60/M14 INOX 0,30
75	25	M14x2	0.30	220856	955222	5,000–8,100	12,500	POS TBU 75/M14 INOX 0,30
100	25	M14x2	0.30	220863	-	3,400–5,500	8,500	POS TBU 100/M14 INOX 0,30
Silicon carbide (SiC) plastic filament								
100	46	M14x2	1.00	530856	-	2,400–3,900	6,000	POS TBU 100/M14 SiC 120 1,00



TBG



Aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning and derusting on large surfaces.

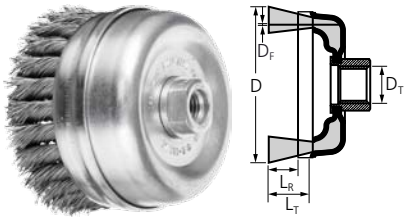
Advantages:
- Aggressive brushing effect due to the very stiff wire knots.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".
- DIA type brushes are supplied with 1 piece per PU.
- Grit size DIA 270 = D 64, grit size DIA 400 = D 46

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Packaging 5 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
65	22	M14x2	0.35	18	153437	955079	6,300–12,500	12,500	POS TBG 65/M14 ST 0,35
			0.50	18	579121	955086	6,300–12,500	12,500	POS TBG 65/M14 ST 0,50
			0.80	18	579138	-	6,300–12,500	12,500	POS TBG 65/M14 ST 0,80
80	20	M14x2	0.50	20	806654	955093	5,000–10,000	10,000	POS TBG 80/M14 ST 0,50
100	25	M14x2	0.50	24	806661	955109	4,500–9,000	9,000	POS TBG 100/M14 ST 0,50
Stainless steel wire (INOX) All INOX brushes are degreased.									
65	22	M14x2	0.35	18	220740	955116	5,000–12,500	12,500	POS TBG 65/M14 INOX 0,35
			0.50	18	598016	955123	5,000–12,500	12,500	POS TBG 65/M14 INOX 0,50
80	20	M14x2	0.35	20	806678	955130	4,000–10,000	10,000	POS TBG 80/M14 INOX 0,35
			0.50	20	003671	003688	4,000–10,000	10,000	POS TBG 80/M14 INOX 0,50
100	25	M14x2	0.35	24	806685	955147	3,600–9,000	9,000	POS TBG 100/M14 INOX 0,35
			0.50	24	003701	003718	3,600–9,000	9,000	POS TBG 100/M14 INOX 0,50
Stainless steel wire (INOX) Diamond (DIA)									
100	38	M14x2	0.50	24	-	107881	1,000–2,400	9,000	TBG 100/M14 INOX 0,50 DIA 270
					-	107874	1,000–2,400	9,000	TBG 100/M14 INOX 0,50 DIA 400

TBGR, with bridle



Aggressive brush with bridle. Excellent for heavy-duty brushing such as deburring, cleaning and derusting on large surfaces.

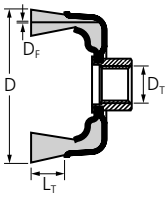
Advantages:
- The bridle prevents the wires spreading out sideways.
- Particularly long tool life.
- The bridle enables the spreading out and flexibility of the brush filament to be controlled.

Recommendations for use:
- For optimum results, use on powerful angle grinders.
- Remove the bridle once the filament is worn down. Then the rest of the filament can be used.
- Remove the bridle before starting work if you would like to achieve a large spreading diameter or access hard-to-reach areas.

D [mm]	L_R [mm]	L_T [mm]	D_T	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
80	25	40	M14x2	0.50	22	153482	4,300–8,500	8,500	TBGR 80/M14 ST 0,50
100	25	40	M14x2	0.50	26	153505	4,300–8,500	8,500	TBGR 100/M14 ST 0,50
			5/8-11	0.50	26	598009	4,300–8,500	8,500	TBGR 100/5/8 ST 0,50
125	25	30	5/8-11	0.50	32	584811	3,300–6,500	6,500	TBGR 125/5/8 ST 0,50
150	20	40	5/8-11	0.50	40	584828	2,800–5,500	5,500	TBGR 150/5/8 ST 0,50

Threaded cup brushes
knotted







TBG CT, COMBITWIST

Very aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning and derusting on large surfaces.

Advantages:
- Maximum economic efficiency due to the longest tool life and the highest stock removal.
- High level of comfort thanks to smooth running with no brush recoiling.
- Suitable for work on corners and edges as the knots are less likely to unravel.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".

PFERDVALUE:

VibrationFilter HapticFilter

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots [pcs.]	Packaging 1	Packaging 5	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Steel wire (ST) – COMBITWIST type									
65	22	M14x2	0.35	18	806692	955154	6,300–12,500	12,500	POS TBG 65/M14 CT ST 0,35
			0.50	18	806708	955161	6,300–12,500	12,500	POS TBG 65/M14 CT ST 0,50
80	20	M14x2	0.50	20	806715	955178	5,000–10,000	10,000	POS TBG 80/M14 CT ST 0,50
100	25	M14x2	0.50	24	806722	955185	4,500–9,000	9,000	POS TBG 100/M14 CT ST 0,50
Stainless steel wire (INOX) – COMBITWIST type									
All INOX brushes are degreased.									
65	22	M14x2	0.35	18	806739	-	5,000–12,500	12,500	POS TBG 65/M14 CT INOX 0,35
			0.50	18	806746	-	5,000–12,500	12,500	POS TBG 65/M14 CT INOX 0,50
80	20	M14x2	0.35	20	806753	-	4,000–10,000	10,000	POS TBG 80/M14 CT INOX 0,35
			0.50	20	003695	-	4,000–10,000	10,000	POS TBG 80/M14 CT INOX 0,50
100	25	M14x2	0.35	24	806760	-	3,600–9,000	9,000	POS TBG 100/M14 CT INOX 0,35
			0.50	24	003725	-	3,600–9,000	9,000	POS TBG 100/M14 CT INOX 0,50

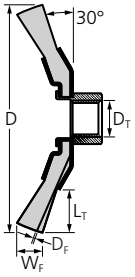




KBU

Excellent for medium-duty brushing such as deburring, cleaning and derusting.





Advantages:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Suitable for use on angle grinders up to 80 m/s.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

Recommendations for use:
- For optimum results, use on speed-adjustable angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Packaging 1	Packaging 5	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Steel wire (ST)									
100	10	22	M14x2	0.35	220832	955314	6,300–12,500	12,500	POS KBU 10010/M14 ST 0,35
115	10	30	M14x2	0.35	806777	-	6,300–12,500	12,500	POS KBU 11510/M14 ST 0,35
125	10	22	M14x2	0.35	-	104736	6,300–11,000	11,000	POS KBU 12510/M14 ST 0,35
Stainless steel wire (INOX)									
All INOX brushes are degreased.									
100	10	22	M14x2	0.35	531129	955321	5,000–12,500	12,500	POS KBU 10010/M14 INOX 0,35
115	10	30	M14x2	0.35	806784	-	5,000–12,500	12,500	POS KBU 11510/M14 INOX 0,35
125	10	22	M14x2	0.35	-	104743	5,000–11,000	11,000	POS KBU 12510/M14 INOX 0,35

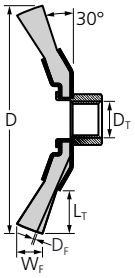
knotted

KBG

Aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning and derusting.







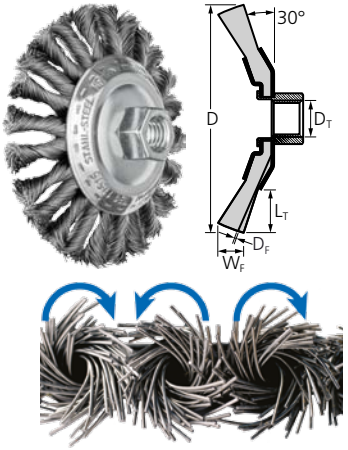
Advantages:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Knots [pcs.]	Packaging 1	Packaging 5	Opt. RPM	Max. RPM	Description
						EAN 4007220				
Steel wire (ST)										
100	13	22	M14x2	0.50	24	153529	955239	10,000–15,000	20,000	POS KBG 10013/M14 ST 0,50
115	15	26	M14x2	0.50	24	220818	955246	7,500–12,500	15,000	POS KBG 11515/M14 ST 0,50
125	15	19	M14x2	0.50	28	531167	-	7,500–12,000	15,000	POS KBG 12515/M14 ST 0,50
Stainless steel wire (INOX)										
All INOX brushes are degreased.										
100	13	22	M14x2	0.35	24	220801	955253	8,600–15,000	20,000	POS KBG 10013/M14 INOX 0,35
				0.50	24	003787	003763	8,600–15,000	20,000	POS KBG 10013/M14 INOX 0,50
115	15	26	M14x2	0.35	24	220825	955260	6,000–12,500	15,000	POS KBG 11515/M14 INOX 0,35
				0.50	24	003824	003800	6,000–12,500	15,000	POS KBG 11515/M14 INOX 0,50
125	15	19	M14x2	0.35	28	531174	-	6,000–12,500	15,000	POS KBG 12515/M14 INOX 0,35
				0.50	28	003848	-	6,000–12,500	15,000	POS KBG 12515/M14 INOX 0,50

Threaded bevel brushes
knotted



KBG CT, COMBITWIST

Very aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning and derusting.

Advantages:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Maximum economic efficiency due to the longest tool life and the highest stock removal.
- High level of comfort thanks to smooth running with no brush recoiling.
- Suitable for work on corners and edges as the knots are less likely to unravel.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 5-piece packaging unit, please specify the description without "POS".

PFERDVALUE:
VibrationFilter HapticFilter

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Packaging 5 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST) – COMBITWIST type										
100	13	22	M14x2	0.50	24	593431	955277	10,000–15,000	20,000	POS KBG 10013/M14 CT ST 0,50
115	15	26	M14x2	0.50	24	593448	955284	7,500–12,500	15,000	POS KBG 11515/M14 CT ST 0,50
125	15	19	M14x2	0.50	28	593455	-	7,500–12,500	15,000	POS KBG 12515/M14 CT ST 0,50
Stainless steel wire (INOX) – COMBITWIST type										
All INOX brushes are degreased.										
100	13	22	M14x2	0.35	24	593462	955291	8,000–15,000	20,000	POS KBG 10013/M14 CT INOX 0,35
				0.50	24	003794	003770	8,000–15,000	20,000	POS KBG 10013/M14 CT INOX 0,50
115	15	26	M14x2	0.35	24	593479	955307	6,000–12,500	15,000	POS KBG 11515/M14 CT INOX 0,35
				0.50	24	003831	003817	6,000–12,500	15,000	POS KBG 11515/M14 CT INOX 0,50
125	15	19	M14x2	0.35	28	593486	-	6,000–12,500	15,000	POS KBG 12515/M14 CT INOX 0,35
				0.50	28	003855	-	6,000–12,500	15,000	POS KBG 12515/M14 CT INOX 0,50



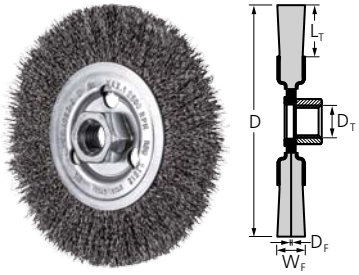
RBU, for angle grinders

Suitable for medium-duty brushing such as derusting, cleaning of weld seams and light deburring work.



Advantages:
- Suitable for use on angle grinders up to 80 m/s.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

Recommendations for use:
- For optimum results, use on speed-adjustable angle grinders.



D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)								
115	12	25	M14x2	0.30	806968	6,300–12,500	12,500	POS RBU 11512/M14 ST 0,30
125	12	15	M14x2	0.30	806975	5,500–11,000	11,000	POS RBU 12512/M14 ST 0,30
Stainless steel wire (INOX) All INOX brushes are degreased.								
115	12	25	M14x2	0.30	806982	5,000–12,500	12,500	POS RBU 11512/M14 INOX 0,30
125	12	15	M14x2	0.30	806999	4,400–11,000	11,000	POS RBU 12512/M14 INOX 0,30

RBU, POLISCRATCH

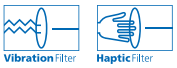
Excellent for processing and removing soft materials such as underseal and anti-drumming compound. Ideally suited to achieving rough, like sandblasted, surfaces due to the specific geometry of the filament material.

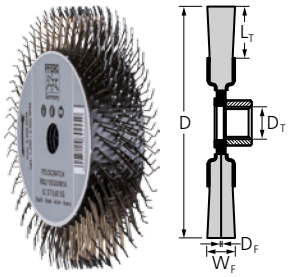


Advantages:
- High cooling effect and no smearing or loading of the brush due to the open construction of the filament material.
- Longer tool life as the brush can be resharpened using a sharpening block.

Recommendations for use:
- Use only on speed-adjustable angle and straight grinders.
- Can be resharpened up to 10x. To do so, press the wire tips onto a sharpening block for around 2–3 seconds. Change the running direction to sharpen the tool.

PFERDVALUE:





D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Packaging 5x 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)								
100	20	18	M14x2	0.60	892459	1,200–3,500	6,000	POS RBU 10020/M14 SC ST 0,60

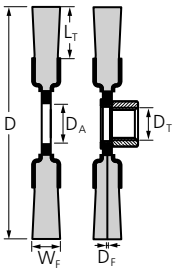


Arbor BO 8/M14
(EAN 4007220**900482**)
Safety note: Exclusively for use with POLISCRATCH brushes.

For more information:
Detailed information on accessories can be found on pages 55 and 56.

Wheel brushes
knotted





RBG

Aggressive brush. Suitable for heavy-duty brushing in metalwork such as descaling, derusting, deburring, cleaning of weld seams and removal of adhesive residues.

Advantages:
- Aggressive brushing effect due to the very stiff wire knots.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 10-piece packaging unit, please specify the description without "POS".

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)										
100	12	28	M14x2	0.50	22	658970	-	10,000–15,000	20,000	POS RBG 10012/M14 ST 0,50
115	12	22	22.2	0.50	24	153512	954966	6,300–12,500	12,500	POS RBG 11512/22,2 ST 0,50
			M14x2	0.50	24	658987	-	6,300–12,500	12,500	POS RBG 11512/M14 ST 0,50
125	12	28	22.2	0.50	24	530597	952702	5,500–12,500	12,500	POS RBG 12512/22,2 ST 0,50
			M14x2	0.50	24	658994	-	5,500–12,500	12,500	POS RBG 12512/M14 ST 0,50
150	13	26	22.2	0.60	30	597996	-	5,000–10,000	10,000	POS RBG 15013/22,2 ST 0,60
178	13	38	22.2	0.50	30	153413	954973	4,500–8,500	9,000	POS RBG 17813/22,2 ST 0,50
			M14x2	0.50	30	659007	-	4,500–8,500	9,000	POS RBG 17813/M14 ST 0,50
			22.2	0.80	30	578940	-	4,500–8,500	9,000	POS RBG 17813/22,2 ST 0,80
Stainless steel wire (INOX)										
All INOX brushes are degreased.										
115	12	22	22.2	0.35	24	220795	954980	5,000–12,500	12,500	POS RBG 11512/22,2 INOX 0,35
			22.2	0.50	24	003732	003459	5,000–12,500	12,500	POS RBG 11512/22,2 INOX 0,50
			M14x2	0.35	24	659014	-	5,000–12,500	12,500	POS RBG 11512/M14 INOX 0,35
			M14x2	0.50	24	003749	-	5,000–12,500	12,500	POS RBG 11512/M14 INOX 0,50
125	12	28	22.2	0.35	24	530788	954997	4,400–12,500	12,500	POS RBG 12512/22,2 INOX 0,35
			22.2	0.50	24	003510	003565	4,400–12,500	12,500	POS RBG 12512/22,2 INOX 0,50
			M14x2	0.35	24	659021	-	4,400–12,500	12,500	POS RBG 12512/M14 INOX 0,35
			M14x2	0.50	24	003527	-	4,400–12,500	12,500	POS RBG 12512/M14 INOX 0,50
178	13	38	22.2	0.35	30	220733	955000	3,600–8,500	9,000	POS RBG 17813/22,2 INOX 0,35
			22.2	0.50	30	003619	003657	3,600–8,500	9,000	POS RBG 17813/22,2 INOX 0,50
			M14x2	0.35	30	659038	-	3,600–8,500	9,000	POS RBG 17813/M14 INOX 0,35
			M14x2	0.50	30	003626	-	3,600–8,500	9,000	POS RBG 17813/M14 INOX 0,50



Arbor BO 8/22,2 100-125 (EAN 4007220**751930**): For knotted wheel brushes up to a diameter of 125 mm with a D_A of 22.2 mm.



BO 12/22,2 150-180 (EAN 4007220**107850**): For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.

For more information:
Detailed information on accessories can be found on pages 55 and 56.



RBG CT, COMBITWIST

Very aggressive brush. Suitable for heavy-duty brushing in metalwork such as descaling, derusting, deburring, cleaning of weld seams and removal of adhesive residues.



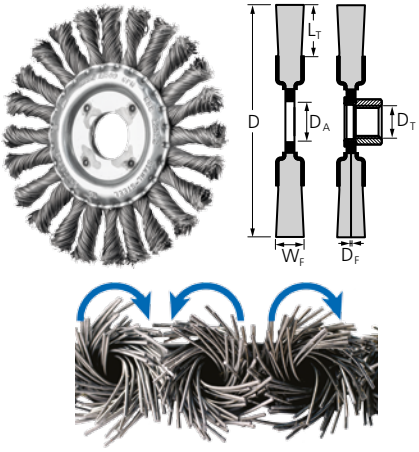
Advantages:
- Maximum economic efficiency due to the longest tool life and the highest stock removal.
- High level of comfort thanks to smooth running with no brush recoiling.
- Suitable for work on corners and edges as the knots are less likely to unravel.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

Ordering notes:
- For the 10-piece packaging unit, please specify the description without "POS".

PFERDVALUE:

Vibration Filter Haptic Filter



D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST) – COMBITWIST type										
115	12	22	22.2	0.50	24	593356	955017	6,300–12,500	12,500	POS RBG 11512/22,2 CT ST 0,50
			M14x2	0.50	24	806814	-	6,300–12,500	12,500	POS RBG 11512/M14 CT ST 0,50
125	12	28	22.2	0.50	24	593363	955024	5,500–12,500	12,500	POS RBG 12512/22,2 CT ST 0,50
			M14x2	0.50	24	806821	-	5,500–12,500	12,500	POS RBG 12512/M14 CT ST 0,50
178	13	38	22.2	0.50	30	593370	955031	4,500–8,500	9,000	POS RBG 17813/22,2 CT ST 0,50
				0.80	30	593394	-	4,500–8,500	9,000	POS RBG 17813/22,2 CT ST 0,80
Stainless steel wire (INOX) – COMBITWIST type										
All INOX brushes are degreased.										
115	12	22	22.2	0.35	24	593400	955048	5,000–12,500	12,500	POS RBG 11512/22,2 CT INOX 0,35
			22.2	0.50	24	003756	003480	5,000–12,500	12,500	POS RBG 11512/22,2 CT INOX 0,50
			M14x2	0.35	24	806838	-	5,000–12,500	12,500	POS RBG 11512/M14 CT INOX 0,35
			M14x2	0.50	24	003466	-	5,000–12,500	12,500	POS RBG 11512/M14 CT INOX 0,50
125	12	28	22.2	0.35	24	593417	955055	4,400–12,500	12,500	POS RBG 12512/22,2 CT INOX 0,35
			22.2	0.50	24	003541	003602	4,400–12,500	12,500	POS RBG 12512/22,2 CT INOX 0,50
			M14x2	0.35	24	806845	-	4,400–12,500	12,500	POS RBG 12512/M14 CT INOX 0,35
			M14x2	0.50	24	003572	-	4,400–12,500	12,500	POS RBG 12512/22,2 CT INOX 0,50
178	13	38	22.2	0.35	30	593424	955062	3,600–8,500	9,000	POS RBG 17813/22,2 CT INOX 0,35
				0.50	30	003633	003664	3,600–8,500	9,000	POS RBG 17813/22,2 CT INOX 0,50



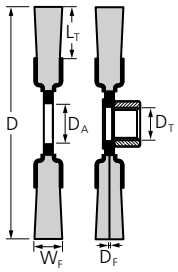
Arbor BO 8/22,2 100-125
(EAN 4007220**751930**):
For knotted wheel brushes up to a diameter of 125 mm with a D_A of 22.2 mm.



BO 12/22,2 150-180
(EAN 4007220**107850**):
For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.

For more information:
Detailed information on accessories can be found on pages 55 and 56.





RBG PIPE, Pipeline

Aggressive and robust brush that is able to withstand high mechanical loads. Perfect for heavy-duty brushing in pipeline and container construction.



Advantages:
- Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.
- Aggressive brushing effect due to the very stiff wire knots.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	Knots [pcs.]	D_F [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
100	6	19	16.0	32	0.50	750810	10,000–15,000	20,000	RBG 10006/16,0 PIPE ST 0,50
115	6	21	22.2	36	0.50	750926	6,300–12,500	12,500	RBG 11506/22,2 PIPE ST 0,50
			M14x2	36	0.50	750933	6,300–12,500	12,500	RBG 11506/M14 PIPE ST 0,50
125	6	18	22.2	48	0.50	750957	6,300–12,500	12,500	RBG 12506/22,2 PIPE ST 0,50
			M14x2	48	0.50	750995	6,300–12,500	12,500	RBG 12506/M14 PIPE ST 0,50
150	6	27	22.2	56	0.50	751015	5,000–10,000	10,000	RBG 15006/22,2 PIPE ST 0,50
			M14x2	56	0.50	751022	5,000–10,000	10,000	RBG 15006/M14 PIPE ST 0,50
178	6	28	22.2	56	0.50	751077	4,500–8,500	9,000	RBG 17806/22,2 PIPE ST 0,50 56Z
			M14x2	56	0.50	751084	4,500–8,500	9,000	RBG 17806/M14 PIPE ST 0,50 56Z
			22.2	76	0.50	751107	4,500–8,500	9,000	RBG 17806/22,2 PIPE ST 0,50 76Z
			M14x2	76	0.50	751114	4,500–8,500	9,000	RBG 17806/M14 PIPE ST 0,50 76Z
Stainless steel wire (INOX) All INOX brushes are degreased.									
100	6	19	16.0	32	0.50	751220	8,000–15,000	20,000	RBG 10006/16,0 PIPE INOX 0,50
115	6	21	22.2	36	0.50	751275	5,000–12,500	12,500	RBG 11506/22,2 PIPE INOX 0,50
			M14x2	36	0.50	751305	5,000–12,500	12,500	RBG 11506/M14 PIPE INOX 0,50
125	6	18	22.2	48	0.50	751329	5,000–12,500	12,500	RBG 12506/22,2 PIPE INOX 0,50
			M14x2	48	0.50	751343	5,000–12,500	12,500	RBG 12506/M14 PIPE INOX 0,50
150	6	27	22.2	56	0.50	751367	4,000–10,000	10,000	RBG 15006/22,2 PIPE INOX 0,50
			M14x2	56	0.50	751374	4,000–10,000	10,000	RBG 15006/M14 PIPE INOX 0,50
178	6	28	22.2	76	0.50	751398	3,600–8,500	9,000	RBG 17806/22,2 PIPE INOX 0,50 76Z
			M14x2	76	0.50	751404	3,600–8,500	9,000	RBG 17806/M14 PIPE INOX 0,50 76Z



For tools specially suited to pipeline construction, see the brochure “PFERD tools for pipeline construction”.



For detailed information and ordering data on PFERD grinding wheels for pipeline construction, please refer to catalogue section 6.



RBG PIPE CT, Pipeline COMBITWIST

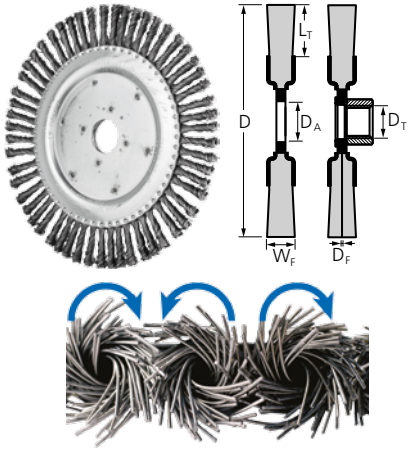
Very aggressive and robust brush that is able to withstand high mechanical loads. Perfect for heavy-duty brushing in pipeline and container construction.

Advantages:
- Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.
- Maximum economic efficiency due to the longest tool life and the highest stock removal.
- High level of comfort thanks to smooth running with no brush recoiling.
- Suitable for work on corners and edges as the knots are less likely to unravel.

Recommendations for use:
- For optimum results, use on powerful angle grinders.

PFERDVALUE:

Vibration Filter Haptic Filter



D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	Knots [pcs.]	D_F [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST) – COMBITWIST type									
125	6	18	22.2	48	0.50	107799	6,300–12,500	12,500	RBG 12506/22,2 PIPE CT ST 0,50
			M14x2	48	0.50	107805	6,300–12,500	12,500	RBG 12506/M14 PIPE CT ST 0,50
178	6	28	22.2	72	0.50	751190	4,500–8,500	9,000	RBG 17806/22,2 PIPE CT ST 0,50 72Z
			M14x2	72	0.50	751206	4,500–8,500	9,000	RBG 17806/M14 PIPE CT ST 0,50 72Z

Wheel brushes, knotted

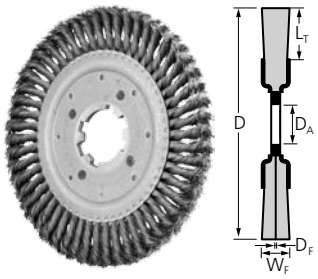
RBG, stationary

Aggressive and robust brush that is able to withstand high mechanical loads. Suitable for all heavy-duty stationary and automated brushing, e.g. deburring work.



Advantages:
- Aggressive brushing effect due to the very stiff wire knots.
- Can be used with all common stationary drive systems and bench grinders thanks to the variable arbor hole diameter.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).
- Grit size DIA 270 = D 64, grit size DIA 400 = D 46



D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	Knots [pcs.]	D_F [mm] 0.35	D_F [mm] 0.50 EAN 4007220	Opt. RPM	Max. RPM	IP	Description
Steel wire (ST)										
200	16	44	50.8	34	956540	956557	4,000–6,500	8,500	1	RBG 20016/50,8 ST ...
250	16	41	50.8	54	956564	956571	2,000–3,400	4,500	1	RBG 25016/50,8 ST ...
Stainless steel wire (INOX) Diamond (DIA)										
190	30	50	22.2	24	-	107898	1,000–2,000	8,000	1	POS RBG 19030/22,2 INOX 0,50 DIA 270
					-	107911	1,000–2,000	8,000	1	POS RBG 19030/22,2 INOX 0,50 DIA 400

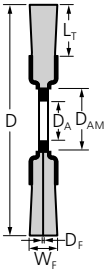


Arbor BO 12/22,2 200 (EAN 4007220**107867**)**:** For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm. **Note: Adapter pair APM 50,8/22,2-30** (EAN 4007220**900390**) is required to use the product with the arbor.

Adapter pair APM 50,8/...: Reduces the arbor hole diameters to the required dimensions. Suitable for knotted wheel brushes with a diameter of 200–250 mm and crimped wheel brushes designed as deburring brushes.

For more information:
Detailed information on accessories can be found on pages 55 and 56.





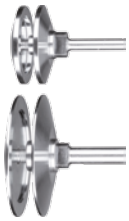
RBU, slim

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces.

Advantages:
- Can be used with all common stationary drive systems and bench grinders thanks to the variable arbor hole diameter.
- Can be packed as wide rollers without gaps because of their special design.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

Ordering notes:
- Please order adapter set AK 32 separately.
- Wheel brushes with diameters 100 and 125 mm cannot be used with adapter set AK 32.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm]	Packaging 2 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
100	12	24	14.0	-	0.15	597866	4,000–6,000	8,000	RBU 10012/14,0 ST 0,15
					0.30	597873	4,000–6,000	8,000	RBU 10012/14,0 ST 0,30
125	12	32	14.0	-	0.30	806791	4,000–6,000	8,000	RBU 12512/14,0 ST 0,30
150	12	28	22.2	31.8	0.25	530412	3,000–4,500	6,000	RBU 15012/22,2 ST 0,25
180	12	43	22.2	31.8	0.30	658734	3,000–4,500	6,000	RBU 18012/22,2 ST 0,30
200	16	44	22.2	31.8	0.25	530436	3,000–4,500	6,000	RBU 20016/22,2 ST 0,25
250	20	70	22.2	31.8	0.25	530443	1,800–2,700	3,600	RBU 25020/22,2 ST 0,25
Stainless steel wire (INOX) All INOX brushes are degreased.									
125	12	32	14.0	-	0.30	806807	3,200–5,200	8,000	RBU 12512/14,0 INOX 0,30
150	12	28	22.2	31.8	0.30	597880	2,400–3,900	6,000	RBU 15012/22,2 INOX 0,30
180	12	43	22.2	31.8	0.30	658796	2,400–3,900	6,000	RBU 18012/22,2 INOX 0,30
200	16	44	22.2	31.8	0.30	597910	2,400–3,900	6,000	RBU 20016/22,2 INOX 0,30
250	20	70	22.2	31.8	0.30	597927	1,400–2,300	3,600	RBU 25020/22,2 INOX 0,30
Silicon carbide (SiC) plastic filament									
100	12	22	12.0	-	1.00	597903	3,200–5,200	8,000	RBU 10012/12,0 SiC 80 1,00
					0.90	220870	3,200–5,200	8,000	RBU 10012/12,0 SiC 180 0,90
150	16	32	12.0	31.8	1.00	530467	2,400–3,900	8,000	RBU 15016/12,0 SiC 80 1,00
					0.90	220894	2,400–3,900	8,000	RBU 15016/12,0 SiC 180 0,90
200	16	32	22.2	31.8	1.00	530474	1,800–2,900	4,500	RBU 20016/22,2 SiC 80 1,00
					0.90	220917	1,800–2,900	4,500	RBU 20016/22,2 SiC 180 0,90
250	16	38	22.2	31.8	1.00	530481	1,400–2,300	3,600	RBU 25016/22,2 SiC 80 1,00
					0.90	220948	1,400–2,300	3,600	RBU 25016/22,2 SiC 180 0,90
Ceramic oxide grain (CO) plastic filament									
100	12	22	12.0	-	1.10	837269	3,200–5,200	8,000	RBU 10012/12,0 CO 120 1,10
150	16	28	12.0	31.8	1.10	837276	2,400–3,900	6,000	RBU 15016/12,0 CO 120 1,10
200	16	38	22.2	31.8	1.10	837283	1,800–2,900	4,500	RBU 20016/22,2 CO 120 1,10
Nylon plastic filament									
100	12	22	12.0	-	0.40	899298	3,200–5,200	8,000	RBU 10012/12,0 Nylon 0,40
150	16	32	12.0	31.8	0.40	899304	3,200–5,200	8,000	RBU 15016/12,0 Nylon 0,40
200	16	32	22.2	31.8	0.40	899311	2,400–3,900	6,000	RBU 20016/22,2 Nylon 0,40

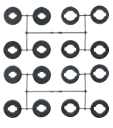


Arbor BO 8/12-14 100-125
(EAN 4007220**107843**)**:** For crimped wheel brushes with a diameter of 100–125 mm and a D_A / D_{AM} of 12 mm and 14 mm.

BO 12/22,2 150-180
(EAN 4007220**107850**)**:**
For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.



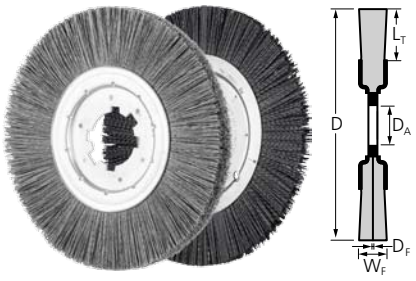
BO 12/22,2 200
(EAN 4007220**107867**)**:**
For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.



Adapter set AK 32
(EAN 4007220**608593**)**:**
Arbor hole diameters contained in the set in mm (inch): 20 / 18 / 14 / 12 / 25.4 (1) / 22.2 (7/8) / 16 (5/8) / 12.7 (1/2).

For more information:
Detailed information on accessories can be found on pages 55 and 56.

RBU, slim, stationary



Its plastic filament makes this product particularly suitable for deburring complicated components such as cylinder heads or gear toothing. Ideal for processing aluminium due to the longer trim length and higher degree of flexibility. Suitable for use on stationary machines, automated centres and robots.

Advantages:
- Can be packed as wide rollers without gaps because of their special design.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.

Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	Grit size / D_F [mm] 120 0.55	120 1.10	180 0.90	320 0.55	Opt. RPM	Max. RPM	IP	Description
				EAN 4007220							
Silicon carbide (SiC) plastic filament											
200	13	43	50.8	807248	-	807255	807262	2,400–3,900	6,000	1	RBU 20013/50,8 SiC …
250	15	55	50.8	807279	-	807286	807293	1,400–2,300	3,600	1	RBU 25015/50,8 SiC …
Ceramic oxide grain (CO) plastic filament											
200	13	46	50.8	-	837290	-	-	2,400–3,900	6,000	1	RBU 20013/50,8 CO …
250	15	63	50.8	-	837306	-	-	1,400–2,300	3,600	1	RBU 25015/50,8 CO …



Arbor BO 12/22,2 200 (EAN 4007220**107867**)**:** For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.

Note: Adapter pair APM 50,8/22,2-30 (EAN 4007220**900390**) is required to use the product with the arbor.

Adapter pair APM 50,8/...: Reduces the arbor hole diameters to the required dimensions. Suitable for knotted wheel brushes with a diameter of 200–250 mm and crimped wheel brushes designed as deburring brushes.

For more information:
Detailed information on accessories can be found on pages 55 and 56.

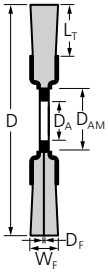






Wheel brushes
crimped





RBU, wide, universal use

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces. Developed for universal use in the workshop.

Advantages:
- Can be used with all common stationary drive systems and bench grinders thanks to the variable arbor hole diameter.

Ordering notes:
- Diameters of 150–200 mm are supplied together with adapter set AK 32-2.
- Diameters of 100–125 mm are supplied with a variable arbor hole.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
100	20	25	12/14/18/22.2/25.4	30.0	0.30	956236	4,000–6,000	8,000	POS RBU 10020/14,0 ST 0,30
	28	25	12/14/18/22.2/25.4	30.0	0.30	956243	4,000–6,000	8,000	POS RBU 10028/14,0 ST 0,30
125	20	30	12/14/18/22.2/25.4	30.0	0.30	956250	3,000–4,500	6,000	POS RBU 12520/14,0 ST 0,30
	28	30	12/14/18/22.2/25.4	30.0	0.30	956274	3,000–4,500	6,000	POS RBU 12528/14,0 ST 0,30
150	25	25	AK 32-2	50.8	0.20	956281	3,000–4,500	6,000	POS RBU 15025/AK32-2 ST 0,20
	25	25	AK 32-2	50.8	0.30	956304	3,000–4,500	6,000	POS RBU 15025/AK32-2 ST 0,30
	38	25	AK 32-2	50.8	0.20	956298	3,000–4,500	6,000	POS RBU 15038/AK32-2 ST 0,20
	38	25	AK 32-2	50.8	0.30	956311	3,000–4,500	6,000	POS RBU 15038/AK32-2 ST 0,30
180	25	40	AK 32-2	50.8	0.20	956335	3,000–4,500	6,000	POS RBU 18025/AK32-2 ST 0,20
	25	40	AK 32-2	50.8	0.30	956342	3,000–4,500	6,000	POS RBU 18025/AK32-2 ST 0,30
	38	40	AK 32-2	50.8	0.30	956359	3,000–4,500	6,000	POS RBU 18038/AK32-2 ST 0,30
200	25	50	AK 32-2	50.8	0.20	956366	2,300–3,400	4,500	POS RBU 20025/AK32-2 ST 0,20
	25	50	AK 32-2	50.8	0.30	956373	2,300–3,400	4,500	POS RBU 20025/AK32-2 ST 0,30
	38	50	AK 32-2	50.8	0.30	956380	2,300–3,400	4,500	POS RBU 20038/AK32-2 ST 0,30
Stainless steel wire (INOX)									
100	20	25	12/14/18/22.2/25.4	30.0	0.30	956397	3,200–5,200	8,000	POS RBU 10020/14,0 INOX 0,30
	28	25	12/14/18/22.2/25.4	30.0	0.30	956403	3,200–5,200	8,000	POS RBU 10028/14,0 INOX 0,30
125	20	30	12/14/18/22.2/25.4	30.0	0.30	956410	2,400–3,900	6,000	POS RBU 12520/14,0 INOX 0,30
	28	30	12/14/18/22.2/25.4	30.0	0.30	956434	2,400–3,900	6,000	POS RBU 12528/14,0 INOX 0,30
150	25	25	AK 32-2	50.8	0.20	956441	2,400–3,900	6,000	POS RBU 15025/AK32-2 INOX 0,20
	25	25	AK 32-2	50.8	0.30	956465	2,400–3,900	6,000	POS RBU 15025/AK32-2 INOX 0,30
	38	25	AK 32-2	50.8	0.20	956458	2,400–3,900	6,000	POS RBU 15038/AK32-2 INOX 0,20
	38	25	AK 32-2	50.8	0.30	956472	2,400–3,900	6,000	POS RBU 15038/AK32-2 INOX 0,30
180	25	40	AK 32-2	50.8	0.20	956489	2,400–3,900	6,000	POS RBU 18025/AK32-2 INOX 0,20
	25	40	AK 32-2	50.8	0.30	956496	2,400–3,900	6,000	POS RBU 18025/AK32-2 INOX 0,30
	38	40	AK 32-2	50.8	0.30	956502	2,400–3,900	6,000	POS RBU 18038/AK32-2 INOX 0,30
200	25	50	AK 32-2	50.8	0.20	956519	1,800–2,900	4,500	POS RBU 20025/AK32-2 INOX 0,20
	25	50	AK 32-2	50.8	0.30	956526	1,800–2,900	4,500	POS RBU 20025/AK32-2 INOX 0,30
	38	50	AK 32-2	50.8	0.30	956533	1,800–2,900	4,500	POS RBU 20038/AK32-2 INOX 0,30
Silicon carbide (SiC) plastic filament									
150	25	25	AK 32-2	50.8	0.55	069707	2,400–3,900	6,000	POS RBU 15025/AK32-2 SiC 120 0,55
					1.10	069691	2,400–3,900	6,000	POS RBU 15025/AK32-2 SiC 120 1,10
					0.55	069714	2,400–3,900	6,000	POS RBU 15025/AK32-2 SiC 320 0,55
200	25	50	AK 32-2	50.8	1.10	069721	2,400–3,900	6,000	POS RBU 20025/AK32-2 SiC 120 1,10





Arbor BO 8/12-14 100-125
(EAN 4007220**107843**):
For crimped wheel brushes with a diameter of 100–125 mm and a D_A / D_{AM} of 12 mm and 14 mm.

BO 12/22,2 150-180
(EAN 4007220**107850**):
For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.



BO 12/22,2 200
(EAN 4007220**107867**):
For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.



Adapter set AK 32-2
(EAN 4007220**806890**):
Arbor hole diameters contained in the set in mm (inch): 31.75 / 20 / 18 / 14 / 12 / 25.4 (1) / 22.2 (7/8) / 19.2 (.750) / 16 (5/8) / 12.7 (1/2).

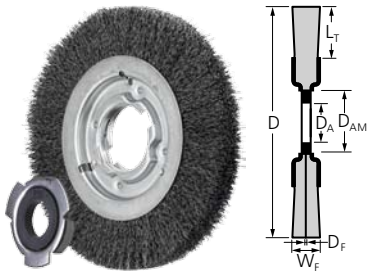
Note: Adapter pairs AM 50,8 for brushes with a D_{AM} of 50.8 mm can be used in applications involving high levels of heat and forces.

RBU, wide, industrial use

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces. Developed specially for industrial use.

Advantages:
- Can be used with all common stationary drive systems and bench grinders thanks to the variable arbor hole diameter.
- High economic efficiency due to very long tool life.

Ordering notes:
- Diameters of 150–250 mm are supplied together with adapter set AK 32-2.
- The 100 mm diameter is supplied with a variable arbor hole.



D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)									
100	20	24	14.0/18.0/22.2	25.4	0.30	658710	4,000–6,000	8,000	RBU 10020/14,0 ST 0,30
	28	24	14.0/18.0/22.2	25.4	0.30	153604	4,000–6,000	8,000	RBU 10028/14,0 ST 0,30
150	25	25	AK 32-2	50.8	0.30	658727	3,000–4,500	6,000	RBU 15025/AK32-2 ST 0,30
	38	25	AK 32-2	50.8	0.30	153628	3,000–4,500	6,000	RBU 15038/AK32-2 ST 0,30
180	25	40	AK 32-2	50.8	0.30	658741	3,000–4,500	6,000	RBU 18025/AK32-2 ST 0,30
200	25	38	AK 32-2	50.8	0.30	658765	2,300–3,400	4,500	RBU 20025/AK32-2 ST 0,30
	38	38	AK 32-2	50.8	0.30	153635	2,300–3,400	4,500	RBU 20038/AK32-2 ST 0,30
250	30	50	AK 32-2	50.8	0.30	658772	1,800–2,700	3,600	RBU 25030/AK32-2 ST 0,30
	48	50	AK 32-2	50.8	0.30	220924	1,800–2,700	3,600	RBU 25048/AK32-2 ST 0,30
300	40	40	50.8	117.5	0.30	616086	1,500–2,500	3,000	RBU 30040/50,8 ST 0,30
Stainless steel wire (INOX)									
All INOX brushes are degreased.									
150	25	25	AK 32-2	50.8	0.30	658789	2,400–3,900	6,000	RBU 15025/AK32-2 INOX 0,30
	38	25	AK 32-2	50.8	0.30	220887	2,400–3,900	6,000	RBU 15038/AK32-2 INOX 0,30
180	25	40	AK 32-2	50.8	0.30	658871	2,400–3,900	6,000	RBU 18025/AK32-2 INOX 0,30
200	25	38	AK 32-2	50.8	0.30	658895	1,800–2,900	4,500	RBU 20025/AK32-2 INOX 0,30
	38	38	AK 32-2	50.8	0.30	220900	1,800–2,900	4,500	RBU 20038/AK32-2 INOX 0,30
250	30	50	AK 32-2	50.8	0.30	658901	1,400–2,300	3,600	RBU 25030/AK32-2 INOX 0,30
	48	50	AK 32-2	50.8	0.30	220931	1,400–2,300	3,600	RBU 25048/AK32-2 INOX 0,30



Arbor BO 8/12-14 100-125 (EAN 4007220**107843**)**:** For crimped wheel brushes with a diameter of 100–125 mm and a D_A / D_{AM} of 12 mm and 14 mm.

BO 12/22,2 150-180 (EAN 4007220**107850**)**:** For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.



BO 12/22,2 200 (EAN 4007220**107867**)**:** For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.

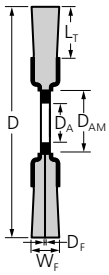


Adapter set AK 32-2 (EAN 4007220**806890**): Arbor hole diameters contained in the set in mm (inch): 31.75 / 20 / 18 / 14 / 12 / 25.4 (1) / 22.2 (7/8) / 19.2 (.750) / 16 (5/8) / 12.7 (1/2).

Note: Adapter pairs AM 50,8 for brushes with a D_{AM} of 50.8 mm can be used in applications involving high levels of heat and forces.







RBU, deburring brushes

Particularly suitable for deburring pipes, cut edges and small parts on stationary machines.

The special wire construction with cord wire filament (LIT) is particularly suitable for heavy-duty brushing and aggressive brushing.



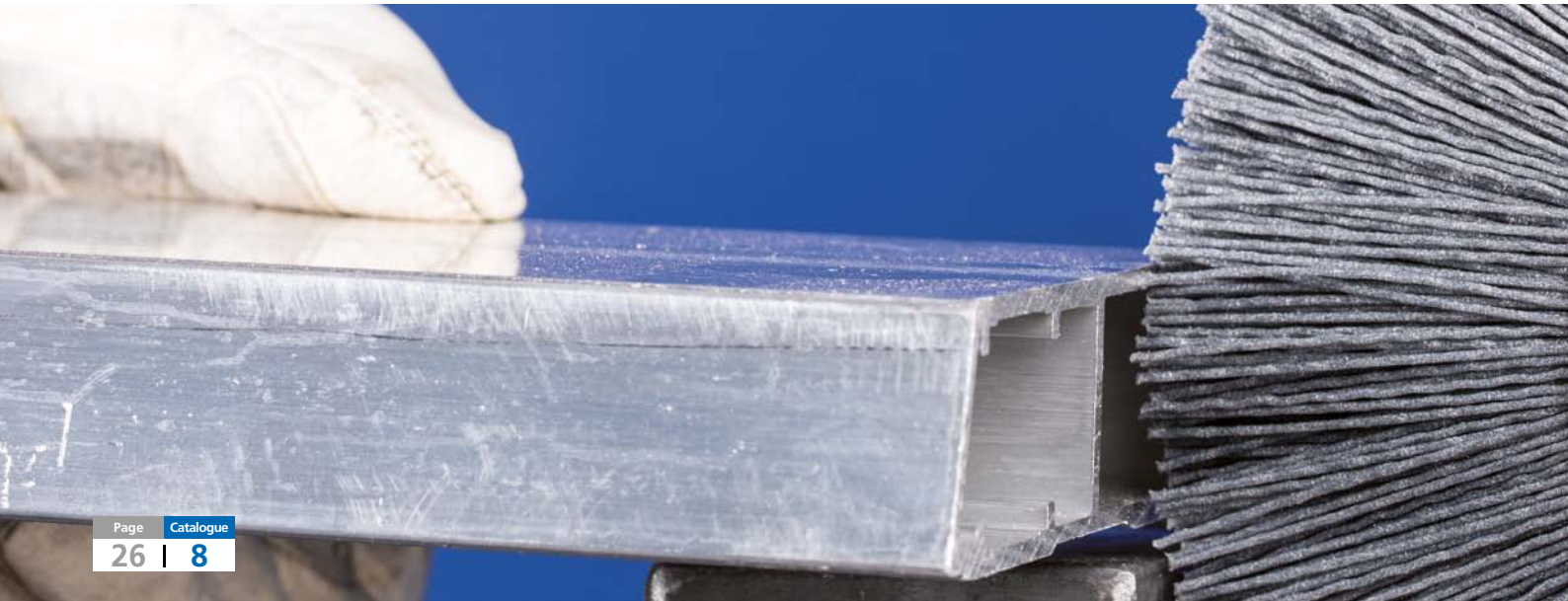
Advantages:
- Individual check for imbalance guarantees smooth running.
- Longest tool life thanks to high filament density.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).
- Please order adapter pairs APM 50,8 separately.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm] 0.20	0.35	0.50	1.10	Opt. RPM	Max. RPM	IP	Description
					EAN 4007220							
Steel wire (ST) LIT ST = stranded, brass-plated steel wire												
250	60	50	50.8	100.0	807040	807057	807064	-	1,800–2,700	3,600	1	RBU 25060/50,8 ST …
	60	50	50.8	100.0	-	807118	-	-	1,800–2,700	3,600	1	RBU 25060/50,8 LIT ST …
	80	50	50.8	100.0	-	807071	-	-	1,800–2,700	3,600	1	RBU 25080/50,8 ST …
	80	50	50.8	100.0	-	807125	-	-	1,800–2,700	3,600	1	RBU 25080/50,8 LIT ST …
	100	50	50.8	100.0	-	807095	807101	-	1,800–2,700	3,600	1	RBU 250100/50,8 ST …
Stainless steel wire (INOX) LIT INOX = stranded INOX wire												
250	60	50	50.8	100.0	807132	807149	807156	-	1,400–2,300	3,600	1	RBU 25060/50,8 INOX …
	60	50	50.8	100.0	-	807200	-	-	1,400–2,300	3,600	1	RBU 25060/50,8 LIT INOX …
	100	50	50.8	100.0	-	807187	807194	-	1,400–2,300	3,600	1	RBU 250100/50,8 INOX …
Silicon carbide (SiC) plastic filament												
250	60	45	50.8	100.0	-	-	-	069738	1,400–2,300	3,600	1	RBU 25060/50,8 SiC 120 …

Adapter pair APM 50,8/...:
Reduces the arbor hole diameters to the required dimensions. Suitable for knotted wheel brushes with a diameter of 200–250 mm and crimped wheel brushes designed as deburring brushes.

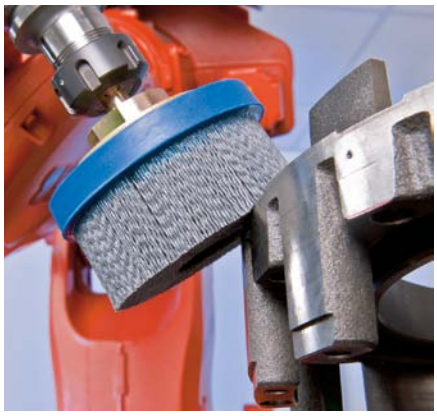
For more information:
Detailed information on accessories can be found on pages 55 and 56.



Composite brushes from PFERD have been specifically developed for industrial, automated use. They are suitable for a variety of applications and their variable clamping options mean that they can be used on many different drive systems. This offers the advantage that the workpiece can be produced and finished on the same machine. As a result, labour-intensive, manual work is reduced and reproducible results are achieved with short cycle times.

The standard type of composite brushes is suitable for tasks requiring aggressive brushing behaviour. The FLEX type is more flexible than the standard type due to its longer trim length on wheel brushes and the special arrangement of the filament on composite disc brushes, and it is particularly well suited to work on irregular surfaces.

For efficient use, numerous application parameters such as the processing time and feed rate must be coordinated with each other and the suitable brush must be selected. PFERD offers a wide range of products for the various applications. Our experienced sales representatives and technical advisers will be happy to help or visit you. Our worldwide sales addresses can be found at: www.pferd.com



Wheel brushes, crimped

RBUP

Particularly aggressive brush. Its plastic filament makes this product particularly suitable for deburring complicated components such as cylinder heads or gear toothing. Developed specially for industrial use.



Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.
- Select the REC type (rectangular filament) for aggressive work with SiC as the filament material.

Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).
- Please order adapter pairs APM 50,8 separately.

PFERDVALUE:

Vibration Filter

Time Saving

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	Grit size / D_F [mm]					Opt. RPM	Max. RPM	IP	Description
				80 1.10	80 1.14	120 0.55	120 1.10	320 0.55				
				EAN 4007220								
Silicon carbide (SiC) plastic filament												
150	25	32	50.8	-	956588	-	-	-	900–1,500	3,600	1	RBUP 15025/50,8 REC SiC …
				956618	-	-	956649	956670	900–1,500	3,600	1	RBUP 15025/50,8 SiC …
200	25	32	50.8	-	956595	-	-	-	900–1,500	3,600	1	RBUP 20025/50,8 REC SiC …
				956625	-	-	956656	956687	900–1,500	3,600	1	RBUP 20025/50,8 SiC …
250	25	38	50.8	-	956601	-	-	-	900–1,500	3,600	1	RBUP 25025/50,8 REC SiC …
				956632	-	039175	956663	956694	900–1,500	3,600	1	RBUP 25025/50,8 SiC …
Ceramic oxide grain (CO) plastic filament												
150	25	32	50.8	956700	-	-	-	-	900–1,500	3,600	1	RBUP 15025/50,8 CO …
200	25	32	50.8	956717	-	-	-	-	900–1,500	3,600	1	RBUP 20025/50,8 CO …
250	25	38	50.8	956724	-	-	-	-	900–1,500	3,600	1	RBUP 25025/50,8 CO …



Arbor BO 12/22,2 150-180 (EAN 4007220**107850**)**:** For knotted and crimped wheel brushes with a diameter of 150–180 mm and a D_A of 22.2 mm.



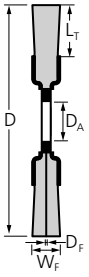
BO 12/22,2 200 (EAN 4007220**107867**)**:** For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.

Note: Adapter pair AM 50,8/22,2 (EAN 4007220**806906**) is required to use the product with arbors.



Adapter pair AM 50,8/...: Reduces the arbor hole diameters to the required dimensions. Suitable for wheel brushes with a brush diameter as from 150 mm in the wide and composite types.





RBUP, FLEX

Particularly flexible brush. Its plastic filament makes this product particularly suitable for deburring complicated components such as cylinder heads or gear toothing. Developed specially for industrial use.

Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- Highly flexible, enabling optimal adjustment to the workpiece contour and less heat build-up.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.
- Select the REC type (rectangular filament) for aggressive work with SiC as the filament material.

Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).
- Packaging unit: 1 piece

PFERDVALUE:

Vibration Filter

Time Saving

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	Keyway [mm]	Grit size / D_F [mm]					Opt. RPM	Max. RPM	Description
					80 1.10	80 1.14	120 1.10	180 0.90	320 0.55			
					EAN 4007220							
Silicon carbide (SiC) plastic filament – FLEX type												
200	25	57	50.8	-	-	039298	-	-	-	900–1,500	3,600	RBUP 20025/50,8 REC SiC…FLEX
					038840	-	039151	-	038895	900–1,500	3,600	RBUP 20025/50,8 SiC … FLEX
250	25	83	50.8	-	-	038505	-	-	-	900–1,500	3,600	RBUP 25025/50,8 REC SiC…FLEX
		83	50.8	-	038499	-	038871	-	039168	900–1,500	3,600	RBUP 25025/50,8 SiC … FLEX
		70	50.8	6.3 x 12.7	-	-	-	038666	-	900–1,500	3,600	RBUP 25025/50,8 SiC … FLEX
300	25	60	50.8	6.3 x 12.7	038772	-	038765	038741	-	500–800	1,800	RBUP 30025/50,8 SiC … FLEX
350	25	89	50.8	6.3 x 12.7	038710	-	-	038680	-	500–800	1,800	RBUP 35025/50,8 SiC … FLEX
Ceramic oxide grain (CO) plastic filament – FLEX type												
300	25	60	50.8	6.3 x 12.7	038796	-	038802	-	-	500–800	1,800	RBUP 30025/50,8 CO … FLEX
350	25	89	50.8	6.3 x 12.7	038826	-	038819	-	-	500–800	1,800	RBUP 35025/50,8 CO … FLEX



BO 12/22,2 200
(EAN 4007220**107867**):
For knotted and crimped wheel brushes with a diameter of 200 mm and a D_A of 22.2 mm.

Note: Adapter pair AM 50,8/22,2 (EAN 4007220**806906**) is required to use the product with arbors.



Adapter pair AM 50,8/...:
Reduces the arbor hole diameters to the required dimensions. Suitable for wheel brushes with a brush diameter as from 150 mm in the wide and composite versions.

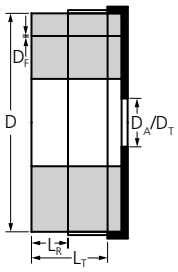
For more information:
Detailed information on accessories can be found on pages 55 and 56.



DBUR, with bridle

Particularly aggressive brush. Particularly suitable for deburring and work on surfaces on stationary machines.





Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.
- Select the REC type (rectangular filament) for aggressive work with SiC as the filament material.
- Remove the bridle once the filament is worn down. Then the rest of the filament can be used.
- Remove the bridle before starting work if you would like to achieve a large spreading diameter or access hard-to-reach areas.
- Brushes with a diameter of 75 mm with an M14 thread are suitable for use on speed-adjustable angle grinders.

Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).
- All composite disc brushes with a 22.2 mm diameter arbor hole are supplied with two drive pin holes with 6.5 mm diameter. Pitch circle diameter of 31 mm.

PFERDVALUE:



D [mm]	L_R [mm]	L_T [mm]	D_A / D_T	Grit size / D_F [mm]					Opt. RPM	Max. RPM	IP	Description
				80 1.10	80 1.14	120 0.55	120 1.10	320 0.55				
				EAN 4007220								
Silicon carbide (SiC) plastic filament												
75	19	38	22.2	-	032787	-	-	-	2,400–3,900	4,500	1	DBUR 75/22,2 REC SiC …
			22.2	032794	-	033517	033500	033524	2,400–3,900	4,500	1	DBUR 75/22,2 SiC …
			M14x2	-	899373	-	-	-	2,400–3,900	6,000	1	DBUR 75/M14 REC SiC …
			M14x2	899380	-	-	-	-	2,400–3,900	6,000	1	DBUR 75/M14 SiC …
100	19	38	22.2	-	808740	-	-	-	1,400–2,300	3,500	1	DBUR 100/22,2 REC SiC …
				808757	-	-	808764	808771	1,400–2,300	3,500	1	DBUR 100/22,2 SiC …
125	19	38	22.2	-	808795	-	-	-	1,200–2,000	3,000	1	DBUR 125/22,2 REC SiC …
				808788	-	-	808801	808818	1,200–2,000	3,000	1	DBUR 125/22,2 SiC …
150	19	38	22.2	808849	-	-	808856	808863	1,000–1,600	2,500	1	DBUR 150/22,2 SiC …
				-	808825	-	-	-	1,000–1,600	2,500	1	DBUR 150/22,2 REC SiC …
Ceramic oxide grain (CO) plastic filament												
75	19	38	22.2	-	-	-	033593	-	2,400–3,900	4,500	1	DBUR 75/22,2 CO …
100	19	38	22.2	-	-	-	837221	-	1,400–2,300	3,500	1	DBUR 100/22,2 CO …
125	19	38	22.2	-	-	-	837245	-	1,200–2,000	3,000	1	DBUR 125/22,2 CO …
150	19	38	22.2	-	-	-	837252	-	1,000–1,600	2,500	1	DBUR 150/22,2 CO …



Arbor BO 12/22,2 75-100
(EAN 4007220**808887**)**:**
For all composite disc brushes with a diameter of 75–100 mm and a D_A of 22.2 mm.



BO 12/22,2 125-150
(EAN 4007220**808894**):
For all composite disc brushes with a diameter of 125–150 mm and a D_A of 22.2 mm.

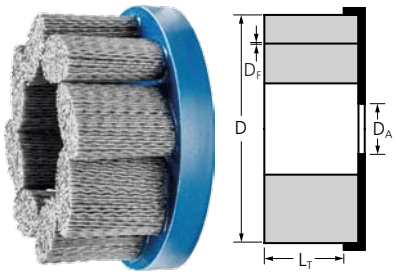
For more information:
Detailed information on accessories can be found on pages 55 and 56.



More PFERD tools and a large number of recommendations for use when working with aluminium can be found in our PRAXIS brochure, "PFERD tools for use on aluminium". Please contact us.







DBU, FLEX

Particularly flexible brush. Particularly suitable for deburring and work on surfaces on stationary machines.

Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- Special arrangement of the filament enables optimal adjustment to the workpiece contour and less heat build-up.
- Select the REC type (rectangular filament) for aggressive work with SiC as the filament material.

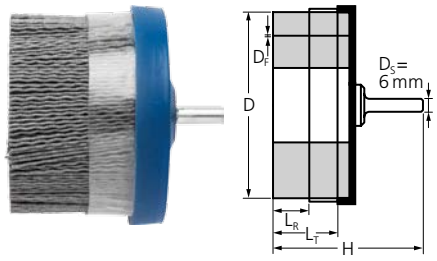
Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).
- All composite disc brushes with a 22.2 mm diameter arbor hole are supplied with two drive pin holes with 6.5 mm diameter. Pitch circle diameter of 31 mm.

PFERDVALUE:

Vibration Filter

Time Saving

D [mm]	L_T [mm]	D_A [mm]	Grit size / D_F [mm] 80 1.10	80 1.14	120 1.10	320 0.55	Opt. RPM	Max. RPM	IP	Description
			EAN 4007220							
Silicon carbide (SiC) plastic filament – FLEX type										
75	38	22.2	-	033647	-	-	2,400–3,900	4,500	1	DBU 75/22,2 REC SiC … FLEX
			033678	-	033685	033708	2,400–3,900	4,500	1	DBU 75/22,2 SiC … FLEX
100	38	22.2	-	033715	-	-	1,400–2,300	3,500	1	DBU 100/22,2 REC SiC … FLEX
			033739	-	033746	033760	1,400–2,300	3,500	1	DBU 100/22,2 SiC … FLEX
150	38	22.2	-	033777	-	-	1,000–1,600	2,500	1	DBU 150/22,2 REC SiC … FLEX
			033791	-	033807	033821	1,000–1,600	2,500	1	DBU 150/22,2 SiC … FLEX



DBUR, shank-mounted, with bridle

Particularly aggressive brush. Particularly suitable for deburring and work on surfaces on stationary machines.

Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.
- Remove the bridle once the filament is worn down. Then the rest of the filament can be used.
- Remove the bridle before starting work if you would like to achieve a large spreading diameter or access hard-to-reach areas.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).

PFERDVALUE:

Vibration Filter

Time Saving

D [mm]	L_R [mm]	L_T [mm]	H [mm]	Grit size / D_F [mm] 120 0.55	120 1.00	120 1.10	Opt. RPM	Max. RPM	IP	Description
				EAN 4007220						
Silicon carbide (SiC) plastic filament										
50	19	38	80	101582	104262	-	1,500–3,500	5,000	1	DBUR 50/6 SiC 120 ...
63	19	38	80	104675	104682	-	1,500–3,500	5,000	1	DBUR 63/6 SiC 120 ...
Ceramic oxide grain (CO) plastic filament										
50	19	38	80	-	-	104699	1,500–3,500	5,000	1	DBUR 50/6 CO 120 ...
63	19	38	80	-	-	104705	1,500–3,500	5,000	1	DBUR 63/6 CO 120 ...



Arbor BO 12/22,2 75-100
(EAN 4007220**808887**):
For all composite disc brushes with a diameter of 75–100 mm and a D_A of 22.2 mm.

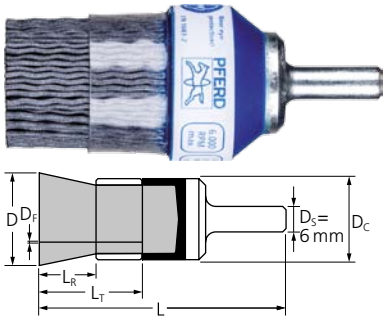


BO 12/22,2 125-150
(EAN 4007220**808894**):
For all composite disc brushes with a diameter of 125–150 mm and a D_A of 22.2 mm.

For more information:
Detailed information on accessories can be found on pages 55 and 56.

PBUPR, with bridle

Particularly suitable for deburring and work on surfaces on stationary machines.



Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the wires spread out upon rotation.

Recommendations for use:
- Use CO as the filament material for particularly aggressive work and a high workpiece surface quality.
- Remove the bridle once the filament is worn down. Then the rest of the filament can be used.
- Remove the bridle before starting work if you would like to ensure particularly flexible working, achieve a large spreading diameter or access hard-to-reach areas.

Ordering notes:
- Please complete the description with the desired grit size and filament material diameter (D_F).
- All brushes are supplied with a bridle.

PFERDVALUE:

Vibration Filter

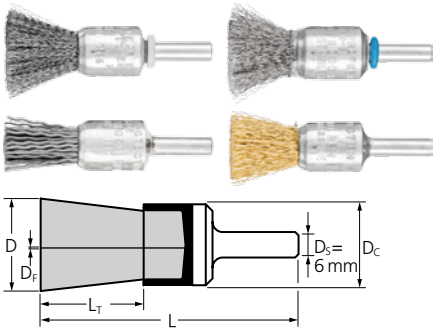
Time Saving

D [mm]	D_C [mm]	L_R [mm]	L_T [mm]	L [mm]	Grit size / D_F [mm] 120 0.55	120 1.00	120 1.10	Opt. RPM	Max. RPM	IP	Description
					EAN 4007220						
Silicon carbide (SiC) plastic filament											
25	28	14	28	70	070383	070369	-	2,400–3,900	6,000	1	PBUPR 2528/6 SiC …
38	38	14	28	77	070390	070376	-	2,000–3,200	5,000	1	PBUPR 3838/6 SiC …
Ceramic oxide grain (CO) plastic filament											
25	28	14	28	70	-	-	104712	2,400–3,900	6,000	1	PBUPR 2528/6 CO …
38	38	14	28	77	-	-	104729	2,000–3,200	5,000	1	PBUPR 3838/6 CO …





Shank mounted end brushes
crimped



PBU

Suitable for light brushing such as deburring, cleaning and derusting.



Advantages:
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the wires spread out upon rotation.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- For POS type, please add "POS" to the description.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Packaging 10x 1	Packaging 10	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Steel wire (ST)									
10	10	20	0.20	65	-	530887	10,000–15,000	20,000	PBU 1010/6 ST 0,20
			0.35	65	-	153277	10,000–15,000	20,000	PBU 1010/6 ST 0,35
13	12	20	0.20	65	-	562574	10,000–15,000	20,000	PBU 1312/6 ST 0,20
			0.35	65	-	562581	10,000–15,000	20,000	PBU 1312/6 ST 0,35
15	16	22	0.20	65	894491	530894	9,000–13,500	18,000	PBU 1516/6 ST 0,20
			0.35	65	532256	153253	9,000–13,500	18,000	PBU 1516/6 ST 0,35
20	22	25	0.20	70	894514	530900	9,000–13,500	18,000	PBU 2022/6 ST 0,20
			0.50	70	532263	153222	9,000–13,500	18,000	PBU 2022/6 ST 0,50
30	29	25	0.20	70	-	530917	7,500–11,300	15,000	PBU 3029/6 ST 0,20
			0.50	70	-	153192	7,500–11,300	15,000	PBU 3029/6 ST 0,50
Stainless steel wire (INOX) Supplied with plastic-covered brush body. All INOX brushes are degreased.									
10	10	20	0.15	65	-	598023	8,000–13,000	20,000	PBU 1010/6 INOX 0,15
			0.20	65	-	530924	8,000–13,000	20,000	PBU 1010/6 INOX 0,20
			0.35	65	-	153291	8,000–13,000	20,000	PBU 1010/6 INOX 0,35
13	12	20	0.15	65	-	598030	8,000–13,000	20,000	PBU 1312/6 INOX 0,15
			0.20	65	-	562598	8,000–13,000	20,000	PBU 1312/6 INOX 0,20
			0.35	65	-	562604	8,000–13,000	20,000	PBU 1312/6 INOX 0,35
15	16	22	0.15	65	-	598047	7,200–11,700	18,000	PBU 1516/6 INOX 0,15
			0.20	65	894545	530931	7,200–11,700	18,000	PBU 1516/6 INOX 0,20
			0.35	65	532287	153260	7,200–11,700	18,000	PBU 1516/6 INOX 0,35
20	22	25	0.15	70	-	598054	7,200–11,700	18,000	PBU 2022/6 INOX 0,15
			0.20	70	894552	530948	7,200–11,700	18,000	PBU 2022/6 INOX 0,20
			0.50	70	532294	153246	7,200–11,700	18,000	PBU 2022/6 INOX 0,50
30	29	25	0.15	70	-	598061	6,000–9,800	15,000	PBU 3029/6 INOX 0,15
			0.20	70	-	530955	6,000–9,800	15,000	PBU 3029/6 INOX 0,20
			0.50	70	-	153215	6,000–9,800	15,000	PBU 3029/6 INOX 0,50
Brass wire (MES)									
10	10	20	0.30	65	-	153284	8,000–13,000	20,000	PBU 1010/6 MES 0,30
13	12	20	0.30	65	-	562611	8,000–13,000	20,000	PBU 1312/6 MES 0,30
15	16	22	0.30	65	-	220672	7,200–11,700	18,000	PBU 1516/6 MES 0,30
20	22	25	0.50	70	-	153239	7,200–11,700	18,000	PBU 2022/6 MES 0,50
30	29	25	0.50	70	-	153208	6,000–9,800	15,000	PBU 3029/6 MES 0,50
Silicon carbide (SiC) plastic filament									
10	10	20	0.90	65	-	220696	8,000–13,000	20,000	PBU 1010/6 SiC 180 0,90
13	12	20	0.90	65	-	562628	8,000–13,000	20,000	PBU 1312/6 SiC 180 0,90
15	16	22	0.90	65	532348	220689	7,200–11,700	18,000	PBU 1516/6 SiC 180 0,90
20	22	25	0.90	70	532355	220665	7,200–11,700	18,000	PBU 2022/6 SiC 180 0,90
30	29	25	0.90	70	-	220658	6,000–9,800	15,000	PBU 3029/6 SiC 180 0,90

PBUL, long / PBUS, tapered

Suitable for light brushing such as deburring, cleaning and derusting.
Special versions for particular applications.

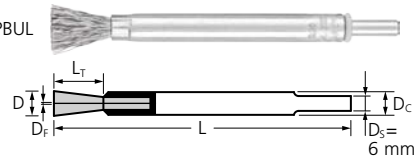
PBUL: Particularly long version to access deep gaps.
PBUS: Tapered tip for superb accuracy.

Advantages:
- Optimal access to hard-to-reach areas.

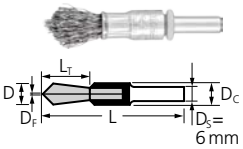
Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).

PBUL



PBUS



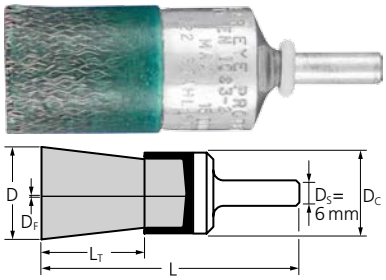
D [mm]	D_C [mm]	L_T [mm]	L [mm]	D_F [mm] 0.20	D_F [mm] 0.30	Opt. RPM	Max. RPM	IP	Description
				EAN 4007220					
Steel wire (ST)									
10	10	20	120	659199	659205	4,000–9,500	20,000	10	PBUL 1010/6 ST …
			60	-	659243	10,000–15,000	20,000	10	PBUS 1010/6 ST …
Stainless steel wire (INOX)									
Supplied with plastic-covered brush body. All INOX brushes are degreased.									
10	10	20	120	659212	659229	3,500–9,000	20,000	10	PBUL 1010/6 INOX …
			60	-	659250	8,000–13,000	20,000	10	PBUS 1010/6 INOX …

PBV, encapsulated

Suitable for medium-duty brushing such as deburring, cleaning and derusting.

Advantages:
- Focused working thanks to high dimensional stability.
- Longest tool life as premature wire breakage is prevented.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.
- Use face-down for a particularly intensive brushing effect.

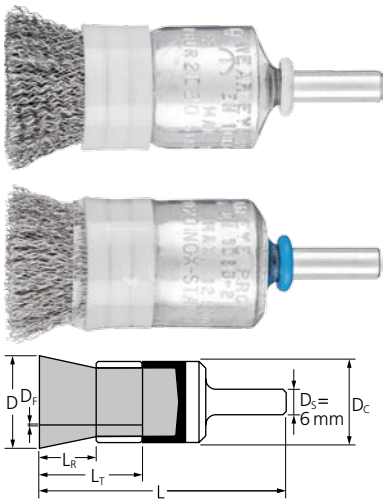


D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Packaging 10	Opt. RPM	Max. RPM	Description
					EAN 4007220			
Steel wire (ST)								
22	22	25	0.25	70	153321	6,500–9,800	13,000	PBV 2222/6 ST 0,25
30	29	25	0.35	70	531112	6,500–9,800	13,000	PBV 3029/6 ST 0,35





Shank mounted end brushes
crimped



PBUR, with bridle

Suitable for light brushing such as deburring, cleaning and derusting.



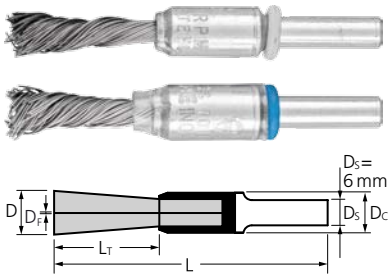
Advantages:
- The bridle prevents the wires spreading out sideways.
- The bridle enables the spreading out and flexibility of the brush filament to be strictly controlled.
- Optimal access to hard-to-reach areas such as recesses and drilled holes.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).

D [mm]	D_C [mm]	L_R [mm]	L_T [mm]	L [mm]	D_F [mm] 0.20	D_F [mm] 0.35	Opt. RPM	Max. RPM	IP	Description
					EAN 4007220					
Steel wire (ST)										
13	16	13	25	70	530962	530979	7,500–11,300	15,000	10	PBUR 1316/6 ST …
20	22	13	25	70	530986	530993	6,300–9,400	12,500	10	PBUR 2022/6 ST …
25	30	13	25	70	531006	531013	6,300–9,400	12,500	10	PBUR 2530/6 ST …
Stainless steel wire (INOX)										
Supplied with plastic-covered brush body. All INOX brushes are degreased.										
13	16	13	25	70	531020	-	6,000–9,800	15,000	10	PBUR 1316/6 INOX …
20	22	13	25	70	531037	-	5,000–8,100	12,500	10	PBUR 2022/6 INOX …
25	30	13	25	70	531044	-	5,000–8,100	12,500	10	PBUR 2530/6 INOX …

knotted



PBGS, SINGLETWIST

Particularly flexible single-knot brush for special applications.



Advantages:
- Optimal access to hard-to-reach areas such as inside corners as the knot is less likely to unravel.

Recommendations for use:
- For optimum results, use on speed-adjustable tool drives.
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- Please complete the description with the desired filament material diameter (D_F).

D [mm]	D_C [mm]	L_T [mm]	L [mm]	D_F [mm] 0.20	D_F [mm] 0.35	D_F [mm] 0.50	Opt. RPM	Max. RPM	IP	Description
				EAN 4007220						
Steel wire (ST) – SINGLETWIST type										
10	10	25	65	659267	659274	659281	5,000–7,500	10,000	10	PBGS 1010/6 ST …
12	10	28	71	807002	-	-	5,000–7,500	10,000	10	PBGS 1210/6 ST …
Stainless steel wire (INOX) – SINGLETWIST type										
Supplied with plastic-covered brush body. All INOX brushes are degreased.										
10	10	25	65	659298	659304	659311	4,000–6,500	10,000	10	PBGS 1010/6 INOX …
12	10	28	71	807019	-	-	4,000–6,500	10,000	10	PBGS 1210/6 INOX …

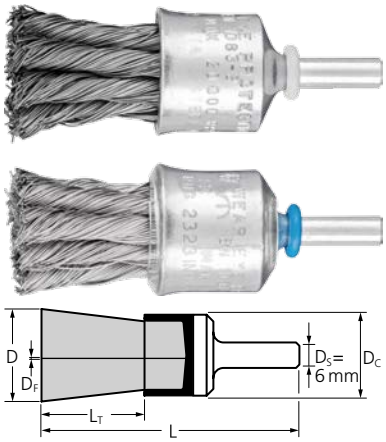
PBG

Aggressive brush. Suitable for medium-duty brushing such as deburring, cleaning and derusting.

Advantages:
- Optimal access to hard-to-reach areas such as recesses and drilled holes.

Recommendations for use:
- Use speed-adjustable tool drives to control the spread of the brush.
- For the best results, use a tool drive with a minimum output of 500 watts.

Ordering notes:
- For POS type, please add "POS" to the description.

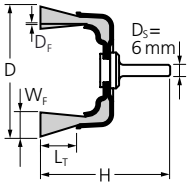


D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Knots [pcs.]	Packaging 10x 1	Packaging 10	Opt. RPM	Max. RPM	Description
						EAN 4007220				
Steel wire (ST)										
19	19	28	0.25	68	6	-	936580	10,000–15,000	20,000	PBG 1919/6 ST 0,25
			0.35	68	6	532416	153314	10,000–15,000	20,000	PBG 1919/6 ST 0,35
			0.50	68	6	894361	531051	10,000–15,000	20,000	PBG 1919/6 ST 0,50
23	23	28	0.25	68	8	-	936603	10,000–15,000	20,000	PBG 2323/6 ST 0,25
			0.35	68	8	-	936610	10,000–15,000	20,000	PBG 2323/6 ST 0,35
			0.50	68	8	-	936627	10,000–15,000	20,000	PBG 2323/6 ST 0,50
30	28	25	0.25	68	12	-	936672	8,000–11,300	20,000	PBG 3028/6 ST 0,25
			0.35	68	12	532423	531068	8,000–11,300	20,000	PBG 3028/6 ST 0,35
			0.50	68	12	894422	531075	8,000–11,300	20,000	PBG 3028/6 ST 0,50
Stainless steel wire (INOX)										
Supplied with plastic-covered brush body. All INOX brushes are degreased.										
19	19	28	0.15	68	6	-	598078	8,000–13,000	20,000	PBG 1919/6 INOX 0,15
			0.25	68	6	-	936597	8,000–13,000	20,000	PBG 1919/6 INOX 0,25
			0.35	68	6	532430	220702	8,000–13,000	20,000	PBG 1919/6 INOX 0,35
			0.60	68	6	-	531082	8,000–13,000	20,000	PBG 1919/6 INOX 0,60
23	23	28	0.15	68	8	-	936634	8,000–13,000	20,000	PBG 2323/6 INOX 0,15
			0.25	68	8	-	936641	8,000–13,000	20,000	PBG 2323/6 INOX 0,25
			0.35	68	8	-	936658	8,000–13,000	20,000	PBG 2323/6 INOX 0,35
			0.60	68	8	-	936665	8,000–13,000	20,000	PBG 2323/6 INOX 0,60
30	28	25	0.15	68	12	-	598085	6,000–9,800	20,000	PBG 3028/6 INOX 0,15
			0.25	68	12	-	936689	6,000–9,800	20,000	PBG 3028/6 INOX 0,25
			0.35	68	12	532447	531099	6,000–9,800	20,000	PBG 3028/6 INOX 0,35
			0.60	68	12	-	531105	6,000–9,800	20,000	PBG 3028/6 INOX 0,60



Shank mounted cup brushes
crimped





TBU

Universally suitable for cleaning, derusting and smoothing, as well as removal of corrosion and paint. Particularly suitable for brushing on large, flat and easily accessible surfaces due to face-down use with the entire brush face applied to the workpiece.

Advantages:
- Highly flexible, enabling optimal adjustment to the workpiece contour.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- For POS type, please add "POS" to the description.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 5x 1	Packaging 10	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Steel wire (ST)									
30	10	15	0.20	60	-	004517	5,300–7,900	10,500	TBU 3010/6 ST 0,20
40	15	20	0.20	70	-	004524	5,300–7,900	10,500	TBU 4015/6 ST 0,20
50	10	20	0.30	75	532171	153345	5,300–7,900	10,500	TBU 5010/6 ST 0,30
60	15	20	0.30	85	-	153352	2,200–3,400	4,500	TBU 6015/6 ST 0,30
70	15	22	0.20	80	-	004531	3,000–4,500	6,000	TBU 7015/6 ST 0,20
			0.30	80	-	004555	3,000–4,500	6,000	TBU 7015/6 ST 0,30
Stainless steel wire (INOX) Supplied with plastic covered brush body.									
30	10	15	0.20	60	-	004562	4,200–6,800	10,500	TBU 3010/6 INOX 0,20
40	15	20	0.20	70	-	004579	4,200–6,800	10,500	TBU 4015/6 INOX 0,20
50	10	20	0.30	75	894651	579107	4,200–6,800	10,500	TBU 5010/6 INOX 0,30
60	15	20	0.30	85	-	579114	1,800–2,900	4,500	TBU 6015/6 INOX 0,30
70	15	22	0.20	80	-	004586	2,400–4,000	6,000	TBU 7015/6 INOX 0,20
			0.30	80	-	004593	2,400–4,000	6,000	TBU 7015/6 INOX 0,30
Silicon carbide (SiC) plastic filament									
50	10	20	0.90	75	894668	220719	4,200–6,800	10,500	TBU 5010/6 SiC 180 0,90
60	15	20	0.90	85	-	220726	1,800–2,900	4,500	TBU 6015/6 SiC 180 0,90
Ceramic oxide grain (CO) plastic filament									
50	15	22	1.10	75	-	004609	4,200–6,800	10,500	TBU 5015/6 CO 120 1,10



KBU

Excellent for medium-duty brushing such as deburring, cleaning and derusting.



Advantages:

- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.

Recommendations for use:

- For the best results, use a tool drive with a minimum output of 300 watts.

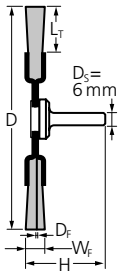


D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (ST)								
50	10	10	0.20	49	936351	7,500–11,300	15,000	KBU 5010/6 ST 0,20
70	10	15	0.30	58	936368	7,500–11,300	15,000	KBU 7010/6 ST 0,30
80	10	20	0.30	62	936375	6,000–9,000	12,000	KBU 8010/6 ST 0,30
95	10	25	0.30	62	899397	6,000–9,000	12,000	KBU 9510/6 ST 0,30
Stainless steel wire (INOX) All INOX brushes are degreased.								
50	10	10	0.20	49	936382	6,000–9,800	15,000	KBU 5010/6 INOX 0,20
70	10	15	0.15	58	936399	6,000–9,800	15,000	KBU 7010/6 INOX 0,15
			0.20	58	936405	6,000–9,800	15,000	KBU 7010/6 INOX 0,20
80	10	20	0.30	62	936412	4,800–7,800	12,000	KBU 8010/6 INOX 0,30
95	10	25	0.30	62	899403	4,800–7,800	12,000	KBU 9510/6 INOX 0,30
Silicon carbide (SiC) plastic filament								
70	10	15	0.55	58	004456	6,000–9,800	15,000	KBU 7010/6 SiC 120 0,55
80	10	20	0.55	62	004470	4,800–7,800	12,000	KBU 8010/6 SiC 120 0,55
95	10	25	1.10	62	004494	4,800–7,800	12,000	KBU 9510/6 SiC 120 1,10
Ceramic oxide grain (CO) plastic filament								
70	10	15	0.55	58	004463	6,000–9,800	15,000	KBU 7010/6 CO 120 0,55
80	10	20	0.55	62	004487	4,800–7,800	12,000	KBU 8010/6 CO 120 0,55
95	10	25	1.10	62	004500	4,800–7,800	12,000	KBU 9510/6 CO 120 1,10



Shank mounted wheel brushes
crimped





RBU

Universally suitable for cleaning, derusting, smoothing, cleaning of weld seams, light deburring, and removal of corrosion and paint.

Advantages:
- Highly flexible, enabling optimal adjustment to the workpiece contour.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.

Ordering notes:
- For POS type, please add "POS" to the description.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 10x 1	Packaging 10	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Steel wire (ST)									
20	4	3	0.20	37	-	152980	10,000–15,000	20,000	RBU 2004/6 ST 0,20
30	6	7	0.20	40	531808	153017	10,000–15,000	20,000	RBU 3006/6 ST 0,20
	9	7	0.20	42	-	899250	10,000–15,000	20,000	RBU 3009/6 ST 0,20
40	9	9	0.20	46	-	153048	9,000–13,500	18,000	RBU 4009/6 ST 0,20
50	4	9	0.20	41	-	806593	7,500–11,300	15,000	RBU 5004/6 ST 0,20
	10	13	0.20	50	-	104767	7,500–11,300	15,000	RBU 5010/6 ST 0,20
	15	13	0.20	50	531822	153079	7,500–11,300	15,000	RBU 5015/6 ST 0,20
60	10	15	0.20	50	-	104781	7,500–11,300	15,000	RBU 6010/6 ST 0,20
	15	15	0.20	50	-	658437	7,500–11,300	15,000	RBU 6015/6 ST 0,20
70	4	9	0.20	41	-	806609	7,500–11,300	15,000	RBU 7004/6 ST 0,20
	10	19	0.30	50	-	658444	7,500–11,300	15,000	RBU 7010/6 ST 0,30
	15	19	0.30	50	894606	153109	7,500–11,300	15,000	RBU 7015/6 ST 0,30
80	4	10	0.20	41	-	806616	6,000–9,000	12,000	RBU 8004/6 ST 0,20
	15	19	0.30	50	-	153130	6,000–9,000	12,000	RBU 8015/6 ST 0,30
100	10	25	0.30	50	894613	658451	6,000–9,000	12,000	RBU 10010/6 ST 0,30
Stainless steel wire (INOX)									
20	4	3	0.20	37	-	153000	8,000–13,000	20,000	RBU 2004/6 INOX 0,20
30	6	7	0.20	40	531884	153031	8,000–13,000	20,000	RBU 3006/6 INOX 0,20
	9	7	0.20	42	-	899267	8,000–13,000	20,000	RBU 3009/6 INOX 0,20
40	9	9	0.20	46	-	153062	7,200–11,700	18,000	RBU 4009/6 INOX 0,20
50	4	9	0.20	41	-	806623	6,000–9,800	15,000	RBU 5004/6 INOX 0,20
	10	13	0.20	50	-	104774	6,000–9,800	15,000	RBU 5010/6 INOX 0,20
	15	13	0.20	50	531891	153093	6,000–9,800	15,000	RBU 5015/6 INOX 0,20
60	10	15	0.20	50	-	104798	6,000–9,800	15,000	RBU 6010/6 INOX 0,20
	15	15	0.20	50	-	658468	6,000–9,800	15,000	RBU 6015/6 INOX 0,20
70	4	9	0.20	41	-	806630	6,000–9,800	15,000	RBU 7004/6 INOX 0,20
	10	19	0.20	50	-	597835	6,000–9,800	15,000	RBU 7010/6 INOX 0,20
	15	19	0.15	50	-	597842	6,000–9,800	15,000	RBU 7015/6 INOX 0,15
	15	19	0.30	50	894620	153123	6,000–9,800	15,000	RBU 7015/6 INOX 0,30
80	4	10	0.20	41	-	806647	4,800–7,800	12,000	RBU 8004/6 INOX 0,20
	10	19	0.20	50	-	578919	4,800–7,800	12,000	RBU 8010/6 INOX 0,20
	15	19	0.15	50	-	597859	4,800–7,800	12,000	RBU 8015/6 INOX 0,15
	15	19	0.30	50	-	153154	4,800–7,800	12,000	RBU 8015/6 INOX 0,30
100	10	25	0.30	50	894637	658475	4,800–7,800	12,000	RBU 10010/6 INOX 0,30
Brass wire (MES)									
20	4	3	0.20	37	-	152997	8,000–13,000	20,000	RBU 2004/6 MES 0,20
30	6	7	0.20	40	-	153024	8,000–13,000	20,000	RBU 3006/6 MES 0,20
40	9	9	0.20	46	-	153055	7,200–11,700	18,000	RBU 4009/6 MES 0,20
50	15	13	0.20	50	-	153086	6,000–9,800	15,000	RBU 5015/6 MES 0,20
70	15	19	0.30	50	-	153116	6,000–9,800	15,000	RBU 7015/6 MES 0,30
80	15	19	0.30	50	-	153147	4,800–7,800	12,000	RBU 8015/6 MES 0,30

Continued on next page

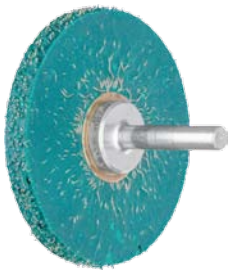
D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 10x 1	Packaging 10	Opt. RPM	Max. RPM	Description
					EAN 4007220				
Silicon carbide (SiC) plastic filament									
50	4	10	0.55	50	-	936511	6,000–9,800	15,000	RBU 5004/6 SiC 120 0,55
50	10	13	0.90	50	-	104750	6,000–9,800	15,000	RBU 5010/6 SiC 180 0,90
	15	13	0.90	50	531945	220610	6,000–9,800	15,000	RBU 5015/6 SiC 180 0,90
70	8	19	0.55	50	-	936528	6,000–9,800	15,000	RBU 7008/6 SiC 120 0,55
	15	19	0.90	50	894644	220627	6,000–9,800	15,000	RBU 7015/6 SiC 180 0,90
80	8	19	0.55	50	-	936535	4,800–7,800	12,000	RBU 8008/6 SiC 120 0,55
	15	19	0.90	50	-	220634	4,800–7,800	12,000	RBU 8015/6 SiC 180 0,90
Ceramic oxide grain (CO) plastic filament									
50	4	10	0.55	50	-	936542	6,000–9,800	15,000	RBU 5004/6 CO 120 0,55
	15	13	1.10	50	-	899342	6,000–9,800	15,000	RBU 5015/6 CO 120 1,10
70	8	19	0.55	50	-	936559	6,000–9,800	15,000	RBU 7008/6 CO 120 0,55
	15	19	1.10	50	-	899359	6,000–9,800	15,000	RBU 7015/6 CO 120 1,10
80	8	19	0.55	50	-	936566	4,800–7,800	12,000	RBU 8008/6 CO 120 0,55
	15	19	1.10	50	-	899366	4,800–7,800	12,000	RBU 8015/6 CO 120 1,10

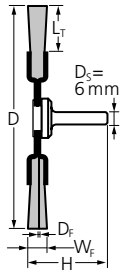
RBV, encapsulated

Suitable for medium-duty brushing such as deburring, cleaning and derusting.

Advantages:
- Focused working thanks to high dimensional stability.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 300 watts.





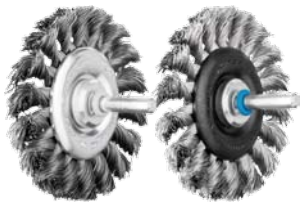
D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 1	Opt. RPM	Max. RPM	Description
					EAN 4007220			
Steel wire (ST)								
ST = brass-plated steel wire								
63	7	20	0.30	40	220955	7,500–11,300	15,000	RBV 6307/6 ST 0,30

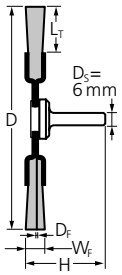






Shank mounted wheel brushes
knotted





RBG

Aggressive brush for cleaning, derusting and work on weld seams.



Advantages:
- Optimal access to hard-to-reach areas such as grooves and recesses.
- Aggressive brushing effect due to the very stiff wire knots.

Recommendations for use:
- For the best results, use a tool drive with a minimum output of 500 watts.

Ordering notes:
- For POS type, please add "POS" to the description.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Knots [pcs.]	Packaging 10x 1	Packaging 10	Opt. RPM	Max. RPM	Description
						EAN 4007220				
Steel wire (ST)										
76	6	16	0.35	42	18	531969	153161	12,500–18,800	25,000	RBG 7006/6 ST 0,35
	6	16	0.50	42	18	894569	530177	12,500–18,800	25,000	RBG 7006/6 ST 0,50
	12	16	0.35	42	18	-	658482	12,500–18,800	25,000	RBG 7012/6 ST 0,35
	12	16	0.50	42	18	-	658680	12,500–18,800	25,000	RBG 7012/6 ST 0,50
100	12	19	0.35	42	22	-	530351	10,000–15,000	20,000	RBG 10012/6 ST 0,35
			0.50	42	22	-	530399	10,000–15,000	20,000	RBG 10012/6 ST 0,50
Stainless steel wire (INOX) All INOX brushes are degreased.										
76	6	16	0.35	42	18	531976	220641	10,000–16,300	25,000	RBG 7006/6 INOX 0,35
	6	16	0.50	42	18	-	530603	10,000–16,300	25,000	RBG 7006/6 INOX 0,50
	12	16	0.35	42	18	-	658697	10,000–16,300	25,000	RBG 7012/6 INOX 0,35
	12	16	0.50	42	18	-	659472	10,000–16,300	25,000	RBG 7012/6 INOX 0,50
100	12	19	0.35	42	22	-	530405	8,000–13,000	20,000	RBG 10012/6 INOX 0,35
			0.50	42	22	-	530610	8,000–13,000	20,000	RBG 10012/6 INOX 0,50

Brush sets



BSO

Set with different wheel, cup and end brushes with a 6 mm shank.

One BSO 5500 ST set contains 80 pieces:
- 10 x RBU 3006/6 ST 0,20
- 10 x RBU 4009/6 ST 0,20
- 10 x RBU 5015/6 ST 0,20
- 10 x RBU 7015/6 ST 0,30
- 10 x TBU 5010/6 ST 0,30
- 10 x PBU 1010/6 ST 0,35
- 10 x PBU 1516/6 ST 0,35
- 10 x PBU 2022/6 ST 0,50

One BSO 5600 ST set contains 23 pieces:
- 4 x TBU 5010/6 ST 0,30
- 10 x PBU 2022/6 ST 0,50
- 5 x RBU 5015/6 ST 0,20
- 4 x RBG 7006/6 ST 0,35

One BSO 5600 INOX set contains 23 pieces:
- 4 x TBU 5010/6 INOX 0,30
- 10 x PBU 2022/6 INOX 0,50
- 5 x RBU 5015/6 INOX 0,20
- 4 x RBG 7006/6 INOX 0,35

Advantages:
- Selection of the most common types.
- Promotional display box.

EAN 4007220	IP	Description
220962	1	BSO 5500 ST
808368	1	BSO 5600 ST
808375	1	BSO 5600 INOX

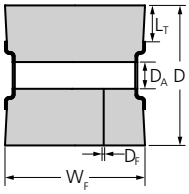
WBU, for burnishing machines

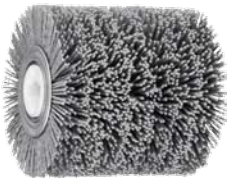
Excellent for surface structuring work on workpieces with large surfaces.

The special wire construction with cord wire filament (LIT) is particularly suitable for heavy-duty brushing and aggressive brushing.

Advantages:
- Can be used with all common burnishing machines thanks to the arbor hole with 4 keyways.







D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Steel wire (LIT, ST) LIT ST = stranded, brass-plated steel wire								
100	100	26	19.1	0.27	773086	3,000–4,500	6,000	WBU 100100/19,1 LIT ST 0,27
Stainless steel wire (INOX)								
100	100	26	19.1	0.20	773079	2,400–3,900	6,000	WBU 100100/19,1 INOX 0,20
Silicon carbide (SiC) plastic filament								
100	100	26	19.1	1.27	773062	2,400–3,900	6,000	WBU 100100/19,1 SiC 80 1,27



For detailed information and ordering data on other drum tools and roller sets, please refer to catalogue section 4.



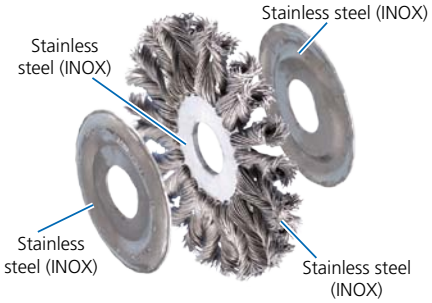
For detailed information and ordering data on matching drum grinders, please refer to catalogue section 9.



In addition to brushes with a stainless steel filament, PFERD also offers brushes of the INOX-TOTAL type for work on stainless steel (INOX). It is particularly well suited to use in extremely critical environments.

Further information about working with stainless steel (INOX) and PFERD INOX-TOTAL brushes can be found on page 10.

Structure of a wheel brush with arbor hole INOX-TOTAL



Advantages:

- Optimum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A).

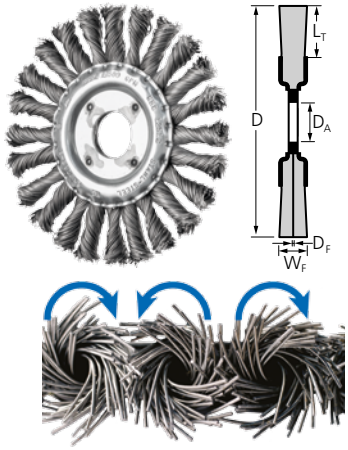
Industries:

- Chemical and plant manufacturing
- Foodstuff industry
- Nuclear industry



More PFERD tools and many valuable recommendations for working with stainless steel (INOX) can be found in our PRAXIS brochure "PFERD tools for use on stainless steel (INOX)". Please contact us for further details.

Wheel brushes



RBGIT CT, COMBITWIST / RBGIT PIPE CT, Pipeline, COMBITWIST

RBGIT CT: Very aggressive brush. Suitable for heavy-duty brushing such as removal of heat discolouration, deburring, cleaning of weld seams and removal of adhesive residues.

RBGIT PIPE CT: Very aggressive and robust brush that is able to withstand high mechanical loads. Perfect for heavy-duty brushing in pipeline and container construction.

Advantages:

- Maximum economic efficiency due to the longest tool life and the highest stock removal.
- High level of comfort thanks to smooth running with no brush recoiling.
- Suitable for work on corners and edges as the knots are less likely to unravel.
- RBGIT PIPE CT: Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.

Recommendations for use:

- For optimum results, use on powerful speed-adjustable angle grinders.

PFERDVALUE:

VibrationFilter HapticFilter

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots [pcs.]	Packaging 1 EAN 4007220	Opt. RPM	Max. RPM	Description
Stainless steel wire (INOX) – COMBITWIST type									
All INOX brushes are degreased.									
115	12	22	22.2	0.35	24	808528	5,000–12,500	12,500	POS RBGIT 11512/22,2 CT INOX 0,35
	6	21	22.2	0.50	36	808511	5,000–12,500	12,500	POS RBGIT 11506/22,2 PIPE CT INOX 0,50



Arbor BO 8/22,2 100-125 (EAN 4007220**751930**)**:** For knotted wheel brushes up to a diameter of 125 mm with a D_A of 22.2 mm.

For more information:
Detailed information on accessories can be found on pages 55 and 56.

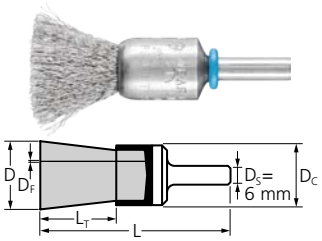
PBUIT / PBGSIT, SINGLETWIST

Suitable for light brushing such as deburring, cleaning, and removal of heat discolouration.

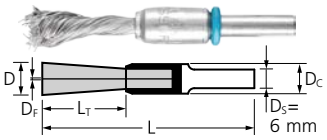
Advantages:

- **PBUIT:** Optimal access to hard-to-reach areas such as drilled holes and cavities as the wires spread out upon rotation.
- **PBGSIT:** Optimal access to hard-to-reach areas such as inside corners as the knot is less likely to unravel.

PBUIT

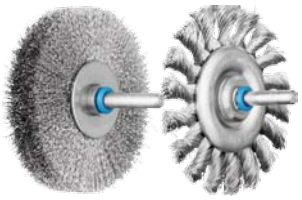


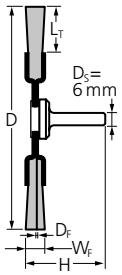
PBGSIT



D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Stainless steel wire (INOX) All INOX brushes are degreased. crimped								
15	16	22	0.15	65	808382	7,200–11,700	18,000	PBUIT 1516/6 INOX 0,15
			0.20	65	808399	7,200–11,700	18,000	PBUIT 1516/6 INOX 0,20
20	22	25	0.15	70	808405	7,200–11,700	18,000	PBUIT 2022/6 INOX 0,15
			0.20	70	808412	7,200–11,700	18,000	PBUIT 2022/6 INOX 0,20
knotted – SINGLETWIST knot								
10	10	25	0.20	65	808429	4,000–6,500	10,000	PBGSIT 1010/6 INOX 0,20
			0.35	65	808436	4,000–6,500	10,000	PBGSIT 1010/6 INOX 0,35







RBUIT / RBGIT

Universally suitable for cleaning, deburring, and removal of heat discolouration.

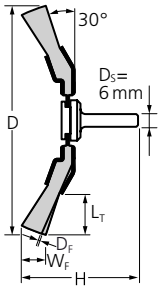
Advantages:

- **RBUIT:** Highly flexible, enabling optimal adjustment to the workpiece contour.
- **RBGIT:** Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	Knots [pcs.]	H [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Stainless steel wire (INOX) All INOX brushes are degreased.									
crimped									
30	6	7	0.20	-	40	808443	8,000–13,000	20,000	RBUIT 3006/6 INOX 0,20
50	15	13	0.20	-	50	808450	6,000–9,800	15,000	RBUIT 5015/6 INOX 0,20
70	15	19	0.15	-	50	808467	6,000–9,800	15,000	RBUIT 7015/6 INOX 0,15
			0.30	-	50	808474	6,000–9,800	15,000	RBUIT 7015/6 INOX 0,30
80	15	19	0.15	-	50	808481	4,800–7,800	12,000	RBUIT 8015/6 INOX 0,15
			0.30	-	50	808498	4,800–7,800	12,000	RBUIT 8015/6 INOX 0,30
knotted									
76	6	16	0.35	18	42	808504	10,000–16,300	25,000	RBGIT 7006/6 INOX 0,35

Shank mounted bevel brushes





KBUIT

Excellent for medium-duty brushing such as deburring, cleaning, and removal of heat discolouration.

Advantages:

- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.

Recommendations for use:

- For the best results, use a tool drive with a minimum output of 300 watts.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Packaging 10 EAN 4007220	Opt. RPM	Max. RPM	Description
Stainless steel wire (INOX) All INOX brushes are degreased.								
50	10	10	0.20	49	936474	6,000–9,800	15,000	KBUIT 5010/6 INOX 0,20
70	10	15	0.15	58	936481	6,000–9,800	15,000	KBUIT 7010/6 INOX 0,15
			0.20	58	936498	6,000–9,800	15,000	KBUIT 7010/6 INOX 0,20
80	10	20	0.30	62	936504	4,800–7,800	12,000	KBUIT 8010/6 INOX 0,30

PFERD offers a wide range of miniature brushes for precision work. These can be used on flexible shaft drives, micro motors or electric grinders.

Advantages:

- Outstanding precision and efficiency in work on delicate workpieces.

Industries:

- Medical equipment
- Jewellery sector
- Electronics industry
- Aerospace industry
- Tool and mould construction



End brushes, crimped

PBU

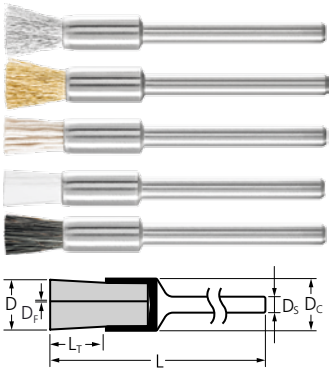
Suitable for light brushing such as deburring, cleaning and polishing.

Advantages:
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the wires spread out upon rotation.

Recommendations for use:
- Use brushes with natural filaments with polishing paste to achieve the optimum polishing result. Detailed information and ordering data on polishing pastes can be found in catalogue section 4.

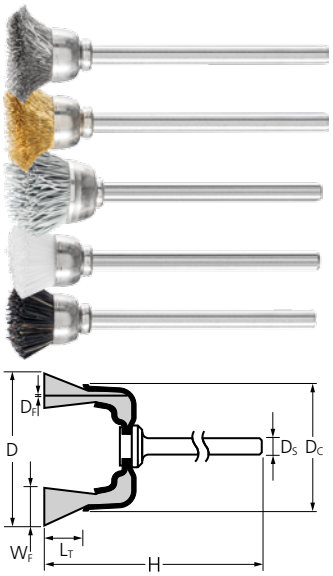
Ordering notes:
- Please complete the description with the desired shank diameter (D_S).
- Grit size DIA 400 = D 46

Accessories:
- Polishing pastes



D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	D_S [mm] 2.34 EAN 4007220	D_S [mm] 3 EAN 4007220	Opt. RPM	Max. RPM	IP	Description
Steel wire (ST)										
5	5	8	0.10	45	032855	032978	5,000–15,000	25,000	10	PBU 0505/... ST 0,10
Stainless steel wire (INOX)										
5	5	8	0.10	45	032879	032985	4,000–10,000	25,000	10	PBU 0505/... INOX 0,10
Brass wire (MES)										
5	5	8	0.10	45	032886	032992	4,000–10,000	25,000	10	PBU 0505/... MES 0,10
Silicon carbide (SiC) plastic filament										
5	5	8	0.55	45	032954	033067	1,200–5,000	25,000	10	PBU 0505/... SiC 320 0,55
			0.25	45	032961	033074	1,200–5,000	25,000	10	PBU 0505/... SiC 800 0,25
Aluminium oxide (AO) plastic filament										
5	5	8	0.50	45	032947	033050	1,200–5,000	25,000	10	PBU 0505/... AO 320 0,50
			0.30	45	032930	033043	1,200–5,000	25,000	10	PBU 0505/... AO 600 0,30
Diamond (DIA) plastic filament										
5	5	8	0.40	45	-	072844	1,200–5,000	25,000	10	PBU 0505/... DIA 400 0,40
Nylon plastic filament										
5	5	8	0.20	45	032923	033036	1,200–5,000	25,000	10	PBU 0505/... Nylon 0,20
Natural bristles white (SBW)										
5	5	8	-	45	032893	033005	4,000–10,000	25,000	10	PBU 0505/... SBW
Natural bristles black (SBS)										
5	5	8	-	45	032909	033012	4,000–10,000	25,000	10	PBU 0505/... SBS
Natural bristles goat hair (ZHW)										
5	5	8	-	45	032916	033029	4,000–10,000	25,000	10	PBU 0505/... ZHW

Brushes with a shank diameter of 3.18 mm are available on request.



TBU

Suitable for light brushing such as deburring, cleaning and polishing. Particularly suitable for brushing on small surfaces due to face-down use with the entire brush face applied to the workpiece.



Advantages:
- Highly flexible, enabling optimal adjustment to the workpiece contour.

Recommendations for use:
- Use brushes with natural filaments with polishing paste to achieve the optimum polishing result. Detailed information and ordering data on polishing pastes can be found in catalogue section 4.

Ordering notes:
- Please complete the description with the desired shank diameter (D_S).
- Grit size DIA 400 = D 46

Accessories:
- Polishing pastes

D [mm]	D_C [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm] 2.34 EAN 4007220	D_S [mm] 3	Opt. RPM	Max. RPM	IP	Description
Steel wire (ST)											
15	8	3	5	0.10	45	033081	033289	5,000–10,000	20,000	10	TBU 1503/... ST 0,10
18	10	3	6	0.10	45	033098	033296	5,000–10,000	18,000	10	TBU 1803/... ST 0,10
Stainless steel wire (INOX)											
15	8	3	5	0.10	45	033104	033302	4,000–10,000	20,000	10	TBU 1503/... INOX 0,10
18	10	3	6	0.10	45	033111	033319	4,000–10,000	18,000	10	TBU 1803/... INOX 0,10
Brass wire (MES)											
15	8	3	5	0.10	45	033128	033326	4,000–10,000	20,000	10	TBU 1503/... MES 0,10
18	10	3	6	0.10	45	033135	033333	4,000–10,000	18,000	10	TBU 1803/... MES 0,10
Silicon carbide (SiC) plastic filament											
18	10	3	6	0.55	45	033265	033456	1,200–5,000	18,000	10	TBU 1803/... SiC 320 0,55
				0.25	45	033272	033463	1,200–5,000	18,000	10	TBU 1803/... SiC 800 0,25
Aluminium oxide (AO) plastic filament											
18	10	3	6	0.50	45	033258	033449	1,200–5,000	18,000	10	TBU 1803/... AO 320 0,50
				0.30	45	033241	033432	1,200–5,000	18,000	10	TBU 1803/... AO 600 0,30
Diamond (DIA) plastic filament											
18	10	3	6	0.40	45	-	072950	4,000–10,000	18,000	10	TBU 1803/... DIA 400 0,40
Nylon plastic filament											
15	8	3	5	0.15	45	033203	033388	1,200–5,000	20,000	10	TBU 1503/... Nylon 0,15
18	10	3	6	0.15	45	033210	033395	1,200–5,000	18,000	10	TBU 1803/... Nylon 0,15
Natural bristles white (SBW)											
15	8	3	5	-	45	033142	033340	4,000–10,000	20,000	10	TBU 1503/... SBW
18	10	3	6	-	45	033159	033357	4,000–10,000	18,000	10	TBU 1803/... SBW
Natural bristles black (SBS)											
15	8	3	5	-	45	033166	033364	4,000–10,000	20,000	10	TBU 1503/... SBS
18	10	3	6	-	45	033173	033371	4,000–10,000	18,000	10	TBU 1803/... SBS
Natural bristles goat hair (ZHW)											
15	8	3	5	-	45	033227	033418	4,000–10,000	20,000	10	TBU 1503/... ZHW
18	10	3	6	-	45	033234	033425	4,000–10,000	18,000	10	TBU 1803/... ZHW

Brushes with a shank diameter of 3.18 mm are available on request.

RBU

Suitable for light brushing such as deburring, cleaning and polishing.

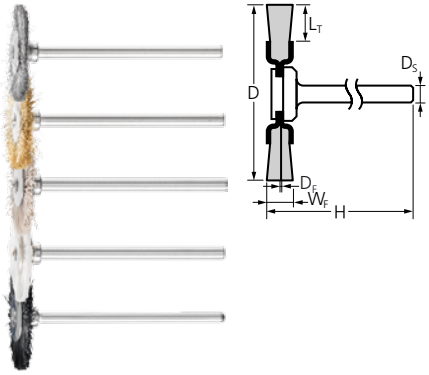


Advantages:
- Enables focused working in hard-to-reach areas.

Recommendations for use:
- Use brushes with natural filaments with polishing paste to achieve the optimum polishing result. Detailed information and ordering data on polishing pastes can be found in catalogue section 4.

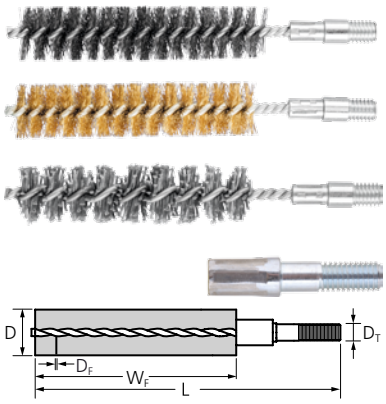
Ordering notes:
- Please complete the description with the desired shank diameter (D_S).
- Grit size DIA 400 = D 46

Accessories:
- Polishing pastes



D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm] 2.34	D_S [mm] 3	Opt. RPM	Max. RPM	IP	Description
					EAN 4007220					
Steel wire (ST)										
16	2	3	0.10	46	031957	032541	5,000–10,000	12,000	10	RBU 1602/... ST 0,10
19	2	5	0.10	46	032022	032558	5,000–10,000	12,000	10	RBU 1902/... ST 0,10
22	2	6	0.10	46	032244	032565	5,000–10,000	12,000	10	RBU 2202/... ST 0,10
32	2	10	0.10	46	-	107812	5,000–10,000	12,000	10	RBU 3202/... ST 0,10
Stainless steel wire (INOX)										
16	2	3	0.10	46	032251	032572	4,000–10,000	12,000	10	RBU 1602/... INOX 0,10
19	2	5	0.10	46	032268	032589	4,000–10,000	12,000	10	RBU 1902/... INOX 0,10
22	2	6	0.10	46	032275	032596	4,000–10,000	12,000	10	RBU 2202/... INOX 0,10
32	2	10	0.10	46	-	107829	4,000–10,000	12,000	10	RBU 3202/... INOX 0,10
Brass wire (MES)										
16	2	3	0.10	46	032282	032619	4,000–10,000	12,000	10	RBU 1602/... MES 0,10
19	2	5	0.10	46	032299	032626	4,000–10,000	12,000	10	RBU 1902/... MES 0,10
22	2	6	0.10	46	032305	032602	4,000–10,000	12,000	10	RBU 2202/... MES 0,10
Silicon carbide (SiC) plastic filament										
22	2	6	0.55	46	032527	032763	1,200–5,000	12,000	10	RBU 2202/... SiC 320 0,55
			0.25	46	032534	032770	1,200–5,000	12,000	10	RBU 2202/... SiC 800 0,25
Aluminium oxide (AO) plastic filament										
22	2	6	0.50	46	032510	032756	1,200–5,000	12,000	10	RBU 2202/... AO 320 0,50
			0.30	46	032497	032749	1,200–5,000	12,000	10	RBU 2202/... AO 600 0,30
Diamond (DIA) plastic filament										
22	2	6	0.40	46	-	070628	1,200–5,000	12,000	10	RBU 2202/... DIA 400 0,40
Nylon plastic filament										
22	2	6	0.15	46	032466	032718	1,200–5,000	12,000	10	RBU 2202/... Nylon 0,15
Natural bristles white (SBW)										
16	2	3	-	46	032329	032633	4,000–10,000	12,000	10	RBU 1602/... SBW
19	2	5	-	46	032336	032640	4,000–10,000	12,000	10	RBU 1902/... SBW
22	2	6	-	46	032343	032657	4,000–10,000	12,000	10	RBU 2202/... SBW
Natural bristles black (SBS)										
16	2	3	-	46	032350	032664	4,000–10,000	12,000	10	RBU 1602/... SBS
19	2	5	-	46	032367	032688	4,000–10,000	12,000	10	RBU 1902/... SBS
22	2	6	-	46	032374	032695	4,000–10,000	12,000	10	RBU 2202/... SBS
Natural bristles goat hair (ZHW)										
16	2	3	-	46	032473	032725	4,000–10,000	12,000	10	RBU 1602/... ZHW
22	2	6	-	46	032480	032732	4,000–10,000	12,000	10	RBU 2202/... ZHW

Brushes with a shank diameter of 3.18 mm are available on request.



IBU, with thread

Particularly suitable for deburring and cleaning pipes, threads, coupling sleeves and cylinders. In addition to a thread, some versions also have a shank:

M6 thread= 6 mm shank
3/8 thread= 10 mm shank

Advantages:
- Can be clamped in collets thanks to integrated shank.

Recommendations for use:
- Insert into the workpiece before it starts to rotate.
- Use with clockwise rotation.

Ordering notes:
- Brushes with an SiC filament have a filament material diameter of 1.00 mm.
- Please complete the description with the desired filament material and filament material diameter (D_F).
- BSW = British Standard Whitworth

Safety notes:
- When using tube brushes inside pipes, holes, grooves, etc., deviations from the specified maximum permitted rotational speed are possible in consultation with PFERD.

D [mm]	W_F [mm]	D_T	D_F [mm]	L [mm]	Filament material				Max. RPM	IP	Description
					Steel	INOX	Brass	SiC 180			
					EAN 4007220						
8	80	M6	0.15	120	659533	659540	659557	659564	1,000	10	IBU 0880/M6 ...
10	80	M6	0.15	120	659571	659588	659595	659601	1,000	10	IBU 1080/M6 ...
12	80	M6	0.15	120	659618	659625	659632	659649	1,000	10	IBU 1280/M6 ...
13	80	M6	0.20	120	660447	660454	660461	660478	1,000	10	IBU 1380/M6 ...
15	80	M6	0.20	120	660485	660515	660522	660539	1,000	10	IBU 1580/M6 ...
16	80	M6	0.20	120	660546	660553	660560	660577	1,000	10	IBU 1680/M6 ...
18	80	M6	0.20	120	660584	660591	660607	660614	1,000	10	IBU 1880/M6 ...
20	80	M6	0.20	120	660621	660638	660645	660652	1,000	10	IBU 2080/M6 ...
22	100	3/8	0.20	170	660669	660676	660683	660690	1,000	10	IBU 22100/3/8 BSW ...
25	100	3/8	0.20	170	660706	660713	660720	660737	1,000	10	IBU 25100/3/8 BSW ...
30	100	3/8	0.20	170	660744	660751	660768	660775	1,000	10	IBU 30100/3/8 BSW ...
32	100	1/2	0.25	170	749425	749449	749456	-	1,000	10	IBU 32100/1/2 BSW ...
38	100	1/2	0.30	170	749463	749470	749487	-	1,000	10	IBU 38100/1/2 BSW ...
40	100	1/2	0.30	170	749494	749500	749517	-	1,000	10	IBU 40100/1/2 BSW ...
44	100	1/2	0.30	170	749524	749531	749548	-	1,000	10	IBU 44100/1/2 BSW ...
50	100	1/2	0.35	170	749555	-	-	-	1,000	5	IBU 50100/1/2 BSW ...
57	100	1/2	0.35	170	749562	-	-	-	1,000	5	IBU 57100/1/2 BSW ...
63	100	1/2	0.35	170	749579	-	-	-	1,000	5	IBU 63100/1/2 BSW ...
69	100	1/2	0.35	170	749586	-	-	-	1,000	5	IBU 69100/1/2 BSW ...
75	100	1/2	0.35	170	749593	-	-	-	1,000	1	IBU 75100/1/2 BSW ...
82	100	1/2	0.35	170	749609	-	-	-	1,000	1	IBU 82100/1/2 BSW ...
101	100	1/2	0.50	170	749616	-	-	-	1,000	1	IBU 101100/1/2 BSW ...



Quick-change handle SWG



Suitable for manual work with tube brushes.

The SWG-6 quick-change handle can be used with all group 10 collets to clamp additional shank diameters. Detailed information and ordering data can be found in catalogue section 9 “Tool drives”.

Advantages:
- Comfortable to use thanks to ergonomic shape.

Recommendations for use:
- Combine with the IBUV extensions in order to access hard-to-reach areas. The available length combinations can be found below.

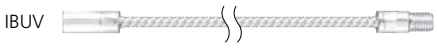
Ordering notes:
- Please complete the description with the desired thread.
- BSW = British Standard Whitworth

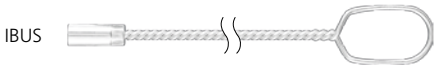
PFERDVALUE:

HapticFilter

L [mm]	Thread				IP	Description
	M6	3/8 BSW	1/2 BSW	Collet 6 mm		
	EAN 4007220					
135	721803	723036	749333	-	1	SWG-...
150	-	-	-	723043	1	SWG-6

Extension IBUV, wire stem IBUS





Suitable for work with tube brushes with a thread. Please note the outer diameter of the screw socket:
- M6 = 12 mm
- 3/8 = 12 mm
- 1/2 = 16 mm

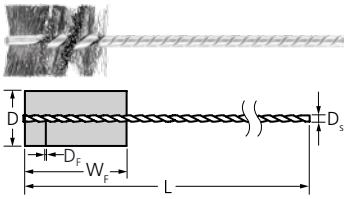
Extension	SWG [mm]	IBUS 300 [mm]	IBUV 1000 [mm]
without	135	300	1,000
IBUV 300	435	600	1,300
IBUV 1000	1,135	1,300	2,000

Advantages:
- Optimal access to hard-to-reach areas.

Recommendations for use:
- To achieve a larger overall length, combine the IBUV extensions and IBUS wire shanks with one another or with the SWG quick-change handles.

Ordering notes:
- Please complete the description with the desired thread.

L [mm]	Thread			IP	Description
	M6	3/8 BSW	1/2 BSW		
	EAN 4007220				
300	726884	726891	750032	1	IBUV ... 300
1,000	660782	660799	750049	1	IBUV ... 1000
300	726907	726914	750094	1	IBUS ... 300
1,000	660805	660812	750100	1	IBUS ... 1000



IBU, shank-mounted

For light cleaning and deburring work on threaded holes or recesses, e.g. keyways.

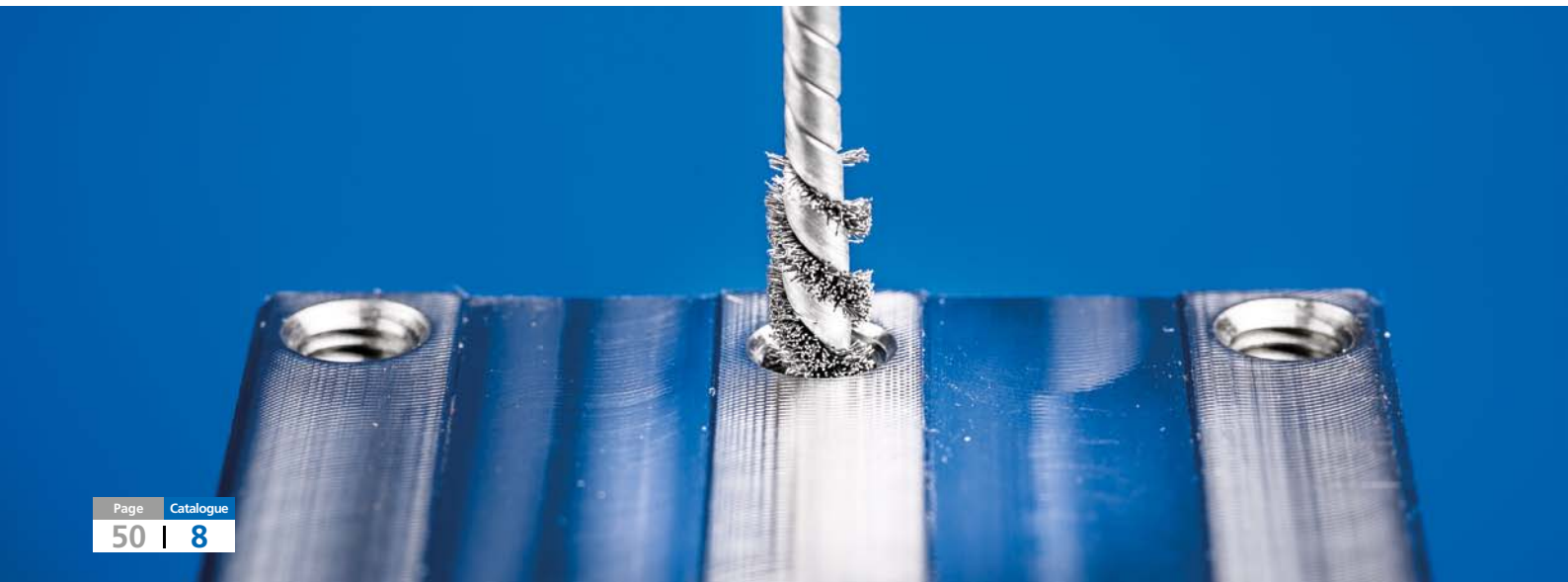
Advantages:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Longer tool life due to the design of the rotating wire.

Recommendations for use:
- Insert into the workpiece before it starts to rotate.
- Use with clockwise rotation.

Ordering notes:
- Please complete the description with the desired filament material and filament material diameter (D_F).

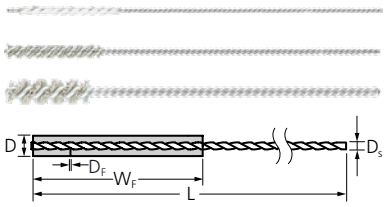
Safety notes:
- When using tube brushes inside pipes, holes, grooves, etc., deviations from the specified maximum permitted rotational speed are possible in consultation with PFERD.

D [mm]	W_F [mm]	D_S	L [mm]	Filament material / D_F [mm]				Max. RPM	IP	Description
				Steel 0.12	Steel 0.20	INOX 0.12	INOX 0.20			
				EAN 4007220						
6	25	3.2	90	036761	-	036938	-	3,500	10	IBU 0625/3,2 ...
8	25	3.2	90	036778	-	-	-	3,500	10	IBU 0825/3,2 ...
10	25	3.2	90	036785	036853	037065	-	3,500	10	IBU 1025/3,2 ...
13	25	3.2	90	036792	036860	036952	-	3,500	10	IBU 1325/3,2 ...
16	25	3.2	90	036808	036877	036969	037003	3,000	10	IBU 1625/3,2 ...
19	25	3.2	90	036815	036884	036976	037010	3,000	10	IBU 1925/3,2 ...
22	25	3.8	90	036822	036891	036983	-	3,000	10	IBU 2225/3,8 ...
25	25	3.8	90	036846	036907	036990	037027	3,000	10	IBU 2525/3,8 ...
29	25	3.8	90	-	036914	-	-	3,000	10	IBU 2925/3,8 ...
32	25	3.8	90	-	036921	-	037034	3,000	10	IBU 3225/3,8 ...



IBU, shank-mounted

For deburring and cleaning holes and cross holes.

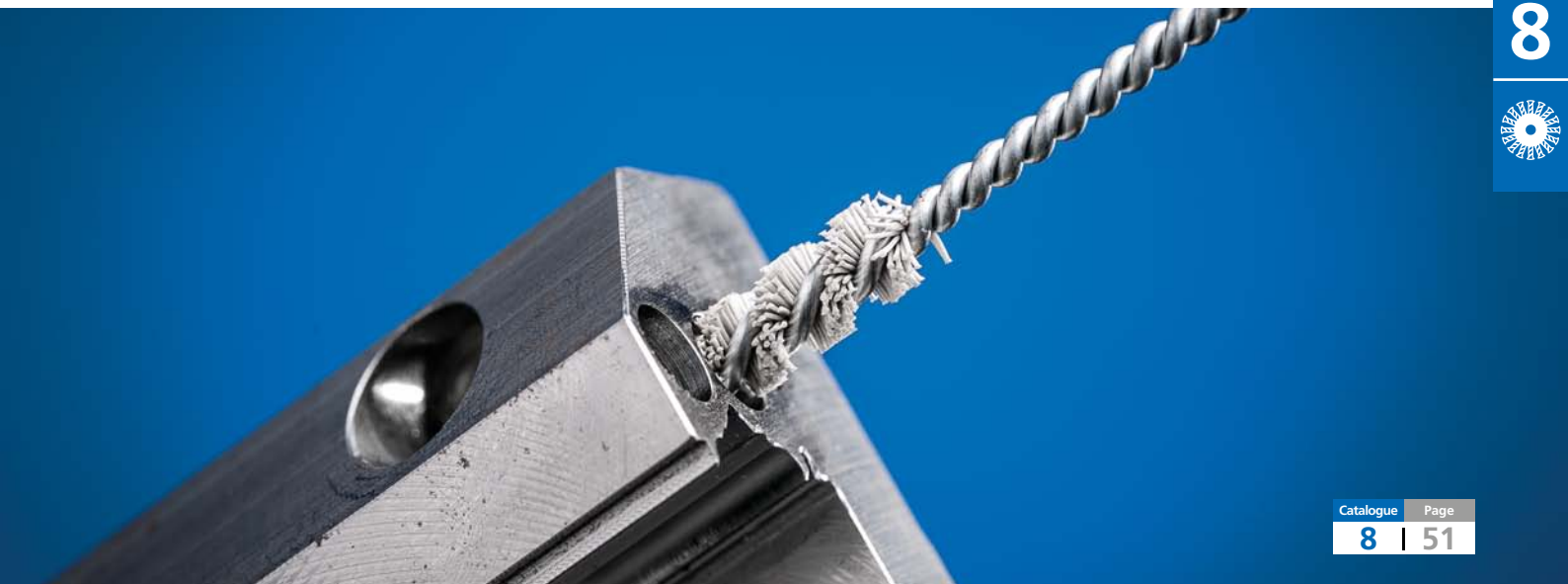


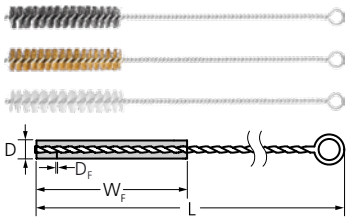
Advantages:
- Enable outstanding precision and efficiency in work on delicate workpieces.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- The dimensional accuracy of the workpieces remains unchanged.

Safety notes:
- When using tube brushes inside pipes, holes, grooves, etc., deviations from the specified maximum permitted rotational speed are possible in consultation with PFERD.

Recommendations for use:
- Insert into the workpiece before it starts to rotate.
- Use with clockwise rotation.

D [mm]	W_F [mm]	D_S [mm]	D_F [mm]	L [mm]	Packaging 10 EAN 4007220	Max. RPM	Description
Aluminium oxide (AO) 2000 plastic filament							
0.7	12	0.4	0.20	100	037089	1,000	IBU 0,712/0,4 AO 2000 0,20
Silicon carbide (SiC) 1000 plastic filament							
1.2	12	0.5	0.25	100	037096	1,000	IBU 1,212/0,5 SiC 1000 0,25
1.9	18	0.7	0.25	100	037102	1,000	IBU 1,918/0,7 SiC 1000 0,25
2.2	18	0.9	0.25	100	037119	1,000	IBU 2,218/0,9 SiC 1000 0,25
2.6	25	1	0.25	100	037133	1,000	IBU 2,625/1,0 SiC 1000 0,25
3.2	25	1.7	0.25	100	037164	1,000	IBU 3,225/1,7 SiC 1000 0,25
3.5	25	1.7	0.25	100	037195	1,000	IBU 3,525/1,7 SiC 1000 0,25
Aluminium oxide (AO) 600 plastic filament							
4.2	25	2.2	0.30	125	037218	1,000	IBU 4,225/2,2 AO 600 0,30
4.8	25	2.2	0.30	125	037225	1,000	IBU 4,825/2,2 AO 600 0,30
5.5	25	2.2	0.30	125	037249	1,000	IBU 5,525/2,2 AO 600 0,30
6.6	25	2.9	0.30	125	037263	1,000	IBU 6,625/2,9 AO 600 0,30
8.2	25	2.9	0.30	125	037270	2,000	IBU 8,225/2,9 AO 600 0,30
9.8	25	3.2	0.30	125	037294	2,000	IBU 9,825/3,2 AO 600 0,30
11.5	25	3.2	0.30	125	037317	2,000	IBU 11,525/3,2 AO 600 0,30
13	25	3.7	0.30	125	037324	2,000	IBU 1325/3,7 AO 600 0,30
16	25	3.7	0.30	125	037386	2,000	IBU 1625/3,7 AO 600 0,30
20	25	4.7	0.30	125	037393	2,000	IBU 2025/4,7 AO 600 0,30
25	25	4.7	0.30	125	037409	2,000	IBU 2525/4,7 AO 600 0,30





IBU, with eyelet

Specially suited to brushing in manual applications.

Advantages:
- Enable outstanding precision and efficiency in work on delicate workpieces.
- Optimal access to hard-to-reach areas such as the inner surfaces of pipes and drilled holes.

Ordering notes:
- Please complete the description with the desired filament material and filament material diameter (D_F).

D [mm]	W_F [mm]	L [mm]	Filament material / D_F [mm]										IP	Description
			Steel 0.10	Steel 0.15	INOX 0.10	INOX 0.15	Brass 0.10	Brass 0.15	Nylon 0.10	Nylon 0.15	Nylon 0.20	Nylon 0.30		
			EAN 4007220											
3	100	300	035740	-	036198	-	036570	-	036617	-	-	-	10	IBU 03100 ...
4	100	300	-	035801	-	036501	-	036587	-	036624	-	-	10	IBU 04100 ...
5	100	300	-	035993	-	036426	-	036594	-	036631	-	-	10	IBU 05100 ...
6	100	300	-	748923	-	748930	-	748947	-	-	748961	-	10	IBU 06100 ...
8	100	300	-	748985	-	748992	-	749005	-	-	749012	-	10	IBU 08100 ...
10	100	300	-	749036	-	749050	-	749043	-	-	749067	-	10	IBU 10100 ...
12	100	300	-	749074	-	749081	-	749098	-	-	-	749104	10	IBU 12100 ...
15	100	300	-	749111	-	749128	-	749142	-	-	-	749159	10	IBU 15100 ...
18	100	300	-	036082	-	036563	-	036600	-	-	-	036648	10	IBU 18100 ...
20	100	300	-	749166	-	749173	-	749180	-	-	-	749197	10	IBU 20100 ...
25	100	300	-	749203	-	749210	-	749227	-	-	-	749708	10	IBU 25100 ...
30	100	300	-	749241	-	749258	-	749265	-	-	-	749272	10	IBU 30100 ...



PFERD offers an extensive range of scratch brushes with various shapes and filament materials.



Advantages:

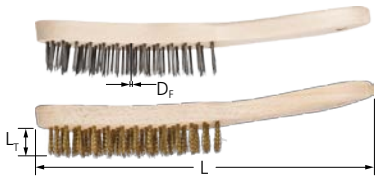
- Optimum presentation on the **PFERD**TOOL-CENTER using hanging hole and labelling with EAN number, description and filament material.

Ordering note:

- Please complete the description with the desired filament material and filament diameter.

HBU, universal use

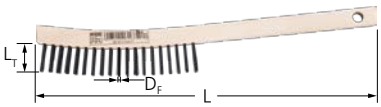
General-use scratch brush for all light cleaning and rust removal jobs.



Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]			IP	Description
			Steel 0.35	INOX 0.30	Brass 0.30		
			EAN 4007220				
1	25	290	659489	659496	-	10	HBU 10 ...
2	25	290	572191	572221	572528	10	HBU 20 ...
3	25	290	572207	572238	572535	10	HBU 30 ...
4	25	290	572214	572245	572542	10	HBU 40 ...
5	25	290	153741	572252	572559	10	HBU 50 ...
6	25	290	713341	713365	-	10	HBU 60 ...
Bulk pack							
3	25	290	808320	-	-	50	HBU 30 GP ...
4	25	290	808337	808351	-	50	HBU 40 GP ...
5	25	290	808344	-	-	50	HBU 50 GP ...

HBU LH, Long Handle

Suitable for cleaning, derusting, and cleaning of weld seams and surfaces. Extra-long handle.



Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]	IP	Description
			Steel 0.35		
			EAN 4007220		
3	25	350	616840	10	HBU LH 30 ...
4	25	350	616857	10	HBU LH 40 ...

HBK, for fillet welds

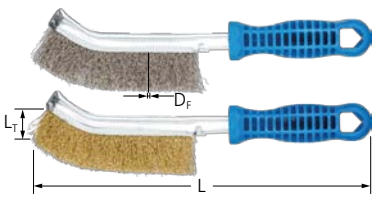
Suitable for cleaning and derusting fillet welds and V-shaped welds thanks to the V shape.



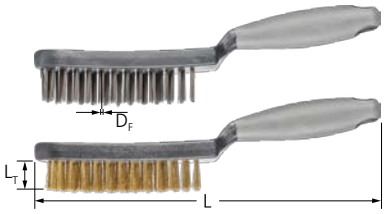
Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]		IP	Description
			Steel 0.35	INOX 0.35		
			EAN 4007220			
3	35	290	572481	572498	10	HBK 30 ...

HBG, curved

Excellent for cleaning work in hard-to-reach areas, e.g. angles, corners and pipes.
Steel = brass-plated steel wire.



Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]			IP	Description
			Steel 0.30	INOX 0.30	Brass 0.30		
			EAN 4007220				
1	25	265	153727	153734	572672	10	HBG 10 ...



HBUP, plastic body

Universally suitable for all light cleaning and derusting work. The version with a stainless steel filament is approved for use in the foodstuff industry.

Advantages:
- Safe and ergonomic working thanks to curved two-component handle.

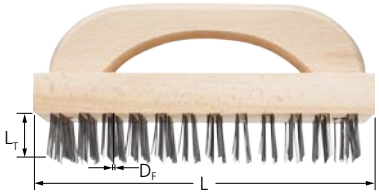
Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]			IP	Description
			Steel 0.40	INOX 0.40	Brass 0.30		
			EAN 4007220				
1	25	290	906583	906743	-	10	HBUP 10 ...
2	25	290	906590	906750	906712	10	HBUP 20 ...
3	25	290	906644	906767	906729	10	HBUP 30 ...
4	25	290	906651	906774	906736	10	HBUP 40 ...
5	25	290	906705	906781	-	10	HBUP 50 ...



HBZ, for spark plugs

Particularly suited to cleaning spark plugs, small workpieces and tools.

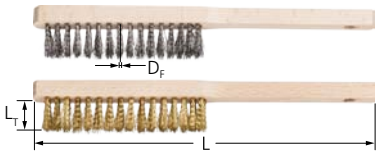
Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]	IP	Description
			Brass 0.15		
			EAN 4007220		
3	15	145	572566	10	HBZ 30 ...



HBB, block brushes with a handle

Wire brush with handle for general cleaning work on large surfaces.

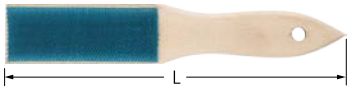
Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]	IP	Description
			Steel 0.45		
			EAN 4007220		
8	35	235	647295	12	HBB 80 ...



HBFM, for precision mechanics

Excellent for light brushing on fine surfaces. The filament material diameter of 0.15 mm allows a smooth brushing action and produces a fine surface.

Rows	L_T [mm]	L [mm]	Filament material / D_F [mm]			IP	Description
			Steel 0.15	INOX 0.15	Brass 0.15		
			EAN 4007220				
4	20	220	659502	659519	659526	10	HBFM 40 ...



HBF, for files

Suitable for cleaning files.

Rows	L_T [mm]	L [mm]	Filament material	IP	Description
			Steel		
			EAN 4007220		
1	7	232	015315	5	HBF 10 ST 0,15

To enable brushes with arbor holes to be used on tool drives with collets, PFERD supplies a corresponding arbor for each brush type.

Advantages:

- Secure hold of the brush thanks to highly accurate fit.

Examples of brushes with arbors

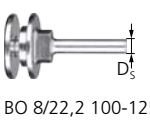


BO

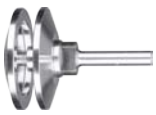
Enables the use of wheel and composite disc brushes with an arbor hole on tool drives with a collet, e.g. electric straight grinders and flexible shaft drives.

Safety notes:

- Arbors must only be used for brush diameters up to a maximum of 200 mm.



BO 8/22,2 100-125



BO 8/12-14 100-125



BO 12/22,2 150-180









BO 12/22,2 200





BO 12/22,2 75-100



BO 12/22,2 125-150

D_S [mm]	Suitable for brush diameter [mm]	Suitable for hole diameter D_A / D_M [mm]	Suitable for	Page	EAN 4007220	IP	Description
Arbors for wheel brushes							
8	100–125	12/14	Wheel brushes, crimped (RBU)	22, 24, 25	107843	1	BO 8/12-14 100-125
		22.2	Wheel brushes, knotted (RBG)	18, 19, 20, 21, 42	751930	1	BO 8/22,2 100-125
12	150–180	22.2	Wheel brushes, crimped (RBU), Wheel brushes, knotted (RBG)	18, 19, 20, 21, 22, 24, 25, 27	107850	1	BO 12/22,2 150-180
	200	22.2	Wheel brushes, crimped (RBU), Wheel brushes, knotted (RBG)	21, 22, 23, 24, 25, 27, 28	107867	1	BO 12/22,2 200
Arbors for composite disc brushes							
12	75–100	22.2	Composite disc brushes (DBU)	29, 30	808887	1	BO 12/22,2 75-100
	125–150	22.2	Composite disc brushes (DBU)	29, 30	808894	1	BO 12/22,2 125-150

BO, POLISCRATCH

For attaching POLISCRATCH brushes to straight grinders, flexible shafts or power drills.

Safety notes:

- Exclusively for use with POLISCRATCH brushes.



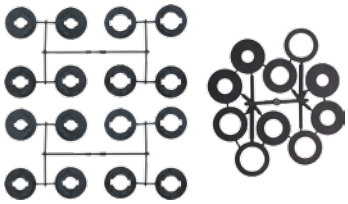
D_T	D_S [mm]	Suitable for	Page	EAN 4007220	IP	Description
M14x2	8	Wheel brushes crimped (RBU), POLISCRATCH type	17	900482	1	BO 8/M14

PFERD offers various adapter sets for wheel brushes with arbor holes.

Advantages:

- Brushes can be used on all tool drives as the hole diameter is adjusted to the required dimension.
- Secure hold of the brush thanks to highly accurate fit.





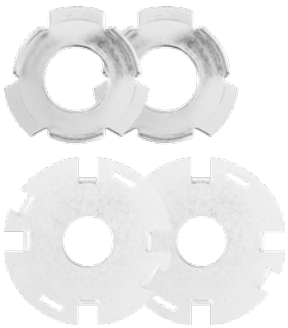
Adapter set AK 32 and AK 32-2

AK 32: Suitable for wheel brushes with a brush diameter as from 150 mm in the narrow type.

AK 32-2: Suitable for wheel brushes with a brush diameter as from 150 mm in the wide type.

Recommendations for use:
- Use for applications that produce little heat and require little pressure.

Suitable for	Page	Hole diameter D_A included [mm/inches]	EAN 4007220	IP	Description
RBU, narrow face ≥ dia. 150 mm	22	20.0 / 18.0 / 14.0 / 12.0 / 25.4 (1) / 22.2 (7/8) / 16.0 (5/8) / 12.7 (1/2)	608593	1	AS AK 32
RBU, wide face ≥ dia. 150 mm	24, 25	31.75 / 20.0 / 18.0 / 14.0 / 12.0 / 25.4 (1) / 22.2 (7/8) / 19.2 (.750) / 16.0 (5/8) / 12.7 (1/2)	806890	1	AS AK 32-2



Adapter pairs AM 50.8 and APM 50.8

AM 50,8: Suitable for wheel brushes with a brush diameter as from 150 mm in the wide and composite type.

APM 50,8: Suitable for knotted wheel brushes with a diameter of 200–250 mm and crimped wheel brushes designed as deburring types.

Recommendations for use:
- Particularly suitable for applications which produce a lot of heat and involve high pressure.

Ordering notes:
- **AM 50.8:** A set consists of 2 individual adapters.
- **APM 50.8:** A set consists of 3 adapter pairs.

Suitable for	Page	Hole diameter D_A included [mm/inches]	EAN 4007220	IP	Description
RBU, wide type, ≥ dia. 150 mm, RBUP, composite type, ≥ dia. 150 mm	24, 25, 27, 28	14.0	549803	1	AP AM 50,8/14,0
		16.0	548486	1	AP AM 50,8/16,0
		20.0	549834	1	AP AM 50,8/20,0
		22.2	806906	1	AP AM 50,8/22,2
		25.4	548509	1	AP AM 50,8/25,4
		30.0	806913	1	AP AM 50,8/30,0
		32.0	606605	1	AP AM 50,8/32,0
		35	004036	1	AP AM 50,8/35,0
RBG, knotted wheel brushes, dia. 200–250 mm, RBU, deburring brush type, dia. 200–250 mm	21, 23, 26	16.0/18.0/20.0	900376	1	APM 50,8/16-20
		22.2/25.4/30.0	900390	1	APM 50,8/22,2-30
		32.0/35.0/40.0	900406	1	APM 50,8/32-40


M1
M2
M3
M4
L
R

Tool drives
Table of contents

General information, PFERDVALUE 4
Comparison of drive systems 5
Well packed and presented 6
Services 7
Online services, spare parts catalogue 8

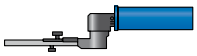
Air grinders

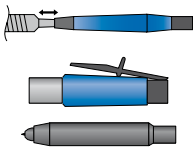


General information 10
Straight grinders 12



Angle grinders 41
- with collet 41
- with threaded spindle 50

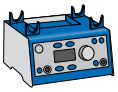


Belt grinders, attachment arms 57



Special drives 61
- Filing machines 61
- DL motors DIN 10 and extensions STV 62
- Marking pens 64

Fittings 65

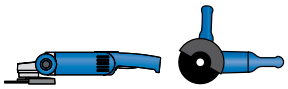
Electric grinders

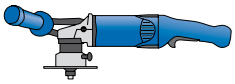
General information 69

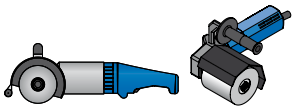


Micro motor systems 70
- Micro motor system 70
- Micro motor handpieces 73

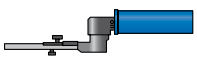


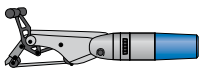
Straight grinders 74

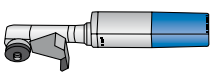


Angle grinders 81



EDGE FINISH system for work on edges 85



Drum grinder 86



Belt grinders 87

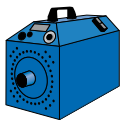


Pipe belt grinders 88



Fillet weld grinders 89



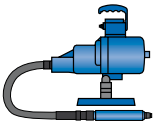

Special drives 90
- EL motors DIN 10 and extensions STV 90

Flexible shaft drives

General information 93

Multi-speed machines with stepless regulation 98

Multi-speed machines with gears 105



Flexible shafts 106

Tool drive accessories



Handpieces 113
- Straight handpieces
- Angle handpieces

Special handpieces 113
- Angle handpieces with telescopic system
- Flexible special handpieces



Belt sanders 114



Accessories for flexible shafts 114
- Drum grinders, straight type 114
- Drum grinders, angle type 114
- Angle drives 115
- Overdrive for flexible shaft drives 115



Collets and extensions 116
- Reducing collet 118
- Extensions SPV and SPVH 119
- Extensions STV 62, 90



Belt grinder attachment holders and arms 121



Maintenance products 122
- Lubricants

Personal protective equipment (PPE)



Safety glasses 123

Protective gloves, ear and breathing protection 124

Tool drives
General information, **PFERD**VALUE

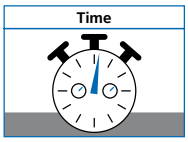
The PFERD range includes tool drives for grinding, milling, brushing, cutting and polishing in manual applications as well as in robotic and semi-stationary applications. PFERD is one of only a few manufacturers that can offer a wide range of tools for work on surfaces and cutting of materials, as well as drives designed specifically for these tools, all from a single source.

The wide product range includes air-powered drives, electric drives and flexible shaft drives and thus offers the best solution for almost any working environment.

PFERD tool drives are characterized by their performance and durability. They are less prone to faults and comply with the latest technological standards.



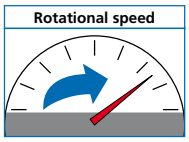
Economic value



Time is money. The cost-effectiveness of a process is determined by the performance of the tool and the time required. The faster the grinding process, the greater its cost-effectiveness. The best results are achieved by tools that have a consistently high aggressiveness throughout the processing time, in combination with PFERD quality tool drives. These are powerful, durable and less susceptible to faults.

$t = €$

Rotational speed n

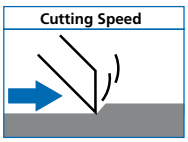


The rotational speed n is given in revolutions per minute [RPM]. The required rotational speed is determined from the cutting speed V in metres per minute [m/min] or in metres per second [m/s] and the diameter of the tool d x π (3.14).

Note:
The rotational speed data for the tools relates to their use under load.

$$n = \frac{V}{d \times \pi}$$

Cutting speed V



The cutting speed is the speed at which a tool bit moves through the material to be worked in the direction of the cut and removes a chip.
The cutting speed V is given in metres per minute [m/min] or metres per second [m/s]. It depends on the rotational speed of the drive n in revolutions per minute [RPM] and the diameter of the tool d x π (3.14).

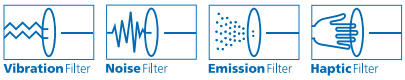
$V = n \times d \times \pi$

PFERDVALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

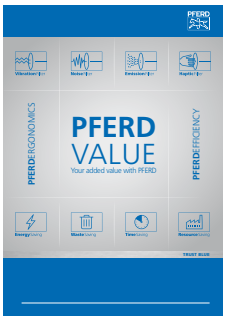
As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.



As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.



For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".



Safety regulations



= Please observe the respective safety regulations!

In accordance with legal requirements, all tool drives are accompanied by operating manuals, a CE declaration of conformity and safety notes.



ASK**PFERD**

Do you have questions concerning machining tasks, materials or tool drives?

Or are you looking for application recommendations, personalized consultation and information on the right choice of tool?

We can answer your questions via WhatsApp with a minimum of fuss:

+49 (0) 1724358151

The PFERD range includes three drive types:

Air grinders	Electric grinders	Flexible shaft drives
		
Applications and economic value		
Single workplace, stationary	Single workplace, flexible use for mobile use	Single workplace, stationary with a variety of tool applications, very easy to handle at high power output
High power output, low wear, long service life, economical air consumption, robust, hard-wearing slide vane and turbine motors	High power output, low wear, long service life	Very robust, low wear, long service life
Drive type		
-	Micro motors	-
Straight grinders	Straight grinders	Straight grinders
Angle grinders	Angle grinders	Angle grinders
-	Drum grinders	Drum grinders
Belt grinders	Belt grinders	Belt grinders
Special drives	Special drives	Special drives
-	Fillet weld grinders	-
Drive characteristics		
No risk of overloading, can be loaded up to machine standstill	Overload protection, can briefly withstand up to four times the rated output	Overload protection, can briefly withstand up to six times the rated output
Optimum rotational speed and power ratios	Optimal tuning possible for tool application	Optimal tuning possible for tool application
Good size to power output ratio	Higher power output compared to air grinders at the same rotational speed	High motor power output, compact hand-pieces, high power transmission to the tool
Achieve high rotational speeds	Achieve constant speed, ideal for tools that need a constant rotational speed	Cover large rotational speed ranges
Ergonomics/Handling		
Drive size and shape suitable for many applications	Ergonomic drive shapes, easy to handle	Light arbors that are easy to handle for low-fatigue work
Rotational speed range [RPM]		
4,000 to 101,000	100 to 80,000	100 to 40,000
Rotational speed control		
Single-rotation speed	Stepless, electronic	Stepless, electronic, alternatively using gears
Energy		
Compressed air (6.3 bar)	1-phase alternating current Safety extra-low voltage	1-phase alternating current, 3-phase alternating current Safety extra-low voltage
Power range [W]		
75 to 2,600	260 to 1,750	500 to 6,100
Safety		
Safe energy form, no sparking	Safeguard to prevent unintentional re-starting	42-volt type suitable for safe use in narrow, conductive spaces
Maintenance		
Simple replacement of worn parts	Simple replacement of carbon brushes	Maintenance by technically experienced employees is possible

Tool drives
Well packed and presented

PFERD packaging

PFERD provides tool drives in industrial packaging as standard.

Advantages:
- Robust packaging protecting the tools from dirt and damage.
- All the important information is included on the packaging label to facilitate product identification.



PFERD packaging label

In addition to the description and the EAN code, the most important technical information is shown with the help of pictograms.

Advantages:
- Easier comparison of product features thanks to clear pictograms.
- The label contains information on other accessories.



Explanation of the pictograms used

General

80.000 RPM	Rotational speed
5 - 11 m/s	Belt speed
500 W	Power output
14 mm, 5 mm, 25 mm, 4 mm	Matching keys

Tool mounting

6 mm, M14	Collets/ stud bolts
22,23 mm	Centre hole
36 mm	Guard
125 mm	Suitable for disc diameter
19 x 100 mm	Suitable for drum grinder fitting
520/610 x 9 - 12 mm	Belt dimensions

Air grinders

3 Oil /min, Oil	Note on use Can be used with/ without oil
6,3 bar	Air pressure
12 mm	Air supply hose diameter

Electric grinders and flexible shaft drives

230 V 1~, 400 V 3~	Voltage
50 Hz, 60 Hz	Frequency
	Insulated
	Protective earthing
	Safety extra-low voltage

Flexible shafts

DIN 10	Drive-side shaft connection
G22	Handpiece-side sliding coupling
6 mm	Core diameter
1.683 mm	Flexible shaft/core length

PFERDTOOL-CENTER

All tool drives can be impressively presented with special supports on the **PFERD**TOOL-CENTER.

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool. Your PFERD sales representative will be glad to answer any questions you might have.



Tool sets with tool drives

PFERD provides various tool sets in cases. They contain the tool drive as well as various tools in the most common dimensions. Detailed information and ordering data can be found in catalogue section 4.



Maintenance and repair service

PFERD provides a maintenance and repair service, which includes basic cleaning, repair and final safety checks at our factory. Our qualified specialists will be happy to quickly create a detailed quotation without obligation.

If the repair costs exceed the replacement value, you will also receive a quotation for a new tool drive. Only original PFERD spare parts will be used to repair tool drives. After the repair, you will receive your tool drive in as-new condition.

An experienced team ensures quick repairs processing at the Marienheide works in Germany. Please send any queries to: **pferd.power.tools@pferd.com**.



Repair training

Worldwide, PFERD offers hands-on training on the safe handling of professional tool drives and expert maintenance. The knowledge provided enables fast on-site repairs and thus reduces downtime. The expert maintenance also extends the service life of the tool drives. On request, the training can also be held on-site at your company. Please contact us for further details.



Performance test bench

PFERD has modern performance test benches for quality control, drive optimization and verification of safety guidelines. On request, you will receive a detailed PFERD performance certificate for your professional tool drive.
For each machine type, we perform safety checks according to the current state of the art and write test reports.



Advice and products made to order

PFERD offers you individual targeted support to solve your application problems. PFERD's experienced sales representatives and technical advisors are happy to help you select your tool drive – also by visiting you on-site. Please contact us for further details.

If you cannot find the solution for your particular application in our extensive catalogue range, we can develop and produce tool drives in premium PFERD quality on request, tailor-made to meet the requirements of your job.



Guarantee

Our PFERD guarantee for defects on air and electric grinders and on flexible shaft drives as well as on the accessories is exercized in such a manner that all parts which have material defects will either be repaired or replaced free of charge at our discretion. We shall honour these material defect claims for a maximum of 12 months. This provision shall be invalid if longer periods are prescribed by law.

The warranty shall not cover damage caused by improper handling, the use of spare parts other than our own, or by repairs carried out in workshops other than our own that are unauthorized.

Technical modifications

Technical developments and ergonomic improvements are continuously incorporated into our design and manufacture. We therefore reserve the right to make technical changes to our products.
In the event of changes to the design, we still ensure the availability of spare parts for four years.

All tools and more information:
www.pferd.com

A powerful PFERD drive is an investment that pays off. This is because we offer numerous services with all our drives that optimally support you in the operation and maintenance of your machine.

Our website has been optimized for mobile end devices and offers in-depth product information as well as lots of other services about cutting and work on surfaces. Discover the many ways that the PFERD brand adds value and supports users of PFERD products in the best possible way.



Assembly and application videos

Alongside the detailed information and safety notes in our operating manuals, we also provide clear and easy-to-understand assembly and application videos. If you still have any questions, our sales team will be happy to offer you personal support together with our experts from the technical advice team.

You can find all available videos for PFERD tools and tool drives on our website at **www.pferd.com**.

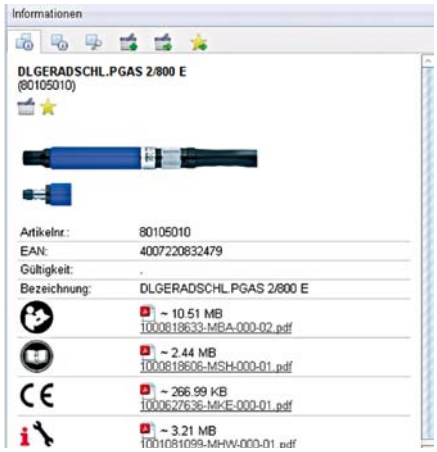


Spare parts catalogue

In our online spare parts catalogue, we have compiled all the information about every PFERD drive. Here you will find exploded drawings and other sketches as well as photos and ordering data for each individual spare part for our drives. With just a few clicks, you can select the required spare parts or spare parts kits, add them to your shopping cart and order them online directly from PFERD.

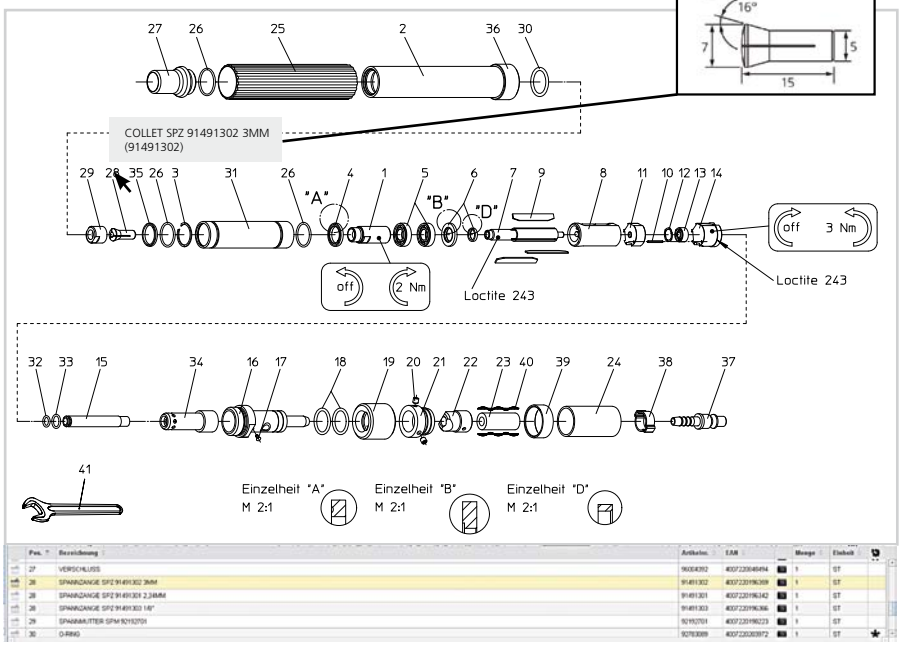
If you ever misplace the operating instructions, you can find them in our spare parts catalogue for download along with other documents such as CE declarations of conformity and illustrated DIY instructions for small repairs.

You can find our clearly structured online spare parts catalogue at **spareparts.pferd.com**.



In the information area you can see which documents are available for download.

Example: Compressed-air straight grinder PGAS 2/800 E



Move your mouse over the different spare parts for your PFERD tool drive to get the exact product specifications. Clicking on the respective code displays more information and a product photo. In the lower part of the image, you have the option of adding the selected spare parts directly to the shopping cart and ordering them.

PFERD

Air grinders



Air grinders
General information

Air grinders are the "top speed" machines among the drives. They achieve higher rotational speeds in comparison to electric grinders or flexible shaft drives. Measured against their small size, they have a high power output. The robust and resistant slide vane and turbine motors have a long service life and are very easy to service.

Areas of application

Air grinders are very versatile. They are used economically and reliably in series production and assembly lines, especially in medium and large-sized companies that have a compressed air network.

PFERD range

PFERD offers straight, angle and belt grinders, as well as special drives. PFERD air grinders are technically up to date and incorporate the latest ergonomic findings and requirements. They have been specially developed for the economic application of grinding and milling tools and cover a wide rotational speed range (101,000–4,000 RPM) and power range (2,600–75 watts).

Advantages

- Compact, ergonomic design.
- Low weight.
- Technically tried and tested.
- High power compared to weight.
- Versatile use.
- Fixed rotational speeds.
- No risk of overloading, can be loaded up to machine standstill.
- Housing insulated against cold and vibration.
- Low-maintenance.
- Easy to service.
- Economical.



Criteria for selecting the optimum air grinder

The most important prerequisite for cost-effective work is the selection of the optimum tool. The appropriate drive is selected taking the following criteria into consideration:

1. Rotational speed
The drive should always be selected according to the rotational speed and cutting speed recommendations for the tool. Please refer to catalogue sections 2–8 for these recommendations.

2. Power output
The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the material to be machined, the cutting characteristics of the tool and the contact pressure.

3. Design, shape and size
Every type of application places specific demands on the shape and size of the tool drive. The different designs can be used for various applications, so the ideal drive should be selected for the task at hand, depending on the dimensions, accessibility, type and frequency of the application.

4. Tool mounting
Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 116–120 for an overview of collets and spindle extensions. If you have any further questions, your personal PFERD sales representative will be happy to help you.

Operates with or without oil

Turbine and air grinders are marked with the following symbols:

Oil	**Use only without oil.**
4 Oil/min Oil	**Can be used with or without oil.**
3 Oil/min	**Use only with oil.**

Advantages of oil-free compressed air
- Protects both people's health, the environment and the workplace.
- Reduces operating costs, because oil and fittings can be dispensed with.
- Avoids oily deposits on the workpiece.



We are happy to supply you with the perfect oil for PFERD tool drives. For all ordering data and information about PFERD lubricants, please see page 122.

Recommendations and prerequisites for the cost-effective use of air grinders

1. Air pressure
The drive should be operated at an air pressure of 6.3 bar. A sufficient flow rate must always be ensured. Over-pressure leads to premature and higher levels of wear.

2. Air consumption
All data in this catalogue refers to air consumption in cubic metres per minute [m³/min]. This is the volume of the air when expanded to atmospheric pressure. Unless otherwise indicated, the air consumption figures stated are always for a pressure of 6.3 bar and the maximum consumption of the drive in question. Non-regulated air grinders have the highest consumption at idling speed. Centrifugal-force-controlled air grinders have their highest air consumption under full load.

3. Rotational speed
Rotational speed data is stated in revolutions per minute [RPM] and refers to the idling speed at a pressure of 6.3 bar. In the case of non-regulated drives, the rotational speed under full load is approximately 50 % of the idling speed. In the case of centrifugal-force-controlled drives, the speed under full load is approximately 80 to 90 % of the idling speed.

4. Oil mist lubrication
Adequate oil mist lubrication, when relevant, is of crucial importance for optimum machine operation (oil viscosity at 40°C according to ISO VG 22–32 mm²/s (cSt)). For special lubricating oil, see page 122.

5. Drives for oil-free compressed-air operation
Drives marked oil-free can be used without oil mist lubrication. Drives which can operate with or without oil have a minimal reduction in rotational speed and power output when used without oil.

6. Maintenance unit
It is recommended to install a complete maintenance unit consisting of a 5 µm dirt filter, pressure reducer and lubricator. The maintenance unit should be located no more than approximately 5 m from the tool drive. The size of the filter pores should be 3–5 µm. If the compressed air is humid, air grinders should not be operated without oil.

7. In-line fine filter
To ensure trouble-free machine operation, particularly with frequent connection and disconnection, we recommend using the appropriate in-line fine filter, filter size 5 µm.

8. Air supply hose
The air supply hose must have an inner diameter that at least corresponds to those stated for the drives and if possible be ≤ 5 m long.

9. Fittings
Always use additional fittings such as hose nozzles, self-closing valve couplings etc. with the largest possible inner diameter. It is not advisable to use more than one valve coupling in order to prevent pressure losses.

10. Noise level
Air tool operators must always wear hearing protection as the process noise emission exceeds 85 dB(A) in many applications, even though the idling noise of the air grinders is low.
To make use much easier on the ears, we offer an optional frequency damper for selected drives with an exhaust hose. See page 67.
For hearing protection, see page 124.

11. Vibrations
PFERD air grinders meet the requirements of the EC Machinery Directive regarding vibrations from hand-held or hand-guided machines. This is achieved through:
- Precise concentricity
- Vibration-damping intermediate layers
- Vibration-insulated housings

For protective gloves, see page 124.

12. Maintenance and safety
We recommend:
- Maintenance of the drives at regular intervals
- Wearing personal protective equipment (see pages 123–124)



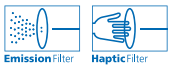
PGTA 1/1010
101,000 RPM / 75 watts

PGT 1/1000
100,000 RPM / 75 watts



PFERDVALUE:

PGTA 1/1010



PGT 1/1000





Special features:
- No oil residues on the workpiece.

PGTA 1/1010
- The highest cutting speed for TC burrs and mounted points.
- Slim air-powered straight grinder with turbine motor.
- Detachable spindle sleeve.

Included in delivery:
PGTA 1/1010
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.
PGT 1/1000
2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGTA 1/1010	071199	rear	ring	0.50	0.35	1	5.5	0.190
PGT 1/1000	653449	front	ring	0.35	0.17	1	5	0.240

Collets



Group	For shank dia.		
	2.34 mm	3 mm	1/8 inch
	EAN 4007220		
1	196342	196359	196366

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7 mm	592885

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 3.5 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 4.5 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

1 Oil /min

Special features:
- Elastically suspended spindle.
- Low-vibration use.

PGAS 2/800 E-HV
- Dead man's switch using safety lever valve.

Included in delivery:
0.32 m exhaust hose and 2 m air supply hose without nozzle, 3 mm collet, 2 keys.

PGAS 2/800 E
PGAS 2/800 E-HV

80,000 RPM / 110 watts



PFERDVALUE:

Vibration Filter · Noise Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 2/800 E	832479	rear	ring	0.31	0.25	1	5	0.208
PGAS 2/800 E-HV	101308	rear	lever	0.31	0.25	1	5	0.248

Collets



Group	For shank dia.		
	2.34 mm	3 mm	1/8 inch
	EAN 4007220		
1	196342	196359	196366

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 8 mm G	206867

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG T5	957103

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm Dia. 6 to 10 mm Width ≤ 10 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 4.5 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 5.5 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





Air grinders
Straight grinders

PGAS 1/750

75,000 RPM / 110 watts



1 Oil /min

Special features:
- Detachable spindle sleeve.

Included in delivery:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/750	507803	rear	ring	0.35	0.20	1	5	0.142

Collets



Group	For shank dia.		
	2.34 mm	3 mm	1/8 inch
	EAN 4007220		
1	196342	196359	196366

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7 mm	592885

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 8 mm Width ≤ 13 mm Dia. 8 to 10 mm Width ≤ 2 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 4.5 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 6.0 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



1 Oil /min

Special features:
- Light, easy to handle.

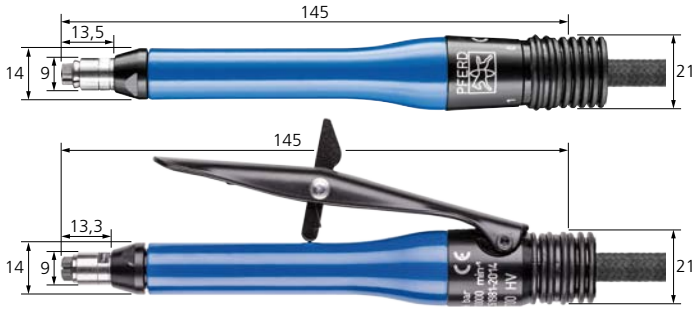
PGAS 1/700
- Particularly slim.

PGAS 1/700 HV
- Dead man's switch using safety lever valve.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

PGAS 1/700
PGAS 1/700 HV

70,000 RPM / 100 watts



PFERDVALUE:
PGAS 1/700:

HapticFilter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/700	948873	rear	ring	0.25	0.12	15	5	0.090
PGAS 1/700 HV	101315	rear	lever	0.25	0.12	15	5	0.128

Collets



Group	For shank dia.		
	3 mm	3/32 inch	1/8 inch
	EAN 4007220		
15	851814	851838	851821

For dimensions see page 116.

Keys



Description	EAN 4007220
DM SW 6/8 mm	851791

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 8 mm Width ≤ 13 mm Dia. 8 to 13 mm Width ≤ 3 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 5.0 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 5.5 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



PGTA 3/700

70,000 RPM / 220 watts



PFERDVALUE:

Emission Filter · Energy Saving

5 Oil /min

Special features:
- With or without oil – no difference in speed at the same power output, no oil residues on the workpiece.
- Maximum power output in the rotational speed range specified.
- Constant power delivery due to the centrifugal governor.
- Tools with shank dia. of 6 mm / 1/4" can also be used.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 3 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGTA 3/700	373248	rear	push-pull	0.25	0.80	4	8	0.390

Collets



Group	For shank dia.			
	3 mm	6 mm	1/8 inch	1/4 inch
	EAN 4007220			
4	349311	349298	349328	349304

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 8 mm Width ≤ 13 mm Dia. 8 to 13 mm Width ≤ 3 mm Shank dia. 6 mm: Dia. up to 5 mm Dia. 5 to 10 mm Width ≤ 25 mm Dia. 10 to 13 mm Width ≤ 20 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 5.0 mm for CRP/GRP Dia. up to 10.0 mm Shank dia. 3 + 6 mm **CBN grinding points** Dia. up to 7.0 mm Shank dia. 3 + 6 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

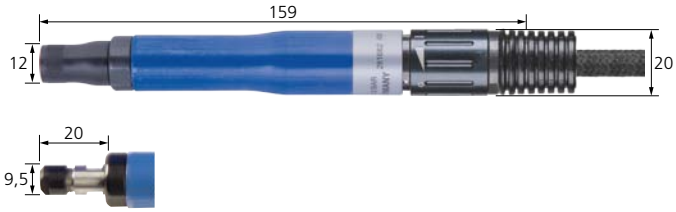
1 Oil /min

Special features:
- Detachable spindle sleeve.

Included in delivery:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

PGAS 1/600

60,000 RPM / 110 watts



Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/600	507780	rear	ring	0.28	0.20	1	5	0.142

Collets



Group	For shank dia.		
	2.34 mm	3 mm	1/8 inch
	EAN 4007220		
1	196342	196359	196366

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7 mm	592885

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm **HSS rotary cutters** **Special cuts** Dia. 1.6 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 6 mm Dia. 6 to 8 mm Width ≤ 16 mm Dia. 8 to 13 mm Width ≤ 3 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GR** Dia. up to 4 mm **GHR, LR, TX** Dia. up to 8 mm **LHR** Dia. up to 10 mm	**Diamond grinding points** Dia. 3.0 to 5.5 mm Shank dia. 3 mm **CBN grinding points** Dia. 5.0 to 5.5 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



Air grinders
Straight grinders

PGAS 1/550

55,000 RPM / 100 watts



PFERDVALUE:

HapticFilter

1 Oil /min

Special features:
- Very slim machine housing.
- Light, easy to handle.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 1/550	896600	rear	ring	0.25	0.12	15	5	0.091

Collets



Group	For shank dia.		
	3 mm	3/32 inch	1/8 inch
	EAN 4007220		
15	851814	851838	851821

For dimensions see page 116.

Keys



Description	EAN 4007220
DM SW 6/8 mm	851791

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm **HSS rotary cutters** **Special cuts** Dia. up to 1.6 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 8 mm Dia. 8 to 10 mm Width ≤ 16 mm Dia. 10 to 16 mm Width ≤ 4 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GR** Dia. up to 4 mm **GHR, LR, TX** Dia. up to 6 mm **LHR** Dia. up to 8 mm **GHR, LR, TX, LHR** Dia. up to 10 mm	**Diamond grinding points** Dia. 2.8 to 5.5 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 5.5 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



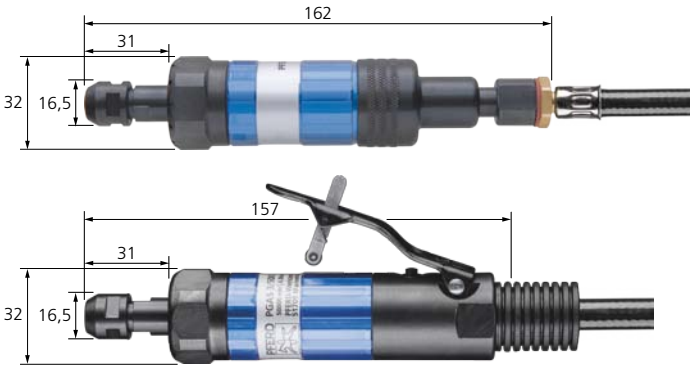
3 Oil /min

Special features:
- Light, easy to handle.

Included in delivery:
PG 3/500 S
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.
PGAS 3/500 HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PG 3/500 S
PGAS 3/500 HV

50,000 RPM / 200 watts



PFERDVALUE:
NoiseFilter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/500 S	286326	front	push-pull	0.45	0.24	5	8.5	0.370
PGAS 3/500 HV	286333	rear	lever	0.45	0.24	5	8.5	0.460

Collets



Group	For shank dia.		
	3 mm, 1/8 inch	6 mm	1/4 inch
	EAN 4007220		
5	299944	299951	606032

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

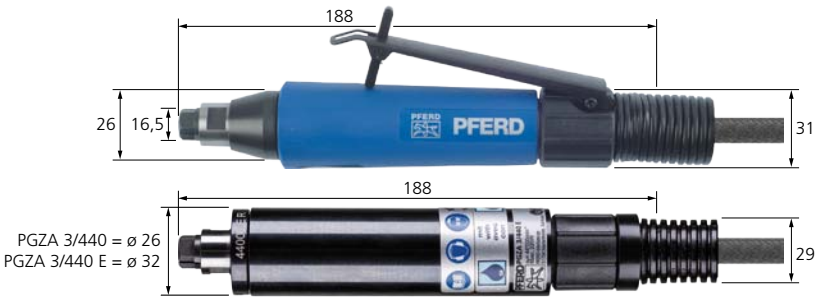
Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO, TITANIUM** Dia. up to 3 mm Shank dia. 3 mm **HSS rotary cutters** **Special cuts** Dia. up to 1.6 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 8 mm Dia. 8 to 10 mm Width ≤ 16 mm Dia. 10 to 16 mm Width ≤ 4 mm Shank dia. 6 mm: Dia. up to 10 mm Dia. 10 to 16 mm Width ≤ 32 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR** Dia. up to 4 mm **GHR, LR, TX** Dia. up to 10 mm **LHR** Dia. up to 15 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 8 mm	**Diamond grinding points** Dia. 3.5 to 7.0 mm Shank dia. 3 + 6 mm **CBN grinding points** Dia. 6.0 to 9.0 mm Shank dia. 3 + 6 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 3/440 DH
PGZA 3/440
PGZA 3/440 E

44,000 RPM / 250 watts



PFERDVALUE:
PGAS 3/440 DH

Haptic Filter

PGZA 3/440 E

Vibration Filter | Waste Saving | Time Saving

2 Oil /min

Special features:
PGAS 3/440 DH
- Ergonomic handle design for optimum power transmission, especially in the axial direction.

PGZA 3/440
- With reinforced drive housing for attaching the straight grinder in stationary applications with support or in robot applications.

PGZA 3/440 E
- Drive with elastically mounted drive unit.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 3/440 DH	176603	rear	ring/lever	0.55	0.35	6	8	0.340
PGZA 3/440	176580	rear	ring	0.55	0.35	6	8	0.450
PGZA 3/440 E	176597	rear	ring	0.55	0.35	6	8	0.556

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Support



Description	EAN 4007220	For drive
SU-D32	208403	PGZA 3/440 E
SU-D26	208410	PGZA 3/440

Frequency damper



Frequency damper FD 37-8-23,5 to make use much easier on the ears.
See page 67.

Noise Filter

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*		Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO, TITANIUM** Dia. up to 4 mm **HSS rotary cutters** **Special cuts** Dia. up to 2.3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 10 mm Dia. 10 to 13 mm Width ≤ 13 mm Dia. 13 to 20 mm Width ≤ 6 mm	Shank dia. 6 mm: Dia. up to 10 mm Dia. 10 to 16 mm Width ≤ 32 mm Dia. 16 to 20 mm Width ≤ 25 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR** Dia. up to 6 mm **GHR** Dia. up to 15 mm **LR** Dia. up to 12 mm	**TX** Dia. up to 10 mm **LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 13 mm	**Diamond grinding points** Dia. 3.5 to 8.0 mm Shank dia. 3 + 6 mm **CBN grinding points** Dia. 7.0 to 10.0 mm Shank dia. 3 + 6 mm	**Cut-off wheels EHT** Dia. 30 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. 30 mm matching **arbor** **BO SPG 6/6 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

2 Oil /min

Special features:
- Easy to handle and guide.
- Drive available with anti-clockwise rotation on request.

Included in delivery:
2 m air supply hose without nozzle,
6 mm collet, 2 keys.

PG 3/380 DH

38,000 RPM / 220 watts



PFERDVALUE:

HapticFilter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/380 DH	176627	front	ring/lever	0.55	0.35	6	8	0.310

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, FVK, FVKS, PLAST, ALLROUND** Dia. 4 to 6 mm **HSS rotary cutters** **Special cuts** Dia. up to 2.3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 10 mm Dia. 10 to 13 mm Width ≤ 13 mm Dia. 13 to 20 mm Width ≤ 6 mm Shank dia. 6 mm: Dia. up to 10 mm Dia. 10 to 16 mm Width ≤ 40 mm Dia. 16 to 20 mm Width ≤ 32 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR** Dia. up to 6 mm **GHR, LR, TX** Dia. up to 15 mm **LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 15 mm	**Diamond grinding points** Dia. 4.0 to 9.0 mm Shank dia. 3 + 6 mm **CBN grinding points** Dia. 8.0 to 13.0 mm Shank dia. 3 + 6 mm	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO SPG 6/6 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 4/350 E

35,000 RPM / 290 watts



PFERDVALUE:

Vibration Filter | Waste Saving | Time Saving

2 Oil /min

Special features:
- Elastically mounted spindle guarantees a longer service life, especially when using TC burrs.
- Low-vibration use.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 4/350 E	896693	rear	ring	0.70	0.45	6	8	0.500

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, FVK, FVKS, PLAST, ALLROUND** Dia. 4 to 6 mm **HSS rotary cutters** **Special cuts** Dia. up to 2.3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 6 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 16 mm Width ≤ 40 mm Dia. 16 to 25 mm Width ≤ 25 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR, PUR** Dia. up to 8 mm **GHR, LR, TX** Dia. up to 16 mm **LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 15 mm	**Diamond grinding points** Dia. 4.5 to 10.0 mm Shank dia. 3 + 6 mm **CBN grinding points** Dia. 8.0 to 14.0 mm Shank dia. 3 + 6 mm	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO SPG 6/6 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



4 Oil /min

PGAS 5/280 HV

28,000 RPM / 370 watts



Special features:
- Good power transmission in the axial direction.
- Very easy to handle and guide.
- Good power output with compact design.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 5/280 HV	176733	rear	lever	0.85	0.60	6	8	0.620

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

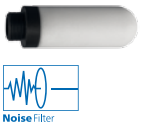
In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, TITANIUM** Dia. 4 to 6 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND** Dia. 6 to 12 mm **HSS rotary cutters** **Special cuts** Dia. 3.2 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 16 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 25 mm Width ≤ 40 mm Dia. 25 to 32 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR, PUR** Dia. up to 10 mm **GHR, LR, TX, LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 19 mm **POLICAP** Dia. up to 7 mm Shank dia. 3 + 6 mm **Mounted flap wheels** Dia. up to 20 mm Shank dia. 3 + 6 mm **POLINOX unitized wheels PNER** Dia. 25 mm	**Diamond grinding points** Dia. 5.5 to 12.0 mm **CBN grinding points** Dia. 10.0 to 15.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. 30 mm matching **arbor** **BO 6/6 0-4** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. 30 mm matching **arbor** **BO 6/6 3-10** Dia. up to 50 mm matching **arbors** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PG 3/250 S

25,000 RPM / 225 watts



3 Oil /min

Special features:
- Small design.
- Light, easy to handle.
- Constant power delivery due to the centrifugal governor.

Included in delivery:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/250 S	286340	front	push-pull	0.21	0.49	5	8.5	0.370

Collets



Group	For shank dia.		
	3 mm, 1/8 inch	6 mm	1/4 inch
	EAN 4007220		
5	299944	299951	606032

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND** Dia. 4 to 6 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, TITANIUM** Dia. 6 to 12 mm **HSS rotary cutters** **Special cuts** Dia. 3.2 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 20 mm Dia. 20 to 25 mm Width ≤ 16 mm Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 25 mm Width ≤ 40 mm Dia. 25 to 32 mm Width ≤ 20 mm	**Poliflex fine grinding points** Shank dia. 3 + 6 mm Bonds: **GR, PUR** Dia. up to 10 mm **GHR, LR, TX, LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 19 mm **POLICAP** Dia. up to 7 mm Shank dia. 3 + 6 mm **Mounted flap wheels** Dia. up to 20 mm Shank dia. 3 + 6 mm **POLINOX unitized wheels PNER** Dia. 25 mm	**Diamond grinding points** Dia. 5.5 to 12.0 mm **CBN grinding points** Dia. 10.0 to 15.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. 30 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. 30 mm matching **arbor** **BO 6/6 3-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

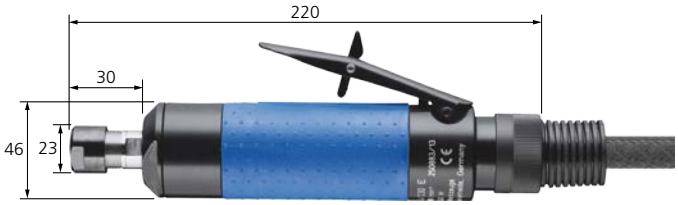
5 Oil /min

Special features:
- Elastically suspended spindle.
- Low-vibration use.
- Very high stock removal rate.
- Particularly suitable for use with TC burrs.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PGAS 7/250 E-HV

25,000 RPM / 540 watts



PFERDVALUE:

Vibration Filter | Waste Saving | Time Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 7/250 E-HV	948880	rear	lever	0.95	0.72	16	8	0.870

Collets



Group	For shank dia.			
	6 mm	8 mm	10 mm	1/4 inch
	EAN 4007220			
16	956984	957004	957028	957035

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

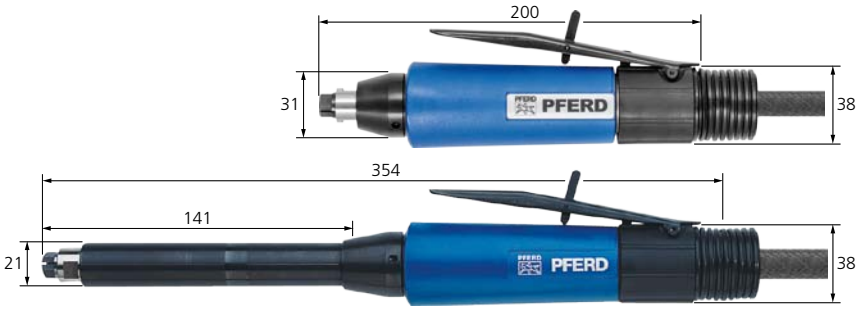
Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, MICRO, ALLROUND** Dia. 6 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND** Dia. 8 to 12 mm **HSS rotary cutters** **Cut 3, Special cuts** Dia. up to 4 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 20 mm Width ≤ 50 mm Dia. 20 to 32 mm Width ≤ 32 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 10 mm **GHR, LR, TX, LHR** Dia. up to 20 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **Mounted flap wheels** Dia. up to 15 mm Shank dia. 3 + 6 mm **POLICAP** Dia. up to 10 mm **POLINOX** **unitized wheels PNER** Dia. 25 mm **Felt points** Dia. up to 6 mm	**Diamond grinding points** Dia. 6.0 to 12.0 mm **CBN grinding points** Dia. 12.0 to 18.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. 30 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. 30 mm matching **arbor** **BO 6/6 3-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 5/230 HV
PGAS 5/230 VE-HV

with oil: 23,000 RPM / 370 watts
without oil: 18,000 RPM / 340 watts



4 Oil /min — Oil

Special features:
- No oil residues on the workpiece.

PGAS 5/230 HV
- Compact design.

PGAS 5/230 VE-HV
- Elastically suspended spindle.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

PFERDVALUE:
PGAS 5/230 HV
Emission Filter

PGAS 5/230 VE-HV
Vibration Filter, Emission Filter, Waste Saving, Time Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 5/230 HV	235294	rear	lever	0.85	0.63	6	8	0.620
PGAS 5/230 VE-HV	235300	rear	lever	0.85	0.63	6	8	0.840

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6	
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND, TITANIUM** Dia. 6 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, TITANIUM** Dia. 8 to 12 mm **HSS rotary cutters** **Cut 3, Special cuts** Dia. up to 4 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 13 mm Dia. 13 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX** Dia. up to 20 mm **LHR** Dia. up to 30 mm **Poliflex fine grinding discs** Bond: **TX** Dia. up to 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm	**Mounted flap wheels** Dia. up to 20 mm **POLICAP** Dia. up to 10 mm **POLIROLL** Dia. up to 6 mm **POLINOX unitized wheels PNER** Dia. 25 mm **Felt points** Dia. up to 8 mm	**Diamond grinding points** Dia. 7.0 to 15.0 mm **CBN grinding points** Dia. 12.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10**	**Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO 6/6 3-10** Dia. up to 50 mm matching **arbors** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

5 Oil /min

Special features:
- Compact design.

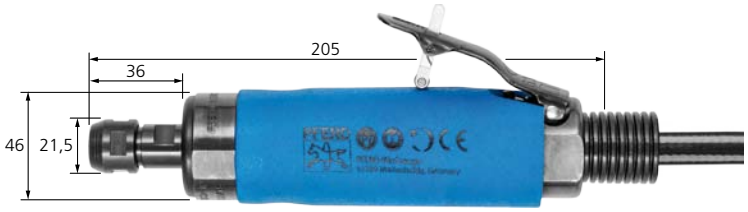
Included in delivery:
PG 8/220 HV
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PGAS 8/220 HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PG 8/220 HV
PGAS 8/220 HV

22,000 RPM / 600 watts





Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/220 HV	450840	front	lever	0.95	0.85	7	8.5	0.950
PGAS 8/220 HV	286401	rear	lever	0.95	0.85	7	8.5	1.000

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-28 ID for PGAS 8/220 HV to make use much easier on the ears.
See page 67.

Suitable PFERD tools

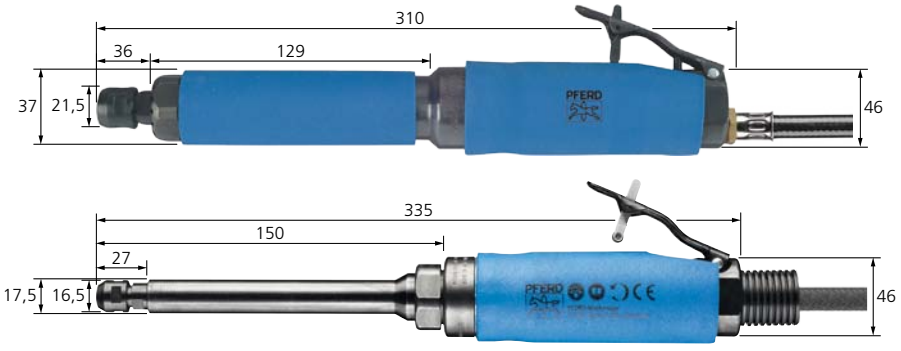
Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND** Dia. 6 to 10 mm **Cut 1, ALU, FVK, FVKS, PLAST, EDGE, TITANIUM** Dia. 10 to 16 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **Poliflex discs** Bond: **TX** Dia. 25 mm Dia. 40 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **POLICAP** Dia. up to 11 mm **Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **Felt points** Dia. up to 8 mm	**Diamond grinding points** Dia. 7.0 to 15.0 mm **CBN grinding points** Dia. 13.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO 6/6 3-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PG 8/220 V-HV
PGAS 8/220 VS-HV

22,000 RPM / 600 watts



PFERDVALUE:
PGAS 8/220 VS-HV

HapticFilter

5 Oil /min

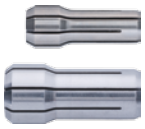
Special features:
PG 8/220 V-HV
- Alternative drive with anti-clockwise rotation available.
- Supported version SU-D32 available on request.

PGAS 8/220 VS-HV
- Particularly slim drive extension.

Included in delivery:
PG 8/220 V-HV
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys (EM SW 9/16", EM SW 3/4").
PGAS 8/220 VS-HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys (EM SW 7/16", EM SW 9/16").

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/220 V-HV	177167	front	lever	0.95	0.85	7	8.5	1.400
PGAS 8/220 VS-HV	836859	rear	lever	0.95	0.85	5	8.5	1.170

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
5	299944	299951	-	606032
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Frequency damper



NoiseFilter

Frequency damper FD 47-8-28 ID for PGAS 8/220 VS-HV to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND** Dia. 6 to 10 mm **Cut 1, ALU, FVK, FVKS, PLAST, EDGE, ALLROUND** Dia. 10 to 16 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **Poliflex discs** Bond: **TX** Dia. 25 mm Dia. 40 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **POLICAP** Dia. up to 11 mm **Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **Felt points** Dia. up to 8 mm	**Diamond grinding points** Dia. 7.0 to 15.0 mm **CBN grinding points** Dia. 13.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor BO 6/6 0-4** **Snagging wheels ER** Dia. up to 40 mm matching **arbor BO 6/6 3-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

3 Oil /min

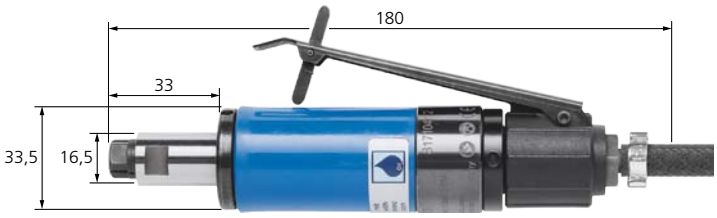
Special features:
- Easy to handle and guide.
- With guide sleeve particularly suitable for use of TC burrs for work on edges.

Included in delivery:
2 m air supply hose without nozzle,
6 mm collet, 2 keys.

PFERDVIDEO
You can find more information at
www.pferd.com.

PG 3/210 DH

21,000 RPM / 220 watts







PFERDVALUE:
Haptic Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 3/210 DH	606315	front	ring/lever	0.67	0.48	6	8	0.430

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Guide plate and sleeve



(1) (2)

Item no.	Description	EAN 4007220
1	EFP PG 3/210	967676
2	EFH PG 3/210	948897

Suitable PFERD tools

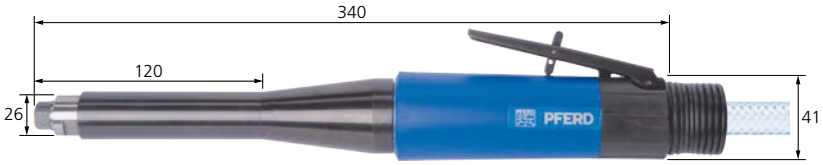
Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, TITANIUM, ALLROUND** Dia. 6 to 10 mm **EDGE cut** Dia. 16 mm This drive is particularly well suited for use of TC burrs with EDGE cut. **HSS rotary cutters** **Cut 3, Special cuts** Dia. up to 5 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **POLIROLL** Dia. up to 6 mm **Poliflex fine grinding discs** Bond: **TX** Dia. 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 25 mm **POLICAP** Dia. up to 10 mm	**Mounted flap wheels** Dia. up to 20 mm **Felt points** Dia. up to 8 mm **Catalogue section 5** **Diamond grinding points** Dia. 7.0 to 15.0 mm **CBN grinding points** Dia. 14.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO 6/6 3-10** Dia. up to 50 mm matching **arbors** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 10/200 V-HV

20,000 RPM / 900 watts



7 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.
- Robust, slim, medium-duty drive.

Included in delivery:
1.7 m exhaust hose and 3 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/200 V-HV	776889	rear	lever	0.75	1.20	8	9	1.600

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	1/4 inch	3/8 inch
	EAN 4007220				
8	213674	213704	213711	213681	213728

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

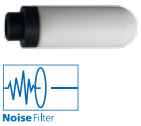
In-line fine filter



Description	EAN 4007220
SF 24 STG-T9	809044

See page 67.

Frequency damper



Frequency damper
FD 47-9-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND** Dia. 6 to 10 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, EDGE ECS** Dia. 10 to 16 mm **HSS rotary cutters** **Cut 3, Special cuts** Dia. up to 5 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 40 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **POLIROLL** Dia. up to 6 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm **POLICAP** Dia. up to 10 mm **Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **Felt points** Dia. up to 8 mm	**Diamond grinding points** Dia. 8.0 to 18.0 mm **CBN grinding points** Dia. 14.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO 6/6 3-10**	**Shank mounted wheel brushes** knotted RBG dia. 76 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

4 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.

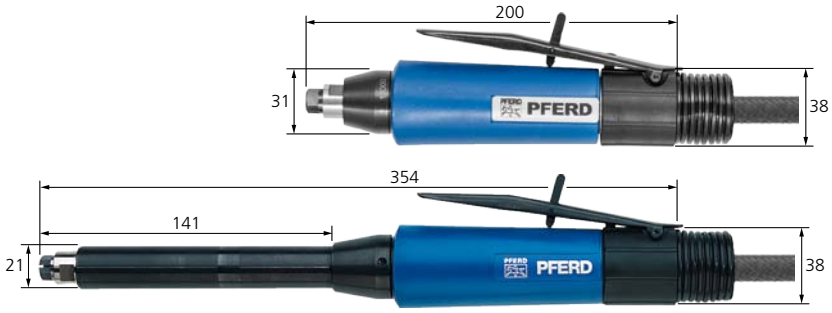
PGAS 5/180 HV
- Compact design.

PGAS 5/180 VE-HV
- Elastically suspended spindle.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

PGAS 5/180 HV
PGAS 5/180 VE-HV

18,000 RPM / 370 watts



PFERDVALUE:
PGAS 5/180 HV
Energy Saving

PGAS 5/180 VE-HV
Vibration Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 5/180 HV	176719	rear	lever	0.30	0.60	6	8	0.620
PGAS 5/180 VE-HV	176726	rear	lever	0.30	0.60	6	8	0.840

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, ALLROUND** Dia. 8 to 12 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 2.3 to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. up to 30 mm **Poliflex fine grinding discs** Bond: **TX** Dia. 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm	**POLICAP** Dia. up to 13 mm **POLINOX cross buffs** Dia. up to 25 mm **Mounted flap wheels** Dia. up to 40 mm **POLISTAR** Dia. 20 mm **Felt points** Dia. up to 10 mm	**Diamond grinding points** Dia. 8.0 to 18.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbors** **BO 6/6 0-4** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 9/180 V-HV

with oil: 18,000 RPM / 600 watts
without oil: 15,000 RPM / 550 watts



PFERDVALUE:

Emission Filter

5 Oil /min

Special features:
- No oil residues on the workpiece.
- Constant power delivery due to the centrifugal governor.

Included in delivery:
1.7 m exhaust hose and 3 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 9/180 V-HV	319765	rear	lever	1.35	0.90	8	9	1.600

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	1/4 inch	3/8 inch
	EAN 4007220				
8	213674	213704	213711	213681	213728

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T9	809044

See page 67.

Frequency damper



Noise Filter

Frequency damper
FD 47-9-30,5 to make use much easier on the ears.
See page 67.

Arbors



Description	EAN 4007220	Tool mounting [mm]
SDD 1016	348444	Dia. 10 x 16

The arbor replaces the collet and is used for direct mounting of tools with a centre hole diameter of 10 mm.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, FVK, FVKS, PLAST, ALLROUND** Dia. 8 to 12 mm **Cut 1, ALU, ALLROUND, EDGE** Dia. 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 2.3 to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. up to 30 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm **Mounted flap wheels** Dia. up to 40 mm **POLISTAR** Dia. up to 20 mm **Felt points** Dia. up to 10 mm	**Diamond grinding points** Dia. 8.0 to 18.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted end brushes** crimped PBU dia. 10 to 15 mm knotted PBG dia. 19 to 30 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

5 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.

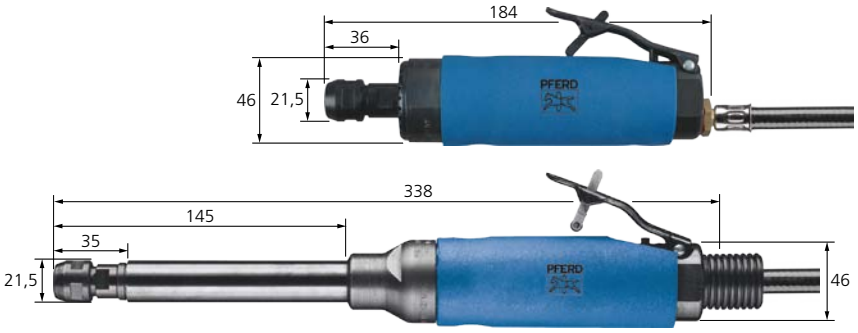
PG 8/160 HV
- Compact shape.

PGAS 8/160 VM-HV
- Slim drive extension.

Included in delivery:
PG 8/160 HV
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.
PGAS 8/160 VM-HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PG 8/160 HV
PGAS 8/160 VM-HV

16,000 RPM / 600 watts



PFERDVALUE:
PG 8/160 HV
Energy Saving

PGAS 8/160 VM-HV
Haptic Filter
Energy Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/160 HV	536339	front	lever	0.34	0.85	7	8.5	0.950
PGAS 8/160 VM-HV	843079	rear	lever	0.34	0.85	7	8.5	1.200

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-28 ID for PGAS 8/160 VM-HV to make use much easier on the ears.
See page 67.

Suitable PFERD tools

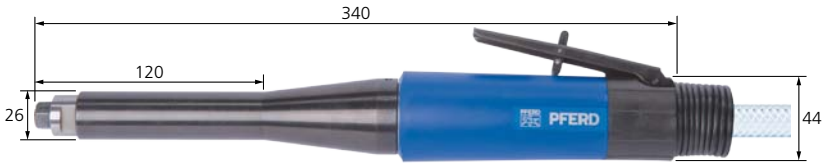
Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO** Dia. 8 to 12 mm **Cut 1, ALU, ALLROUND, EDGE** Dia. up to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 2.3 to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. 12 to 30 mm **Poliflex fine grinding discs** Bond: **TX** Dia. 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm	**POLICAP** Dia. up to 29 mm **Mounted flap wheels** Dia. up to 25 mm **POLINOX cross buffs** Dia. up to 25 mm **POLIROLL** Dia. up to 16 mm **POLISTAR** Dia. up to 20 mm **Felt points** Dia. up to 10 mm	**Diamond grinding points** Dia. 10.0 to 20.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 22 mm Dia. 40 to 50 mm	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20** **Catalogue section 8** **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 10/160 V-HV

16,000 RPM / 900 watts



PFERDVALUE:

Energy Saving

7 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.

Included in delivery:
1.7 m exhaust hose and 3 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 10/160 V-HV	777282	rear	lever	0.70	1.20	8	9	1.600

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	1/4 inch	3/8 inch
	EAN 4007220				
8	213674	213704	213711	213681	213728

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T9	809044

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-9-30,5 to make use much easier on the ears.
See page 67.

Arbors



Description	EAN 4007220	Tool mounting [mm]
SDD 1016	348444	Dia. 10 x 16

The arbor replaces the collet and is used for direct mounting of tools with a centre hole diameter of 10 mm.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO** Dia. 8 to 12 mm **Cut 1, ALU, ALLROUND, EDGE** Dia. up to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 2.3 to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. 12 to 30 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm **POLICAP** Dia. up to 29 mm **Mounted flap wheels** Dia. up to 25 mm **POLISTAR** Dia. up to 20 mm **Felt points** Dia. up to 10 mm	**Diamond grinding points** Dia. 10.0 to 20.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted wheel brushes** crimped RBG dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

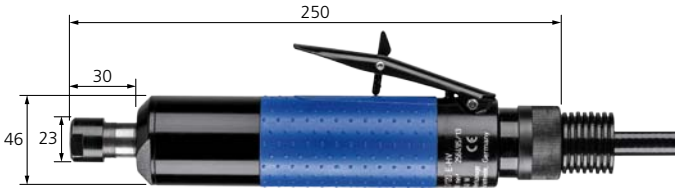
5 Oil /min

Special features:
- Elastically suspended spindle.
- Low-vibration use.
- Constant power delivery due to the centrifugal governor.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PGAS 7/120 E-HV

12,000 RPM / 540 watts



PFERDVALUE:

Vibration Filter | Energy Saving | Waste Saving | Time Saving | Resource Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 7/120 E-HV	101322	rear	lever	0.70	1.30	16	8	1.035

Collets



Group	For shank dia.			
	6 mm	8 mm	10 mm	1/4 inch
	EAN 4007220			
16	956984	957004	957028	957035

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 17 mm	204542
DM SW 20/22 mm	957059

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, TITANIUM, MICRO** Dia. 10 to 20 mm **Cut 1, ALU, ALLROUND, EDGE** Dia. up to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 3.2 to 8 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm **Catalogue section 4*** **Poliflex fine grinding points** Bonds: **GR, PUR** Dia. 8 to 20 mm **GHR, LR, TX, LHR** Dia. 15 to 40 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 45 mm **Mounted flap wheels** Dia. up to 40 mm **POLINOX unitized wheels PNER** Dia. 50 mm **POLIROLL** Dia. up to 12 mm **POLICAP** Dia. up to 16 mm **Felt points** Dia. up to 15 mm	**Diamond grinding points** Dia. 15.0 to 20.0 mm **Diamond cut-off wheels** Dia. 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted end brushes** crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 to 23 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 9/120 V-HV

12,000 RPM / 600 watts



PFERDVALUE:

Emission Filter · Energy Saving

5 Oil /min — Oil

Special features:
- With or without oil – no difference in speed at the same power output.
- No oil residues on the workpiece.
- Constant power delivery due to the centrifugal governor.

Included in delivery:
1.7 m exhaust hose and 3 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 9/120 V-HV	319758	rear	lever	0.40	0.90	8	9	1.600

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	1/4 inch	3/8 inch
	EAN 4007220				
8	213674	213704	213711	213681	213728

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T9	809044

See page 67.

Frequency damper



Noise Filter

Frequency damper
FD 47-9-30,5 to make use much easier on the ears.
See page 67.

Arbors



Description	EAN 4007220	Tool mounting [mm]
SDD 1016	348444	Dia. 10 x 16

The arbor replaces the collet and is used for direct mounting of tools with a centre hole diameter of 10 mm.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO** Dia. 10 to 20 mm **Cut 1, ALU, FVK, FVKS, PLAST, ALLROUND, EDGE, EDGE ECS** Dia. up to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 3.2 to 8 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. 8 to 20 mm **GHR, LR, TX, LHR** Dia. 15 to 40 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 45 mm **Mounted flap wheels** Dia. up to 40 mm **POLINOX unitized wheels PNER** Dia. 50 mm	**POLIROLL** Dia. up to 12 mm **POLICAP** Dia. up to 16 mm **Felt points** Dia. up to 15 mm **Catalogue section 5** **Diamond grinding points** Dia. 15.0 to 20.0 mm **Diamond cut-off wheels** Dia. 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted end brushes** crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 to 23 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

5 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.
- Compact design.

Included in delivery:
PG 8/100 HV
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.
PGAS 8/100 HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PG 8/100 HV
PGAS 8/100 HV

10,000 RPM / 600 watts



PFERDVALUE:
Energy Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/100 HV	536438	front	lever	0.17	0.85	7	8.5	0.950
PGAS 8/100 HV	286272	rear	lever	0.17	0.85	7	8.5	1.000

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-28 ID for PGAS 8/100 HV to make use much easier on the ears.
See page 67.

Suitable PFERD tools

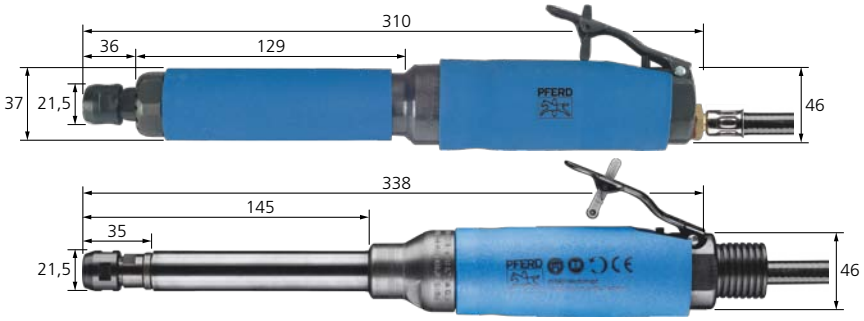
Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, EDGE** Dia. 10 to 20 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 3.2 to 10 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. 8 to 25 mm **GHR, LR, TX, LHR** Dia. 15 to 40 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 60 mm **POLICAP** Dia. up to 21 mm **Mounted flap wheels** Dia. up to 40 mm	**POLINOX mounted grinding wheels POLINOX unitized wheels PNER** Dia. up to 50 mm **POLIROLL** Dia. up to 18 mm **POLINOX cross buffs** Dia. up to 25 mm **Felt points** Dia. up to 20 mm	**Diamond grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 22 to 30 mm **Catalogue section 6** **Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted end brushes** crimped PBU dia. 10 to 20 mm knotted PBG dia. 19 to 30 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 40 mm knotted RBG dia. 76 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PG 8/100 V-HV
PGAS 8/100 V-HV
PGAS 8/100 VM-HV

10,000 RPM / 600 watts



PFERDVALUE:
PG 8/100 V-HV, PGAS 8/100 V-HV
Energy Saving

PGAS 8/100 VM-HV
Haptic Filter
Energy Saving

5 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.

PG 8/100 V-HV, PGAS 8/100 V-HV
- Alternative drive with anti-clockwise rotation available.
- Supported version SU-D32 available on request.

PGAS 8/100 VM-HV
- Slim drive extension.

Included in delivery:
PG 8/100 V-HV
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.
PGAS 8/100 V-HV, PGAS 8/100 VM-HV
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/100 V-HV	176825	front	lever	0.17	0.85	7	8.5	1.400
PGAS 8/100 V-HV	286289	rear	lever	0.17	0.85	7	8.5	1.400
PGAS 8/100 VM-HV	843086	rear	lever	0.17	0.85	7	8.5	1.200

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-28 ID for PGAS 8/100 V-HV and PGAS 8/100 VM-HV to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, EDGE** Dia. 10 to 20 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 3.2 to 10 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 32 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. up to 32 mm Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. 8 to 25 mm **GHR, LR, TX, LHR** Dia. 15 to 40 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 60 mm **POLICAP** Dia. up to 21 mm **Mounted flap wheels** Dia. up to 40 mm	**POLINOX mounted grinding wheels** **POLINOX unitized wheels PNER** Dia. up to 50 mm **POLIROLL** Dia. up to 18 mm **POLINOX cross buffs** Dia. up to 25 mm **Felt points** Dia. up to 20 mm	**Diamond grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 22 to 30 mm **Catalogue section 6** **Cut-off wheels EHT** Dia. up to 50 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank mounted end brushes** crimped PBU dia. 10 to 20 mm knotted PBG dia. 19 to 30 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

5 Oil /min

Special features:
- Light, compact design.
- Supported version for SU-D32 available on request.
- Alternative drive with rear exhaust and anti-clockwise rotation available on request.

Included in delivery:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PG 8/50 V-HV

5,000 RPM / 600 watts



Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PG 8/50 V-HV	176788	front	lever	0.85	0.34	7	8.5	1.600

Collets



Group	For shank dia.			
	3 mm, 1/8 inch	6 mm	8 mm	1/4 inch
	EAN 4007220			
7	187074	186855	187050	187067

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 9/16"	186831
EM SW 3/4"	186848

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Support



Description	EAN 4007220
SU-D32	208403

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 8
HSS rotary cutters **Cut ALU, 1, 2, 3, 5** Dia. 5 to 16 mm **HSS aluminium cutters** **119** **120** matching **arbor with thread** **BO 6/10** **BO 8/10** for HSS rotary cutters	**Mounted points** **RUBBER type** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 40 mm Width ≤ 32 mm **Catalogue section 4*** **Poliflex fine grinding points** **Poliflex fine grinding discs** Dia. 25 to 50 mm **Abrasive spiral bands and rubber drum holders** Dia. 50 mm **Mounted flap wheels** Dia. 56 to 80 mm	**POLINOX mounted grinding wheels** Dia. 50 to 80 mm **POLINOX cross buffs** Dia. 38 mm **POLICLEAN discs/ mounted tools** Dia. 50 mm **Felt points** **Mounted felt flap wheels** **Felt wheels** Dia. up to 45 mm matching **arbor** **BO 6/6 3-10**	**Diamond cut-off wheels** Dia. 40 mm matching **arbor** **BO 6/10 3** **BO 8/10 3**	**Shank mounted wheel brushes** crimped RBU dia. 70 to 100 mm **Shank mounted end brushes** knotted PBG dia. 10 to 13 mm **Shank-mounted bevel brushes** crimped KBU dia. 80 to 95 mm **Shank-mounted cup brushes** crimped TBU dia. 30 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

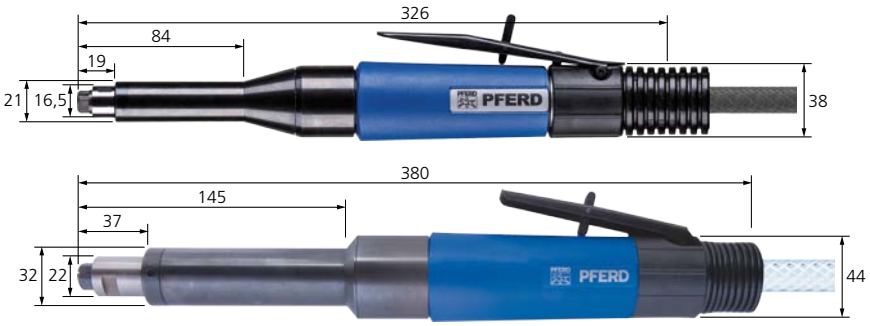
***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PGAS 5/40 V-HV

with oil: 4,000 RPM / 370 watts
without oil: 3,500 RPM / 340 watts

PGAS 10/40 V-HV

4,000 RPM / 900 watts



PFERDVALUE:
PGAS 5/40 V-HV
Emission Filter

PGAS 10/40 V-HV
Energy Saving

4 Oil /min — Oil

7 Oil /min

Special features:
PGAS 5/40 V-HV
- No oil residues on the workpiece.

PGAS 10/40 V-HV
- Constant power delivery due to the centrifugal governor.

Included in delivery:
PGAS 5/40 V-HV
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys (EM SW 11 mm and EM SW 14 mm).
PGAS 10/40 V-HV
1.7 m exhaust hose and 3 m air supply hose without nozzle, 6 mm collet, 2 keys (EM SW 14 mm and EM SW 17 mm).

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PGAS 5/40 V-HV	344361	rear	lever	0.85	0.63	6	8	0.904
PGAS 10/40 V-HV	802649	rear	lever	0.60	1.20	8	9	1.700

Collets



Group	For shank dia.							
	3 mm	6 mm	8 mm	10 mm	3/32 inch	1/8 inch	1/4 inch	3/8 inch
	EAN 4007220							
6	212875	212851	212936	-	234969	212882	212868	-
8	-	213674	213704	213711	-	-	213681	213728

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 2	351116
AS 3	351123

See page 67.

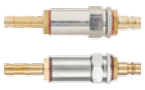
Frequency damper



Noise Filter

To make use much easier on the ears, frequency damper
FD 47-8-30,5 for PGAS 5/40 V-HV
FD 47-9-30,5 for PGAS 10/40 V-HV
See page 67.

In-line fine filter



Description	EAN 4007220	Matching drives
SF 24 STG-T8	809020	PGAS 5/40 V-HV
SF 24 STG-T9	809044	PGAS 10/40 V-HV

See page 67.

Arbor



Description	EAN 4007220	Tool mounting [mm]
SDD 1016	348444	Dia. 10 x 16

The arbor replaces the collet. It is used for direct mounting of tools with a diameter of 10 mm on the PGAS 10/40 V-HV.

Suitable PFERD tools

Catalogue section 2	Catalogue section 4*		Catalogue section 5
HSS rotary cutters, Cut ALU, 1, 2, 3, 5 Dia. 6 to 16 mm **HSS aluminium cutters 119, 120** matching **arbor with thread BO 6/10, BO 8/10** for HSS rotary cutters	**Poliflex fine grinding points** **Poliflex fine grinding discs** Dia. 25 to 80 mm **Abrasive spiral bands and rubber drum holders** Dia. 100 mm **Mounted flap wheels** Dia. up to 80 mm	**POLINOX mounted grinding wheels** Dia. 60 to 100 mm **POLICLEAN discs** Dia. 50 and 75 mm **Felt points, mounted felt flap wheels, felt wheels** Dia. up to 50 mm	**Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbor BO 6/10 3, BO 8/10 3**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue section 4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions. **Note:** Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

1 Oil /min

Special features:
- Smallest high-revving angle grinder.
- Robust, without angular gear.

Included in delivery:
PWS 1/800
2 m air supply hose without nozzle, 3 mm collet, 2 keys.
PWSA 1/800
0.3 m exhaust hose, 2 m air supply hose without nozzle, 3 mm collet, 2 keys.

PWS 1/800
PWSA 1/800

80,000 RPM / 75 watts



Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWS 1/800	176900	side	push-pull	0.25	0.18	2	5	0.115
PWSA 1/800	541142	rear	ring	0.25	0.18	2	5	0.117

Collets



Group	For shank dia.			
	2.34 mm	3 mm	3/32 inch	1/8 inch
	EAN 4007220			
2	851999	207840	207864	207857

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 6 mm	204504
EM SW 8 mm G	206867

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG T5	957103

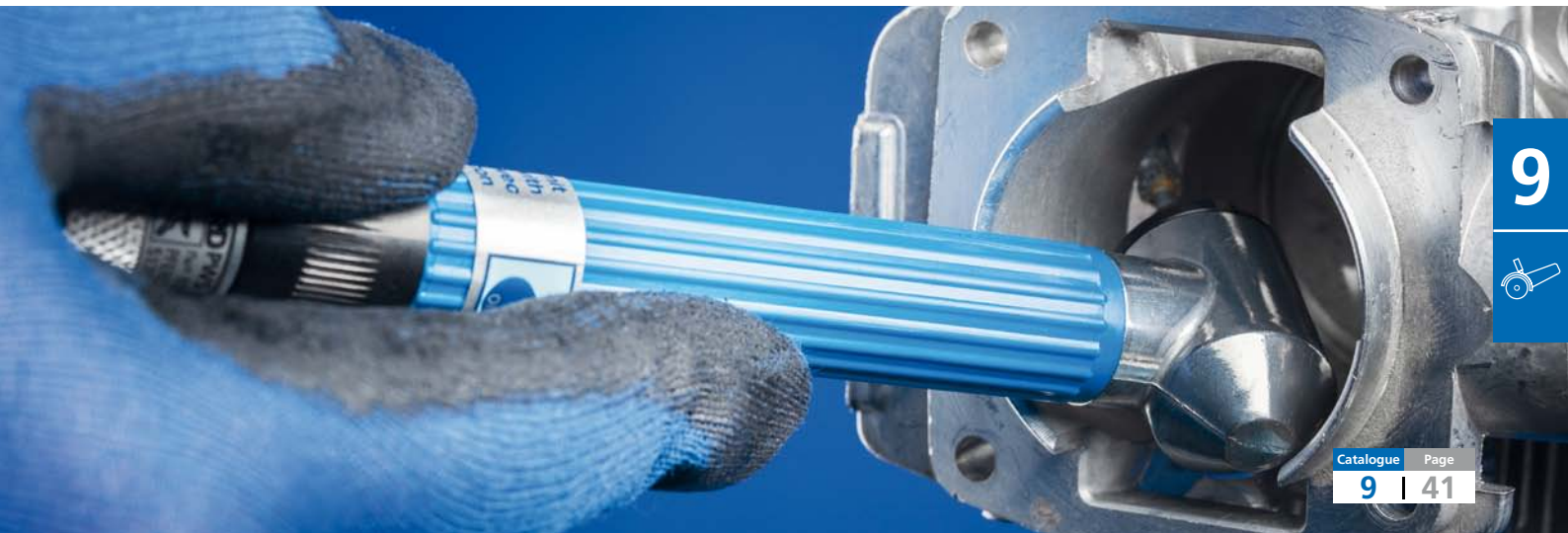
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5
TC burrs **Cut 3 PLUS, 4, 5, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm **ALU cut** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm Dia. 6 to 10 mm Width ≤ 2 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm	**Diamond grinding points** Dia. up to 4.0 mm Shank dia. 3 mm **CBN grinding points** Dia. 3.5 to 6.0 mm Shank dia. 3 mm

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



Air grinders
Angle grinders with collet

PWSA 1/250

25,000 RPM / 110 watts



2 Oil /min

Special features:
- Light and easy to handle.

Included in delivery:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 1/250	802588	rear	ring	0.30	0.20	3	5	0.217

Collets



Group	For shank dia.		
	3 mm	3/32 inch	1/8 inch
	EAN 4007220		
3	188262	188378	188354

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 10 mm	188514
EM SW 13/64"	188279

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Arbor



Description	EAN 4007220	Use for
ASD 20 CD 1/4-20 G	308417	COMBIDISC tools, SBH 20, SBH 25, SBH 38, CD 20, CD 38

The arbor replaces the collet. It is used for direct mounting of COMBIDISC tools.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	
TC burrs **Cut 3 PLUS, 4, 5, INOX, MICRO** Dia. 3 mm Shank dia. 3 mm **Cut 1, 3,** **Special cuts** Dia. up to 4 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 13 mm Width ≤ 13 mm Dia. 13 to 25 mm Width ≤ 6 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GR, PUR** Dia. up to 10 mm **GHR, LR, TX, LHR** Dia. up to 20 mm	**COMBIDISC abrasive discs** Dia. up to 25 mm with **arbor** **ASD 20 CD 1/4-20G**

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



4 Oil /min

Special features:
- Low angle head height.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

PWSA 5/210 HV

21,000 RPM / 370 watts



Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 5/210 HV	177075	rear	lever	0.85	0.60	6	8	0.710

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

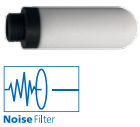
In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Grinding disc adapter set



Description	EAN 4007220	Tool mounting [mm]
SAS 10/50	238462	Dia. 10 x 1-9

Using this adapter set, cut-off and grinding wheels can be used up to dia. 50 mm and a thickness of 1–9 mm. Easy to use: Remove the collet, connect the hand protection, place the washer onto the spindle and tighten the grinding wheel with the clamping screw (washer is not needed for wheels thicker than 6 mm).

Suitable PFERD tools

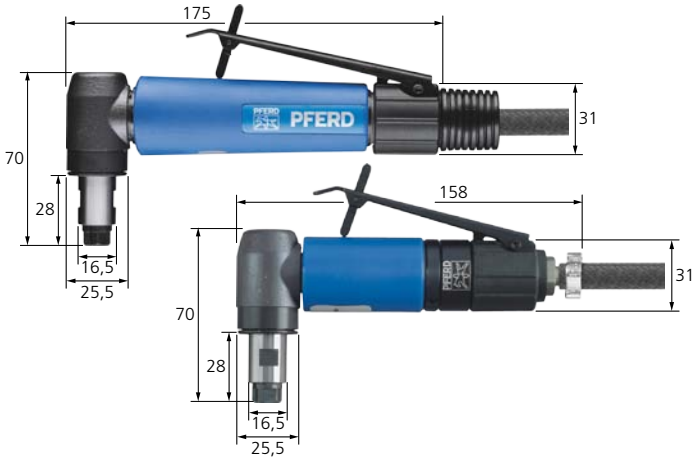
Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND, TITANIUM** Dia. 6 to 12 mm **Cut 1, ALU, FVK, FVKS, PLAST** Dia. 10 to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. up to 5 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **POLICAP** Dia. up to 11 mm **Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **COMBIDISC abrasive discs** Dia. 20 to 38 mm	**Diamond grinding points** Dia. 7.0 to 15.0 mm **CBN grinding points** Dia. 14.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbor** **BO 6/10 3** **BO 8/10 3** or **Adapter set** **SAS 10/50**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbors** **BO 6/6 0-4** **BO SPG 6/6 0-10** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** or **Adapter set** **SAS 10/50**	**Snagging wheels ER** Dia. up to 40 mm matching **arbors** **BO 6/6 3-10** **BO SPG 6/6 0-10** Dia. up to 50 mm matching **arbors** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10** or **Adapter set** **SAS 10/50**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Air grinders
Angle grinders with collet

PWSA 3/220 DH **22,000 RPM / 250 watts**
PWS 3/200 DH **20,000 RPM / 220 watts**



2 Oil /min

Special features:
- Slim angle head for work in hard-to-reach areas.
- Easy to handle, compact shape.

Included in delivery:
PWSA 3/220 DH
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.
PWS 3/200 DH
2 m air supply hose without nozzle, 6 mm collet, 2 keys.

PFERDVALUE:
PWS 3/200 DH
Haptic Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 3/220 DH	566503	rear	ring/lever	0.60	0.46	6	8	0.380
PWS 3/200 DH	282175	front	ring/lever	0.55	0.35	6	8	0.370

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 37-8-23,5 for PWSA 3/220 DH to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 6	
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND** Dia. 6 to 10 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. up to 5 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm Shank dia. 8 mm: Dia. up to 32 mm Width ≤ 40 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **POLICAP** Dia. up to 11 mm	**Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **COMBIDISC abrasive discs** Dia. 20 to 50 mm **COMBIDISC non-woven discs** hard type **VRH 20**	**Diamond grinding points** Dia. 8.0 to 15.0 mm **CBN grinding points** Dia. 15.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbor** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10**	**Snagging wheels ER** Dia. up to 40 mm matching **arbors** **BO 6/6 3-10** **BO SPG 6/6 0-10** Dia. up to 50 mm matching **arbors** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

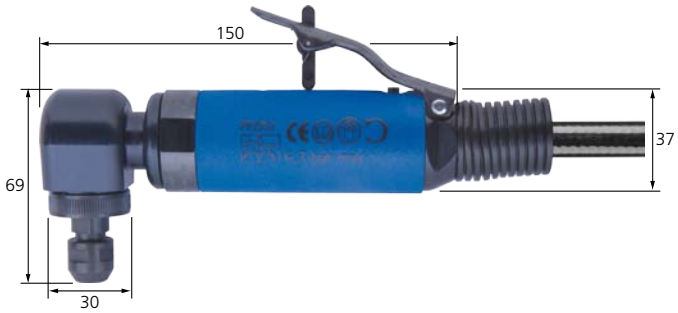
3 Oil /min

Special features:
- Compact design.
- High spindle concentricity.

Included in delivery:
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet, 2 keys.

PWSA 4/200 HV

20,000 RPM / 300 watts



Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 4/200 HV	598184	rear	lever	0.57	0.42	5	8.5	0.520

Collets



Group	For shank dia.		
	3 mm, 1/8 inch	6 mm	1/4 inch
	EAN 4007220		
5	299944	299951	606032

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 7/16"	300480
EM SW 9/16"	186831

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND** 7 to 10 mm dia. **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. up to 5 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 32 mm Dia. 32 to 40 mm Width ≤ 20 mm **Catalogue section 4*** **Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 12 mm **GHR, LR, TX, LHR** Dia. up to 25 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 22 mm **POLICAP** Dia. up to 11 mm **Mounted flap wheels** Dia. up to 20 mm **POLINOX unitized wheels PNER** Dia. 25 mm **COMBIDISC abrasive discs** Dia. 20 to 50 mm **COMBIDISC non-woven discs** hard type **VRH 20**	**Diamond grinding points** Dia. 8.0 to 15.0 mm **CBN grinding points** Dia. 15.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbor** **BO 6/10 3**	**Cut-off wheels EHT** Dia. up to 40 mm matching **arbor** **BO 6/6 0-4** **Snagging wheels ER** Dia. up to 40 mm matching **arbor** **BO 6/6 3-10**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PWSA 5/170-45 HV

with oil: 17,000 RPM / 370 watts
without oil: 14,000 RPM / 340 watts



PFERDVALUE:

Emission Filter Haptic Filter

4 Oil /min

Special features:
- No oil residues on the workpiece.
- Angle head with 45° inclination to improve work in corners and hard-to-reach areas.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 5/170-45 HV	484999	rear	lever	0.85	0.63	6	8	0.880

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

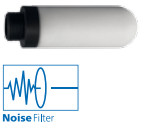
In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



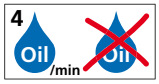
Frequency damper
FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND** Dia. 8 to 12 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. up to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 40 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. 12 to 30 mm **Poliflex fine grinding discs** Bond: **TX** Dia. up to 25 mm **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm **POLICAP** Dia. up to 13 mm **Mounted flap wheels** Dia. up to 25 mm **Felt points** Dia. up to 10 mm	**Diamond grinding points** Dia. 9.0 to 20.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbor** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbors** **BO 6/6 0-4** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**	**Shank mounted end brushes** crimped PBU dia. 10 to 20 mm crimped with bridle PBUR dia. 13 mm knotted PBG dia. 19 to 23 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



Special features:
- No oil residues on the workpiece.
- Low angle head height.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

PWSA 5/160 HV

with oil: 16,000 RPM / 370 watts
without oil: 13,000 RPM / 340 watts



PFERDVALUE:

Emission Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 5/160 HV	235287	rear	lever	0.85	0.63	6	8	0.710

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Grinding disc adapter set



Description	EAN 4007220	Tool mounting [mm]
SAS 10/50	238462	Dia. 10 x 1-9

Using this adapter set, cut-off and grinding wheels can be used up to dia. 50 mm and a thickness of 1–9 mm. Easy to use: Remove the collet, connect the hand protection, place the washer onto the spindle and tighten the grinding wheel with the clamping screw (washer is not needed for wheels thicker than 6 mm).

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND** Dia. 9 to 12 mm **HSS rotary cutters** **Cut 1, 2, 3, 5,** **Special cuts** Dia. 2.3 to 6 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 40 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. 32 to 50 mm Width ≤ 50 mm	**Poliflex** **fine grinding points** Bonds: **GR, PUR** Dia. up to 15 mm **GHR, LR, TX, LHR** Dia. 12 to 30 mm **POLICAP** Dia. up to 13 mm **COMBIDISC** **abrasive discs** Dia. 20 to 50 mm **COMBIDISC TX discs** Dia. 50 mm	**Diamond** **grinding points** Dia. 9.0 to 20.0 mm **CBN grinding points** Dia. 18.0 to 20.0 mm **Diamond cut-off wheels** Dia. 40 to 50 mm matching **arbor** **BO 6/10 3** **BO 8/10 3** or **Adapter set** **SAS 10/50**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbors** **BO 6/6 0-4** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**	**Shank mounted** **end brushes** crimped PBU dia. 10 to 20 mm crimped with bridle PBUR dia. 13 mm knotted PBG dia. 19 to 23 mm **Shank mounted** **wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

PWSA 5/130 HV

13,000 RPM / 370 watts



PFERDVALUE:

Emission Filter · Energy Saving

4 Oil /min · Oil

Special features:
- With or without oil – no difference in speed at the same power output.
- No oil residues on the workpiece.
- Constant power delivery due to the centrifugal governor.
- Low angle head height.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 6 mm collet, 2 keys.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 5/130 HV	271766	rear	lever	0.30	0.60	6	8	0.710

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 17 mm	204542

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Grinding disc adapter set



Description	EAN 4007220	Tool mounting [mm]
SAS 10/50	238462	Dia. 10 x 1-9

Using this adapter set, cut-off discs and grinding wheels can be used up to dia. 50 mm and a thickness of 1–9 mm. Easy to use: Remove the collet, connect the hand protection, place the washer onto the spindle and tighten the grinding disc with the clamping screw (washer is not needed for discs thicker than 6 mm).

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND** Dia. 10 to 16 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 2.3 to 7 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 32 mm Width ≤ 40 mm Dia. 40 to 50 mm Width ≤ 25 mm Shank dia. 8 mm: Dia. 32 to 50 mm Width ≤ 50 mm **Catalogue section 4*** **Poliflex fine grinding points** Bonds: **GR, PUR** Dia. 8 to 20 mm **GHR, LR, TX, LHR** Dia. 15 to 40 mm	**Poliflex fine grinding discs** Bond: **TX** Dia. 25 to 40 mm **POLICAP** Dia. up to 13 mm **COMBIDISC abrasive discs** Dia. 20 to 50 mm **COMBIDISC TX discs** Dia. 50 and 75 mm	**Diamond grinding points** Dia. 12.0 to 20.0 mm **Diamond cut-off wheels** Dia. 22 and 50 mm matching **arbor** **BO 3/1,7 1** **BO 6/10 3** **BO 8/10 3** or **Adapter set** **SAS 10/50**	**Cut-off wheels EHT** Dia. up to 50 mm matching **arbors** **BO 6/6 0-4** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20** **BO SPG 6/6 0-10** **BO SPG 6/10 0-10**	**Shank mounted end brushes** crimped PBU dia. 10 to 20 mm crimped with bridle PBUR dia. 13 mm knotted PBG dia. 19 to 23 mm **Shank mounted wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

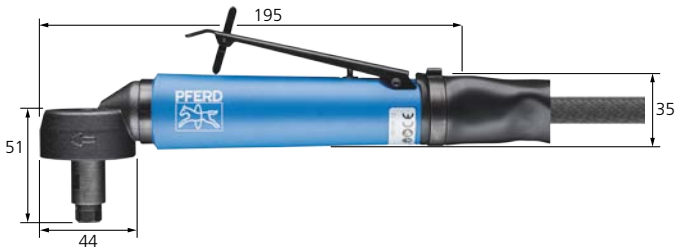
3 Oil /min

Special features:
- Constant power delivery due to the centrifugal governor.
- For low-speed grinding tools with shank diameter up to 8 mm.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 2 keys, 6 mm collet.

PWSA 4/45 HV

4,500 RPM / 250 watts



PFERDVALUE:

Energy Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Collet group	Inner dia. of air supply hose [mm]	Net weight [kg]
PWSA 4/45 HV	948750	rear	lever	0.25	0.50	6	8	0.560

Collets



Group	For shank dia.					
	3 mm	6 mm	8 mm	3/32 inch	1/8 inch	1/4 inch
	EAN 4007220					
6	212875	212851	212936	234969	212882	212868

For dimensions see page 116.

Keys



Description	EAN 4007220
EM SW 11 mm	206812
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Suitable PFERD tools

Catalogue section 4*

Poliflex fine grinding points
Poliflex fine grinding discs
Dia. up to 80 mm

Poliflex marbling tool holder
PFZY 5040

Felt points
Felt wheels
Dia. up to 45 mm

COMBIDISC diamond abrasive discs
Dia. up to 75 mm

COMBIDISC non-woven discs
Dia. 75 mm

COMBIDISC felt discs
Dia. up to 75 mm

COMBIDISC POLICLEAN discs
Dia. up to 75 mm

COMBIDISC abrasive disc holder
SBH 75

matching
arbor
SBH 50
BO PFF 50

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue section 4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.



Air grinders
Angle grinder with threaded spindle

PW 3/120 DH

12,000 RPM / 220 watts



PFERDVALUE:

Haptic Filter

2 Oil /min

Special features:
- Special spindle for holding all COMBIDISC tools (use a backing pad without shank).
- Flat angle head for work in hard-to-reach areas.
- Drive version with rear exhaust available on request.

Included in delivery:
2 m air supply hose without nozzle, 1 key.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Net weight [kg]
PW 3/120 DH	271780	front	ring/lever	0.55	0.35	1/4" - 20 UNC	8	0.390

Keys



Description	EAN 4007220
EM SW 11 mm	206812

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Extension for drive spindles



Description	EAN 4007220	Use for
SPV 20 CD 1/4-20 UNC	333167	COMBIDISC abrasive disc holder without threaded shank

Suitable PFERD tools

Catalogue section 4

COMBIDISC abrasive discs
Dia. 20 to 75 mm

COMBIDISC non-woven discs
Dia. 20 to 75 mm

COMBIDISC abrasive disc holders
SBH 20, 25, 38, 50, 75
without threaded shank

COMBIDISC TX discs
Dia. 50 and 75 mm

POLICLEAN discs
Dia. 50 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



5 Oil /min Oil

Special features:
- Max. **tool diameter up to 115 mm**.
- With or without oil – no difference in speed at the same power output.
- No oil residues on the workpiece.
- With spindle lock pin.
- Low angle head height.
- Can be converted to a belt grinder with belt grinder attachment.

Included in delivery:
1.7 m exhaust hose and 3 m air supply hose without nozzle, 1 key, clamping flanges, guard, side handle.

PWAS 9/120 HV

12,000 RPM / 600 watts



PFERDVALUE:

Emission Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWAS 9/120 HV	319772	rear	lever	0.90	0.80	M14	9	22.23	1.750

Clamping flanges



Description	EAN 4007220
SPF 95774001	426036
SPM 95732801	316238

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T9	809044

See page 67.

Frequency damper



Noise Filter

Frequency damper FD 47-9-30,5 to make use much easier on the ears.
See page 67.

Belt grinder attachment



See page 121.

Suitable PFERD tools

Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
COMBICLICK fibre discs Dia. up to 115 mm **Fibre discs** Dia. up to 115 mm	**Diamond cut-off wheels** **CC-GRIND-SOLID-DIAMOND** Dia. 115 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 115 mm	**Threaded cup brushes** crimped TBU dia. 60 mm M14 **Threaded bevel brushes** crimped KBU dia. 100 to 115 mm M14 knotted KBG dia. 115 mm M14	**Wheel brushes** **Type for angle grinders** crimped RBU dia. 115 mm

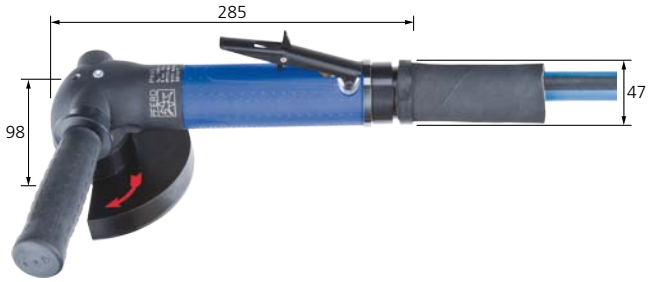
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



Air grinders
Angle grinder with threaded spindle

PWAS 13/120 AVH

12,000 RPM / 1,100 watts



PFERDVALUE:

Vibration Filter | Energy Saving

7 Oil /min

Special features:
- Max. **tool diameter up to 125 mm**.
- Autobalancer on the work spindle.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

Included in delivery:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys, guard, anti-vibration handle.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWAS 13/120 AVH	896709	rear	lever	0.50	1.20	M14	12	22.23	2.100

Clamping flanges



Item no.	Description	EAN 4007220
1	SPM14 98980036	902189
2	DHFL 98980039	902226
3	FLS 98980037	902202
4	DHTR 98980040	902233
5	FLS-CC 98980038	902219

Keys



Description	EAN 4007220
SKS SW 4 mm	204450
STL SW 35 x 5 mm	193853

Connecting set



Description	EAN 4007220
AS 4	351130

See page 67.

In-line fine filter



Description	EAN 4007220
SF 30 STG 12-T12	809051

See page 67.

Suitable PFERD tools

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
High Speed Disc ALUMASTER Dia. 115 mm	**COMBICLICK fibre discs** Dia. up to 125 mm matching **backing pad CC-GT 115/125** **Fibre discs** Dia. up to 125 mm matching **backing pad GT 125**	**Diamond cut-off wheels** **CC-GRIND-SOLID-DIAMOND** Dia. 125 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 125 mm	**Threaded cup brushes** crimped TBU dia. 60 to 75 mm M14 **Threaded bevel brushes** crimped KBU dia. 100 to 125 mm M14 knotted KBG dia. 115 mm M14	**Wheel brushes Type for angle grinders** crimped RBU dia. 115 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





Special features:
- Max. **tool diameter up to 125 mm**.
- M14 threaded spindle for the convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

Included in delivery:
1/2" female connecting thread, 2 keys, 1 clamping nut, 1 clamping flange, 1 spacer, guard, anti-vibration handle.

PWT 26/120 HV M14

12,000 RPM / 2,600 watts



PFERDVALUE:

Emission Filter | Haptic Filter | Time Saving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWT 26/120 HV M14	071205	bottom	lever	0.90	2.25	M14	16	22.23	2.200

Clamping flanges



Item no.	Description	EAN 4007220
1	SPM14 90011450	067444
2	SPF 90011455	067437
3	DS 90011460	071533

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853
SKS SW 5 mm	204467

In-line fine filter



Description	EAN 4007220
SF 35 IG 1/2-IG 1/2	072103

See page 67.

Revolving nozzle



See page 66.

Suitable PFERD tools

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
High Speed Disc ALUMASTER Dia. 115 mm	**COMBICLICK fibre discs** Dia. up to 125 mm matching **backing pad CC-GT 115/125** **Fibre discs** Dia. up to 125 mm matching **backing pad GT 125**	**Diamond cut-off wheels** **CC-GRIND-SOLID-DIAMOND** Dia. 125 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. 125 mm	**Wheel brushes Type for angle grinders** crimped RBU dia. 115 mm knotted RBG dia. 100 to 125 mm **Pipeline wheel brushes** knotted RBG dia. 100 to 115 mm	**Threaded bevel brushes** crimped KBU dia. 100 to 125 mm M14 knotted KBG dia. 100 to 125 mm M14 **Threaded cup brushes** crimped TBU dia. 60 to 75 mm M14 knotted TBG dia. 60 to 75 mm M14

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





Air grinders
Angle grinder with threaded spindle

PWT 26/100 HV M14

10,000 RPM / 2,600 watts



PFERDVALUE:

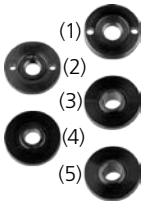
Emission Filter · Haptic Filter · Time Saving

Special features:
- Max. **tool diameter up to 150 mm**.
- M14 threaded spindle for the convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

Included in delivery:
1/2" female connecting thread, 2 keys, 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWT 26/100 HV M14	071212	bottom	lever	0.90	2.25	M14	16	22.23	2.580

Clamping flanges



Item no.	Description	EAN 4007220
1	SPM14 90011450	067444
2	SPM14 90011451 T150	067482
3	SPF 90011456 M150	067451
4	SPF 90011457 K150/180	067475
5	SPF 90011458 H150/180	067468

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853
SKS SW 5 mm	204467

In-line fine filter



Description	EAN 4007220
SF 35 IG 1/2-IG 1/2	072103

See page 67.

Revolving nozzle



See page 66.

Suitable PFERD tools

Catalogue section 4	Catalogue section 6	Catalogue section 8	
Fibre discs Dia. up to 150 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 150 mm	**Wheel brushes** **Type for angle grinders** crimped RBU dia. 115 to 125 mm **Pipeline wheel brushes** knotted RBG dia. 150 mm	**Threaded cup brushes** crimped TBU dia. 75 mm M14 knotted TBG dia. 80 mm M14

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.



Special features:
- Max. **tool diameter up to 180 mm**.
- M14 threaded spindle for the convenient mounting of various tools.
- Very powerful turbine motor.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

Included in delivery:
1/2" female connecting thread, 2 keys, 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

PWT 26/85 HV M14

8,500 RPM / 2,600 watts

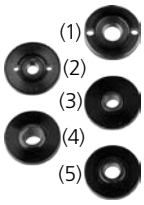


PFERDVALUE:

EmissionFilter HapticFilter TimeSaving

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Tool mounting [mm]	Net weight [kg]
PWT 26/85 HV M14	071229	bottom	lever	0.90	2.25	M14	16	22.23	2.800

Clamping flanges



Item no.	Description	EAN 4007220
1	SPM14 90011450	067444
2	SPM14 90011452 T180	067505
3	SPF 90011459 M180	067499
4	SPF 90011457 K150/180	067475
5	SPF 90011458 H150/180	067468

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853
SKS SW 5 mm	204467

In-line fine filter



Description	EAN 4007220
SF 35 IG 1/2-IG 1/2	072103

See page 67.

Revolving nozzle



See page 66.

Suitable PFERD tools

Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8
Fibre discs **COMBICLICK fibre discs** Dia. up to 180 mm	**Diamond cut-off wheels** Dia. 178 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 180 mm	**Wheel brushes** knotted RBG dia. 178 mm **Pipeline wheel brushes** knotted RBG dia. 178 mm **Threaded cup brushes** knotted TBG dia. 80 to 100 mm M14

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.



Air grinders
Angle grinder with threaded spindle

PWAS 4/45 HV-CD

4,500 RPM / 250 watts



PFERDVALUE:

Energy Saving

3 Oil /min

Special features:
- Special spindle for holding all low-speed COMBIDISC tools (use a backing pad without shank).
- Constant power delivery due to the centrifugal governor.
- Work spindle extension of 20 mm is possible with SPV 20 CD 1/4-20 UNC.

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 1 key.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Spindle thread	Inner dia. of air supply hose [mm]	Net weight [kg]
PWAS 4/45 HV-CD	948767	rear	lever	0.25	0.50	1/4"-20 UNC	8	0.510

Keys



Description	EAN 4007220
EM SW 11 mm	206812

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Extension for drive spindles



Description	EAN 4007220	Use for
SPV 20 CD 1/4-20 UNC	333167	COMBIDISC abrasive disc holder without threaded shank

Suitable PFERD tools

Catalogue section 4*

COMBIDISC diamond abrasive discs
Dia. up to 75 mm

COMBIDISC non-woven discs
Dia. 75 mm

COMBIDISC felt discs
Dia. up to 75 mm

COMBIDISC POLICLEAN discs
Dia. up to 75 mm

COMBIDISC abrasive disc holder
SBH 75

matching
arbors
SBH 50
BO PFF 50



2 Oil /min

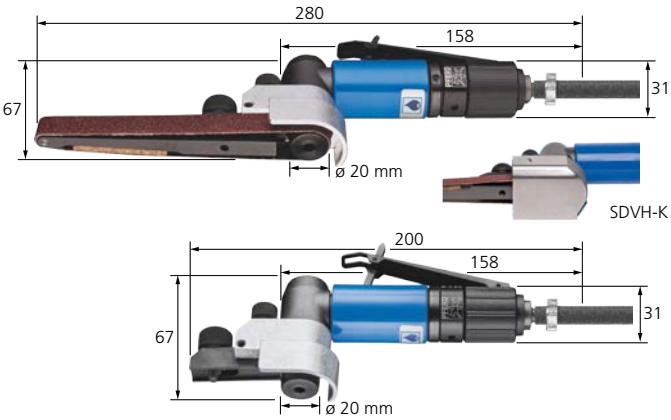
Special features:
PBS 3/200 DH 99
- Incl. belt grinder attachment arm BSVAK 9/9 x 305.
- Easy to handle, compact shape.

PBS 3/200 DH oVA
- Please order belt grinder attachment arm separately (see below).

Included in delivery:
2 m air supply hose without nozzle, 3 keys, protective cover.

PBS 3/200 DH 99
PBS 3/200 DH oVA

Belt length: 305 x width: 3–12 mm



PFERDVALUE:
HapticFilter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Belt speed [m/s]	Power output [watts]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBS 3/200 DH 99	801857	front	ring/lever	0.55	0.35	21	220	8	0.575
PBS 3/200 DH oVA	948781	front	ring/lever	0.55	0.35	21	220	8	0.500

Keys



Description	EAN 4007220
SKS SW 3 mm	584538
SKS SW 5 mm	204467
EM SW 14 mm	206836

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Protective cover



Description	EAN 4007220
SDVH-K	544938



For further information and ordering data on abrasive and non-woven short belts, please refer to catalogue section 4.

Belt grinder attachment arms

BSVAK 9/25



BSVAK 9/25-1



BSVAK 4/16



BSVAK 9/9



BSVAK 9/16

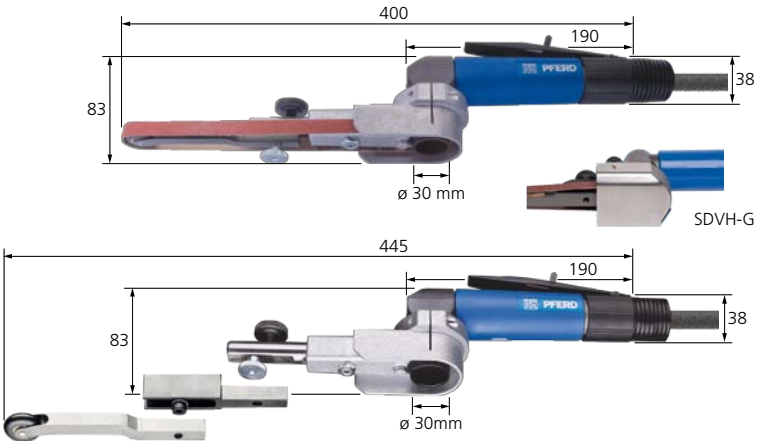


- Robust steel design.
- Use of the full roller width.
- Extremely slim fixing lugs on the facing roller.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVAK 9/25-1 with conical guide roller (range 1 mm).
- BSVAK 4/16, BSVAK 9/9 and BSVAK 9/16 with pad for stabilisation/support.

Description	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVAK 9/25 x 305	544914	9 x 25	3, 6, 9, 12, 16	305	0.083
BSVAK 9/25-1 x 305	544921	9 x 25	3, 6, 9, 12	305	0.082
BSVAK 4/16 x 305	544884	4 x 16	3, 6, 9	305	0.052
BSVAK 9/9 x 305	544891	9 x 9	9, 12	305	0.075
BSVAK 9/16 x 305	544907	9 x 16	9, 12	305	0.088

PBSA 5/160 HV 925
PBSA 5/160 HV oVA

Belt lengths: 520 (610*) mm x width: 3–20 mm



PFERDVALUE:

Emission Filter

4 Oil /min

Special features:
- ***Belt length 610 mm** x width 3–20 mm with **adapter BSAD 41/36 x 610**.
- The belt grinder attachment can be pivoted on the drive system.

PBSA 5/160 HV 925
- Incl. belt grinder attachment arm BSVA 9/25 x 520.

PBSA 5/160 HV oVA
- Please order belt grinder attachment arm separately (see below).

Included in delivery:
0.75 m exhaust hose and 2 m air supply hose without nozzle, 1 key.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Belt speed [m/s]	Power output [watts]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBSA 5/160 HV 925	801963	rear	lever	0.85	0.63	20-25	370	8	1.250
PBSA 5/160 HV oVA	948804	rear	lever	0.85	0.63	20-25	370	8	1.150

Keys



Description	EAN 4007220
SKS SW 4 mm	204450

Connecting set



Description	EAN 4007220
AS 2	351116

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Protective cover



Description	EAN 4007220
SDVH-G	956861

Adapter



Description	EAN 4007220
BSAD 41/36 x 610	395967

Frequency damper



Noise Filter

Frequency damper FD 47-8-30,5 to make use much easier on the ears.
See page 67.

Belt grinder attachment arms

BSVA 9/25, BSVA 9/25-1, BSVA 4/16



BSVA 9/16, BSVA 12/19, BSVA 18/23



- Robust steel design.
- Extremely slim fixing lugs on the facing roller.
- Use of the full roller width.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVA 9/25-1 with conical guide roller (range 1 mm).
- BSVA 18/23 with metal roller and pad for stabilisation/support.

Description	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 9/25 x 520	323007	9 x 25	3, 6, 9, 12, 16	520, 610	0.095
BSVA 9/25-1 x 520	494288	9 x 25	3, 6, 9, 12	520, 610	0.095
BSVA 4/16 x 520	322987	4 x 16	3, 6, 9	520, 610	0.060
BSVA 9/16 x 520	322994	9 x 16	9, 12	520, 610	0.096
BSVA 12/19 x 520	323014	12 x 19	12, 16	520, 610	0.107
BSVA 18/23 x 520	349267	18 x 23	20	520, 610	0.150

4 Oil /min

PBS 5/155 HV oVA

Belt lengths: 520 (610*) mm x width: 3–20 mm



Special features:
- ***Belt length 610 mm** x width 3–20 mm with **adapter BSAD 41/36 x 610**.
- The belt grinder attachment can be pivoted on the drive system.
- Balanced handling.
- Please order belt grinder attachment arm separately (see below).

Included in delivery:
- 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key.

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Belt speed [m/s]	Power output [watts]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBS 5/155 HV oVA	101841	front	lever	0.60	0.40	21	370	8.5	1.305

Keys



Description	EAN 4007220
SKS SW 4 mm	204450

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Protective cover



Description	EAN 4007220
SDVH-G	956861

Adapter



Description	EAN 4007220
BSAD 41/36 x 610	395967

Belt grinder attachment holder



Description	EAN 4007220
BSVH 41 oATR	101858

Belt grinder attachment arms



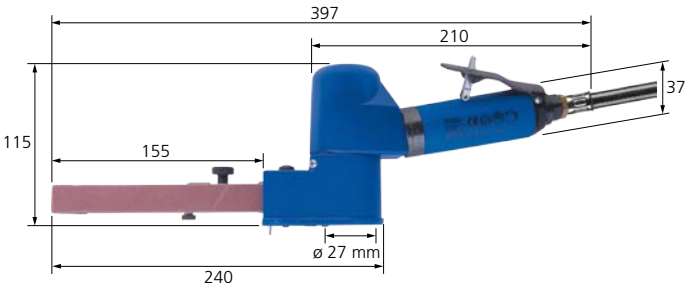


- Robust steel design.
- Use of the full roller width.
- Extremely slim fixing lugs on the facing roller.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVA 9/25-1 with conical guide roller (range 1 mm).
- BSVA 18/23 with metal roller and pad for stabilisation/support.

Description	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 9/25 x 520	323007	9 x 25	3, 6, 9, 12, 16	520, 610	0.095
BSVA 9/25-1 x 520	494288	9 x 25	3, 6, 9, 12	520, 610	0.095
BSVA 4/16 x 520	322987	4 x 16	3, 6, 9	520, 610	0.060
BSVA 9/16 x 520	322994	9 x 16	12	520, 610	0.096
BSVA 12/19 x 520	323014	12 x 19	12, 16	520, 610	0.107
BSVA 18/23 x 520	349267	18 x 23	20	520, 610	0.150

PBS 5/155 HV 824
PBS 5/155 HV 1924
PBS 5/155 HV 2324

Belt lengths: 480 (610*) mm x width: 6–25 mm



4 Oil /min

Special features:
- ***Belt length 610 mm** x width 6–12 mm with **belt grinder attachment arm BSVA 5/155-4/16** or **9/16**.
- The belt grinder attachment can be pivoted on the drive system.
- Balanced handling.

Included in delivery:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 2 keys.

Description	EAN 4007220	Incl. belt arm	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Belt speed [m/s]	Power output [watts]	Inner dia. of air supply hose [mm]	Net weight [kg]
PBS 5/155 HV 824	792674	1	front	lever	0.60	0.40	21	370	8.5	1.390
PBS 5/155 HV 1924	792681	2	front	lever	0.60	0.40	21	370	8.5	1.390
PBS 5/155 HV 2324	792698	3	front	lever	0.60	0.40	21	370	8.5	1.390

Keys



Description	EAN 4007220
SKS SW 3 mm	584538
SKS SW 5/32"	500439

Connecting set



Description	EAN 4007220
AS 3	351123

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Belt grinder attachment arms

BSVA 5/155-8/24x480





BSVA 5/155-19/24x480





BSVA 5/155-23/24x480





BSVA 5/155-4/16x610





BSVA 5/155-9/16x610



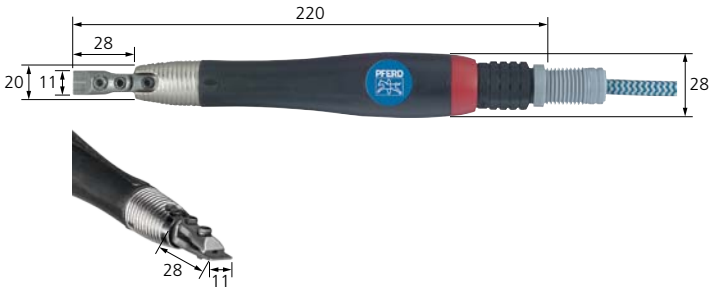


- Robust steel design.
- Use of the full roller width.
- Slim fixing lugs on the facing roller.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- For further information and ordering data on abrasive and non-woven short belts, please refer to catalogue section 4.

Description	EAN 4007220	Belt arm	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 5/155-8/24x480	794098	1	8 x 24	6, 10, 12	480	0.070
BSVA 5/155-19/24x480	794081	2	19 x 24	16, 20	480	0.086
BSVA 5/155-23/24x480	794104	3	23 x 24	25	480	0.088
BSVA 5/155-4/16x610	808054	-	4 x 16	6	610	0.070
BSVA 5/155-9/16x610	801871	-	9 x 16	6, 10, 12	610	0.132

PFGA 07/220

Frequency: 22,000 strokes/min



Special features:
- Light, easy to handle design.
- For work on surfaces and in hard-to-reach areas.
- Tool mountings: Round shank with dia. 3 mm, slot mounting of 10x1.5x10 mm (LxWxD) for ceramic fibre files.

Included in delivery:
0.32 m exhaust hose and 1.5 m air supply hose with 1/4" female threaded connection and threaded quick coupling (STGI), 1 key, arbor.

PFERDVALUE:
Emission Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Frequency [strokes/min]	Stroke length [mm]	Net weight [kg]
PFGA 07/220	657638	rear	ring	0.05	0.03	4	22,000	0.7	0.180

Keys



Description	EAN 4007220
SKS SW 2.5 mm	785980

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Double nipple

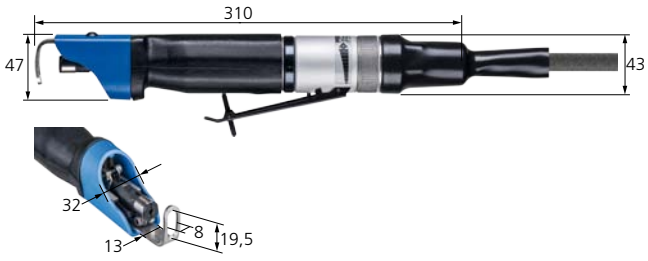


Description	EAN 4007220
DNA 1/4-1/4	178577

See page 67.

PFGA 10/120 HV

Frequency: 12,000 strokes/min



Special features:
- Light, easy to handle design.
- Mechanical drive for tools used for deburring, filing, grinding, fine grinding, polishing, lapping, sawing, and creating grinding patterns in the axial direction.
- Tool mountings: Round shank with dia. 3 mm, 4 mm, 6 mm; slot mounting of 11x1x17 mm (LxWxD) for saw blades.

Included in delivery:
0.40 m exhaust hose and 2 m air supply hose without nozzle, 1 key, arbor with dia. 4 mm.

PFERDVALUE:
Vibration Filter

Description	EAN 4007220	Exhaust direction	Throttle type	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Frequency [strokes/min]	Stroke length [mm]	Net weight [kg]
PFGA 10/120 HV	963395	rear	lever	0.23	0.15	8	12,000	2–11	0.845

Keys



Description	EAN 4007220
SKS SW 3 mm	584538

In-line fine filter



Description	EAN 4007220
SF 24 STG-T8	809020

See page 67.

Arbor



Description	EAN 4007220
WZH 3 mm	539408
WZH 4 mm	663776
WZH 6 mm	942925

Suitable PFERD tools

Catalogue section 1	Catalogue section 3	Catalogue section 4	Catalogue section 5
Needle files Tang dia. 3.0 mm Tang dia. 4.0 mm	**Grinding and polishing stones**	**Ceramic fibre files**	**Diamond sabre saw blades** **Diamond files for manual filing machines** Shank dia. 3 mm

Air grinders
Rigid extensions for DIN 10 air-powered motors

Rigid extensions

Max. 25,000 RPM (STV9 and STV13)

STV9
STV13

STV20

STV27
STV33



Special features:
- Rigid extensions for hard-to-reach areas.
- No risk of overloading the drive motor in conjunction with air-powered motors.
- Special lengths and options for workpiece adaptation available on request.
- The potential bending point and the bending radius depend on the STV type and the desired bend.
- Bent types available as from a minimum length of 500 mm (see 2nd and 5th figure).

Included in delivery:
STV9
3 mm collet, 3 keys.
STV13
6 mm collet, 3 keys.
STV20 incl. HA 4 ZGA STV G16/G22
6 mm collet, 2 keys.

Description	EAN 4007220	Connection coupling [DIN]	Sliding coupling [G]	Dia. x length [mm]	Max. bending radius [mm]	Matching tool mounting	Matching drives	*	Net weight [kg]
STV9 L300	035092	10	-	9 x 300	150	Collet group 2	1, 2	*	0.430
STV9 L500	035108	10	-	9 x 500	150	Collet group 2	1, 2	*	0.520
STV9 L800	035115	10	-	9 x 800	150	Collet group 2	1, 2	*	0.640
STV9 L1000	035122	10	-	9 x 1,000	150	Collet group 2	1, 2	*	0.720
STV13 L300	733004	10	-	13 x 300	150	Collet group 10	1, 2	*	0.520
STV13 L500	768242	10	-	13 x 500	150	Collet group 10	1, 2	*	0.670
STV13 L800	035139	10	-	13 x 800	150	Collet group 10	1, 2	*	0.890
STV13 L1000	035146	10	-	13 x 1,000	150	Collet group 10	1, 2	*	1.040
STV20 L200	272770	10	16/22	20 x 200	150	HA 4 ZGA STV G16/G22	1, 2	*	0.400
STV20 L400	179604	10	16/22	20 x 400	150	HA 4 ZGA STV G16/G22	1, 2	*	0.630
STV20 L600	179703	10	16/22	20 x 600	150	HA 4 ZGA STV G16/G22	1, 2	*	0.890
STV27 L250	282137	10	22	27 x 250	250	HA 7 ZGA G22, WZ 7 B STV G22, WZ 7-45° STV G22	1, 2, 3	*	0.550
STV27 L500	179499	10	22	27 x 500	250	HA 7 ZGA G22, WZ 7 B STV G22, WZ 7-45° STV G22	1, 2, 3	*	0.930
STV33 L250	179420	10	28	33 x 250	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	1.025
STV33 L500	179468	10	28	33 x 500	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	2.100
STV33 L1000	179758	10	28	33 x 1,000	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	3.250

* 1 = PMAS 5/230 HV, 2 = PMAS 12/200 HV, 3 = PMAS 12/120 HV, 4 = PMAS 12/70 HV, 5 = PMAS 10/40 HV

Handpieces



HA 4 ZGA STV G16/G22



HA 7 ZGA G22



WZ 7 B STV G22



WZ 7-45° STV G22



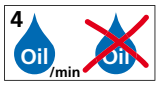
WZ 10 B STV G28



WZ 10-45° STV G28

Description	EAN 4007220	Max. perm. rotational speed [RPM]	Sliding coupling [G]	Dia. x length [mm]	Transmission ratio	Incl. collet dia. [mm]	Collet group	Net weight [kg]
HA 4 ZGA STV G16/G22	247952	25,000	16/22	20 x 110	-	6	11	0.165
HA 7 ZGA G22	181928	25,000	22	27 x 130	-	6	11	0.320
WZ 7 B STV G22	334645	17,100	22	55 x 157	1.3 : 1	6	6	0.710
WZ 7-45° STV G22	334614	17,100	22	57 x 175	1.3 : 1	6	6	0.750
WZ 10 B STV G28	334638	17,100	28	55 x 156	1.3 : 1	6	6	0.805
WZ 10-45° STV G28	334621	17,100	28	57 x 184	1.3 : 1	6	6	0.845

Other matching handpieces can be found on page 113.





Special features:
- Air-powered motor for rigid extensions with DIN 10 motor connection.
- Exhaust direction: rear.
- Throttle type: lever.

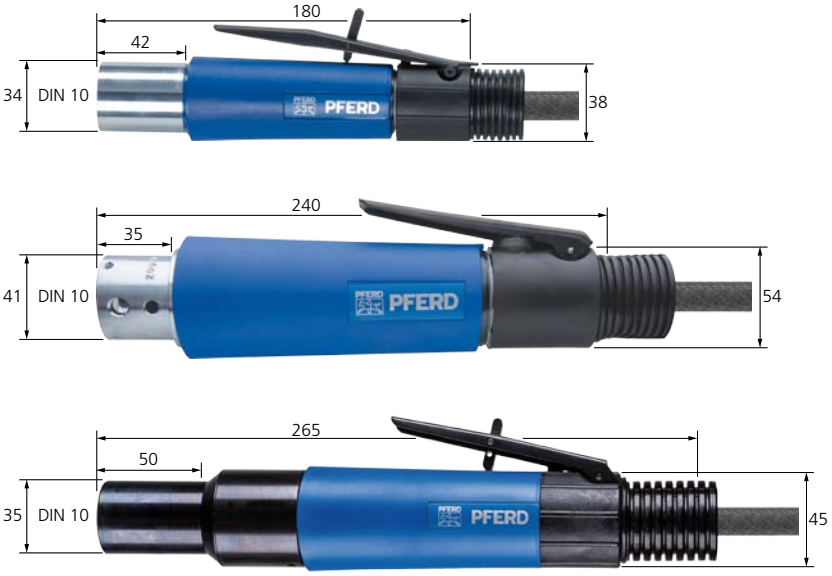
PMAS 5/230 HV
- Without oil: no oil residues on the workpiece.

PMAS 12/120 HV
PMAS 12/70 HV
PMAS 10/40 HV
- Constant power delivery due to the centrifugal governor.

PMAS 10/40 HV
- Particularly suitable for PST shafts.

Included in delivery:
PMAS 5/230 HV
0.75 m exhaust hose and 2 m air supply hose without nozzle, 2 keys.
PMAS 12/200 HV
PMAS 12/120 HV
PMAS 12/70 HV
1.25 m exhaust hose and 3 m air supply hose without nozzle, 2 keys.
PMAS 10/40 HV
1.75 m exhaust hose and 3 m air supply hose without nozzle, 2 keys.

PMAS 5/230 HV	**with oil: 23,000 RPM / 370 watts without oil: 18,000 RPM / 340 watts**
PMAS 12/200 HV	**20,000 RPM / 1,000 watts**
PMAS 12/120 HV	**12,000 RPM / 1,000 watts**
PMAS 12/70 HV	**7,000 RPM / 1,000 watts**
PMAS 10/40 HV	**4,000 RPM / 900 watts**



PFERDVALUE:
PMAS 5/230 HV



PMAS 12/120 HV, PMAS 12/70 HV, PMAS 10/40 HV



Item no.	Description	EAN 4007220	Rotational speed [RPM]	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Connection coupling [DIN]	Inner dia. of air supply hose [mm]	Matching extension	Net weight [kg]
1	PMAS 5/230 HV	263235	23,000	370	0.85	0.63	10	8	STV9, STV13, STV20, STV27	0.650
2	PMAS 12/200 HV	178058	20,000	1,000	1.30	0.75	10	12	STV13, STV20, STV27, STV33	2.160
3	PMAS 12/120 HV	178034	12,000	1,000	0.60	1.30	10	12	STV27, STV33	2.160
4	PMAS 12/70 HV	358122	7,000	1,000	0.60	1.30	10	12	STV33	2.320
5	PMAS 10/40 HV	101377	4,000	900	0.60	1.20	10	9	STV33	1.325

Keys



Description	EAN 4007220
STS D 4 mm	205020

Connecting set



Description	EAN 4007220	Matching drives
AS 2	351116	1
AS 3	351123	5
AS 4	351130	2, 3, 4

See page 67.

In-line fine filter



Description	EAN 4007220	Matching drives
SF 24 STG-T8	809020	1
SF 24 STG-T9	809044	5
SF 30 STG 12-T12	809051	2, 3, 4

See page 67.

Frequency damper





To make use much easier on the ears, frequency damper
FD 47-8-30,5 for PMAS 5/230 HV
FD 47-9-30,5 for PMAS 10/40 HV
See page 67.

Marking pen MST 31

Frequency: 30,000–36,000 strokes/min



1 Oil /5min

Special features:
- Very high stroke frequency.
- For applying markings and labels on metal, glass, plastics and on hardened tool steel (fine needle gauge).

Included in delivery:
2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), TC engraving needle.

Description	EAN 4007220	Needle width	Throttle type	Exhaust direction	Air consumption at idling speed [m³/min]	Air consumption under load [m³/min]	Inner dia. of air supply hose [mm]	Frequency [strokes/min]	Operating pressure [bar]	Net weight [kg]
MST 31 F	450314	F (fine)	ring	front	0.03	0.02	4	30,000–36,000	6–7	0.150
MST 31 M	450079	M (medium)	ring	front	0.03	0.02	4	30,000–36,000	6–7	0.150
MST 31 G	450307	G (coarse)	ring	front	0.03	0.02	4	30,000–36,000	6–7	0.150

Connecting set



Description	EAN 4007220
AS 1	351109

See page 67.

In-line fine filter



Description	EAN 4007220
SF 24 STG-IG 1/4	953259

See page 67.

Replacement TC engraving needles for marking pens



Description	EAN 4007220	Needle gauge	Net weight [kg]
HM-GN MST 31 F	455722	F (fine)	0.003
HM-GN MST 31 M	455753	M (medium)	0.003
HM-GN MST 31 G	455760	G (coarse)	0.003



How to choose the correct connection fittings for your air grinder

In general, PFERD air grinders with "rear exhaust" are supplied with an air supply and exhaust hose.
Air grinders with "front exhaust" are generally supplied with fixed screw-on nozzles and the matching air supply hose.

Some accessories can be used with several drives; they have been sorted into the groups 1–6. Please refer to the tables for the description of the matching accessory parts.

Connecting sets
The complete connecting sets AS 1–4 for the individual air grinders are allocated in the table below. Please refer to the table on pages 66–67 for the connecting set contents.

Cat. page	Drive		Use		Air consumption [m³/min]		Exhaust direction		Air supply hose inner dia. [mm]	Air supply and exhaust hose supplied		Con-necting set no.	Drive group p. 66–67
			with oil	with-out oil	at idle	under load	front	rear		Supply air	Exhaust air		
Straight grinders													
12	PGTA 1/1010	101,000 RPM	-	•	0.50	0.35	-	•	5.5	•	•	-	1
12	PGT 1/1000	100,000 RPM	-	•	0.35	0.17	•	-	5	•	-	-	1
13	PGAS 2/800 E	80,000 RPM	•	-	0.31	0.25	-	•	5	•	•	1	1
13	PGAS 2/800 E-HV	80,000 RPM	•	-	0.31	0.25	-	•	5	•	•	1	1
14	PGAS 1/750	75,000 RPM	•	-	0.35	0.20	-	•	5	•	•	1	1
15	PGAS 1/700	70,000 RPM	•	-	0.25	0.12	-	•	5	•	•	1	1
15	PGAS 1/700 HV	70,000 RPM	•	-	0.25	0.12	-	•	5	•	•	1	1
16	PGTA 3/700 (with oil)	70,000 RPM	•	•	0.25	0.80	-	•	8	•	•	2	5
17	PGAS 1/600	60,000 RPM	•	-	0.28	0.20	-	•	5	•	•	1	1
18	PGAS 1/550	55,000 RPM	•	-	0.25	0.12	-	•	5	•	•	1	1
19	PG 3/500 S	50,000 RPM	•	-	0.45	0.24	•	-	8.5	•	-	3	2
19	PGAS 3/500 HV	50,000 RPM	•	-	0.45	0.24	-	•	8.5	•	•	3	2
20	PGAS 3/440 DH	44,000 RPM	•	-	0.55	0.35	-	•	8	•	•	2	5
20	PGZA 3/440	44,000 RPM	•	-	0.55	0.35	-	•	8	•	•	2	5
20	PGZA 3/440 E	44,000 RPM	•	-	0.55	0.35	-	•	8	•	•	2	5
21	PG 3/380 DH	38,000 RPM	•	-	0.55	0.35	•	-	8	•	-	2	2
22	PGAS 4/350 E	35,000 RPM	•	-	0.70	0.45	-	•	8	•	•	2	5
23	PGAS 5/280 HV	28,000 RPM	•	-	0.85	0.60	-	•	8	•	•	2	5
24	PG 3/250 S	25,000 RPM	•	-	0.21	0.49	•	-	8.5	•	-	3	2
25	PGAS 7/250 E-HV	25,000 RPM	•	-	0.95	0.72	-	•	8	•	•	2	5
26	PGAS 5/230 HV (with oil)	23,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
26	PGAS 5/230 VE-HV (with oil)	23,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
27	PG 8/220 HV	22,000 RPM	•	-	0.95	0.85	•	-	8.5	•	-	3	2
27	PGAS 8/220 HV	22,000 RPM	•	-	0.95	0.85	-	•	8.5	•	•	3	2
28	PG 8/220 V-HV	22,000 RPM	•	-	0.95	0.85	•	-	8.5	•	-	3	2
28	PGAS 8/220 VS-HV	22,000 RPM	•	-	0.95	0.85	-	•	8.5	•	•	3	2
29	PG 3/210 DH	21,000 RPM	•	-	0.67	0.48	•	-	8	•	-	2	5
30	PGAS 10/200 V-HV	20,000 RPM	•	-	0.75	1.20	-	•	9	•	•	3	2
31	PGAS 5/180 HV	18,000 RPM	•	-	0.30	0.60	-	•	8	•	•	2	5
31	PGAS 5/180 VE-HV	18,000 RPM	•	-	0.30	0.60	-	•	8	•	•	2	5
32	PGAS 9/180 V-HV (with oil)	18,000 RPM	•	•	1.35	0.90	-	•	9	•	•	3	2
33	PG 8/160 HV	16,000 RPM	•	-	0.34	0.85	•	-	8.5	•	-	3	2
33	PGAS 8/160 VM-HV	16,000 RPM	•	-	0.34	0.85	-	•	8.5	•	•	3	2
34	PGAS 10/160 V-HV	16,000 RPM	•	-	0.70	1.20	-	•	9	•	•	3	2
35	PGAS 7/120 E-HV	12,000 RPM	•	-	0.70	1.30	-	•	8	•	•	2	5
36	PGAS 9/120 V-HV (with oil)	12,000 RPM	•	•	0.40	0.90	-	•	9	•	•	3	2
37	PG 8/100 HV	10,000 RPM	•	-	0.17	0.85	•	-	8.5	•	-	3	2
37	PGAS 8/100 HV	10,000 RPM	•	-	0.17	0.85	-	•	8.5	•	•	3	2
38	PG 8/100 V-HV	10,000 RPM	•	-	0.17	0.85	•	-	8.5	•	-	3	2
38	PGAS 8/100 V-HV	10,000 RPM	•	-	0.17	0.85	-	•	8.5	•	•	3	2
38	PGAS 8/100 VM-HV	10,000 RPM	•	-	0.17	0.85	-	•	8.5	•	•	3	2
39	PG 8/50 V-HV	5,000 RPM	•	-	0.85	0.34	•	-	8.5	•	-	3	2
40	PGAS 5/40 V-HV (with oil)	4,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
40	PGAS 10/40 V-HV	4,000 RPM	•	-	0.60	1.20	-	•	9	•	•	3	2
Angle grinders with collet													
41	PWS 1/800	80,000 RPM	•	-	0.25	0.18	-	side	5	•	-	1	1
41	PWSA 1/800	80,000 RPM	•	-	0.25	0.18	-	•	5	•	•	1	1
42	PWSA 1/250	25,000 RPM	•	-	0.30	0.20	-	•	5	•	•	1	1
43	PWSA 5/210 HV	21,000 RPM	•	-	0.85	0.60	-	•	8	•	•	2	5
44	PWSA 3/220 DH	22,000 RPM	•	-	0.60	0.46	-	•	8	•	•	2	5
44	PWS 3/200 DH	20,000 RPM	•	-	0.55	0.35	•	-	8	•	-	2	5
45	PWSA 4/200 HV	20,000 RPM	•	-	0.57	0.42	-	•	8.5	•	•	3	5
46	PWSA 5/170-45 HV (with oil)	17,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
47	PWSA 5/160 HV (with oil)	16,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
48	PWSA 5/130 HV (with oil)	13,000 RPM	•	•	0.30	0.60	-	•	8	•	•	2	5
49	PWSA 4/45 HV	4,500 RPM	•	-	0.25	0.50	-	•	8	•	•	2	5
Angle grinders with threaded spindle													
50	PW 3/120 DH	12,000 RPM	•	-	0.55	0.35	•	-	8	•	-	2	5
51	PWAS 9/120 HV (with oil)	12,000 RPM	•	•	0.90	0.80	-	•	9	•	•	3	2
52	PWAS 13/120 AVH	12,000 RPM	•	-	0.50	1.20	-	•	12	•	•	4	4
53	PWT 26/120 HV M14	12,000 RPM	-	•	0.90	2.25	bottom	-	16	-	-	-	6
54	PWT 26/100 HV M14	10,000 RPM	-	•	0.90	2.25	bottom	-	16	-	-	-	6
55	PWT 26/85 HV M14	8,500 RPM	-	•	0.90	2.25	bottom	-	16	-	-	-	6
56	PWAS 4/45 HV-CD	4,500 RPM	•	-	0.25	0.50	-	•	8	•	•	2	5
Belt grinders													
57	PBS 3/200 DH...	21 m/s	•	-	0.55	0.35	•	-	8	•	-	2	5
58	PBSA 5/160 HV... (with oil)	25 m/s	•	•	0.85	0.63	-	•	8	•	•	2	5
59, 60	PBS 5/155 HV...	21 m/s	•	-	0.60	0.40	•	-	8.5	•	-	3	2

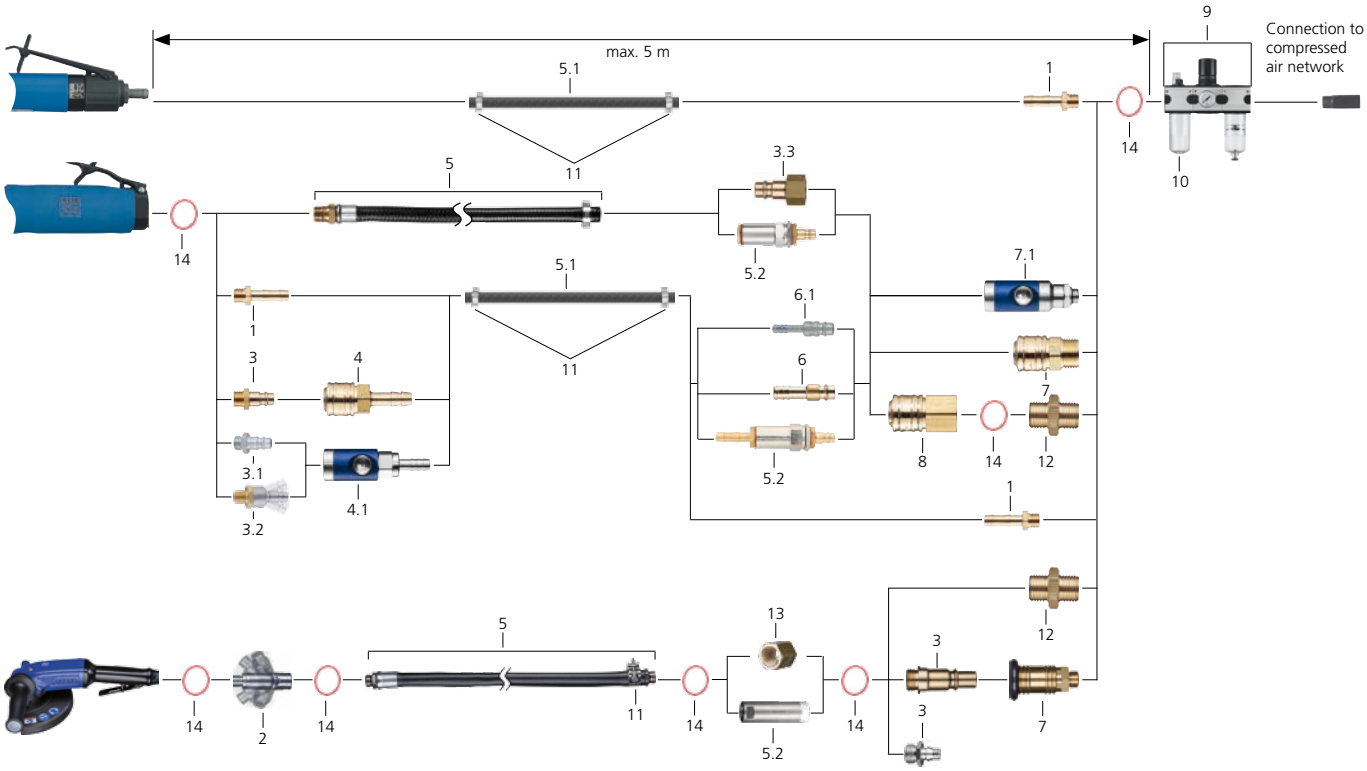
Continued on next page

Cat. page	Drive		Use		Air consumption [m³/min]		Exhaust direction		Air supply hose inner dia. [mm]	Air supply and exhaust hose supplied		Con-necting set no.	Drive group p. 66–67
			with oil	with-out oil	at idle	under load	front	rear		Supply air	Exhaust air		
Special drives													
61	PFGA 07/220	22,000 strokes/min	-	•	0.05	0.03	-	•	4	•	•	-	3
61	PFGA 10/120 HV	12,000 strokes/min	•	-	0.23	0.15	-	•	8	•	•	2	5
63	PMAS 5/230 HV (with oil)	23,000 RPM	•	•	0.85	0.63	-	•	8	•	•	2	5
63	PMAS 12/200 HV	20,000 RPM	•	-	1.30	0.75	-	•	12	•	•	4	4
63	PMAS 12/120 HV	12,000 RPM	•	-	0.60	1.30	-	•	12	•	•	4	4
63	PMAS 12/70 HV	7,000 RPM	•	-	0.60	1.30	-	•	12	•	•	4	4
63	PMAS 10/40 HV	4,000 RPM	•	-	0.60	1.20	-	•	9	•	•	3	2
64	MST 31 F, M, G	36,000 strokes/min	•	-	0.03	0.02	•	-	4	•	-	1	3

● = yes - = no

Possible connection options for air grinder fittings are listed in the table below.

Quick-coupling system



Drive group 1	2	3	4	5	6	Quick-coupling system Description with dimensions		EAN 4007220	Connecting set 1	2	3	4	Safety coupling system Description	EAN 4007220
						Item 1 Hose nozzle								
•						TGA 6 1/8	Dia. 6 / R 1/8" male	178362						
				•		TGA 8 1/4	Dia. 8 / R 1/4" male	178379						
	•					TGA 9 1/4	Dia. 9 / R 1/4" male	178409						
					•	TGA 16 1/2 ID 12	Dia. 16 / R 1/2" male	067284						
						Item 2 Revolving nozzle								
					•	DGT 1/2	R1/2" male - R1/2" female	070949						
						Item 3 Threaded quick coupling							**Item 3.1**	
•						STGA 1/8	R 1/8" male	178300						
	•			•		STGA 1/4	R 1/4" male	178324					STGA 1/4 ST	801888
													Item 3.2	
	•			•									DSTGA 1/4 ST (ball joint)	801895
					•	STGA 1/2 NW12	R 1/2" male NW12	179239						
					•	STGA 1/2-16/AC	R 1/2" male	076378						
						Item 3.3								
	•					STGI 1/4	R 1/4" female	179406						
						Item 4 Self-closing valve couplings with hose nozzle							**Item 4.1**	
•						VKT 6	Dia. 6	178195					SVKT 6 DK	957066
				•		VKT 8	Dia. 8	178201						
	•					VKT 9	Dia. 9	178218					SVKT 9 DK	957073
						Item 5 Complete air hose								
•						PLS 5 A KPL 1/4" 2M	Dia. 5.5 / 2 metres	073889						
	•					PLS 9 A KPL 1/4" 3M	Dia. 8.5 / 3 metres	104026						
					•	PLS 16 HD KPL 1/2" 4M	Dia. 16 / 4 metres	068236						

Continued on next page

Drive group						Quick-coupling system Description with dimensions		EAN 4007220	Connecting set				Safety coupling system Description	EAN 4007220
1	2	3	4	5	6				1	2	3	4		
						Item 5.1 Air hose								
•						PLS 5	Dia. 5 / sold by the metre	178461						
•						PLS 6	Dia. 6 / sold by the metre	178478	3 m*					
				•		PLS 8	Dia. 8 / sold by the metre	178485		3 m*				
	•					PLS 9 A	Dia. 8.5 / sold by the metre	316696						
	•					PLS 9	Dia. 9 / sold by the metre	178492			3 m*			
			•			PLS 12	Dia. 12 / sold by the metre	178508				3 m*		
					•	PLS 16 HD	Dia. 16 / sold by the metre	025116						
						Air hose for particularly harsh conditions available on request.								
						Item 5.2 In-line fine filter (pore size: 5 µm)								
•		•				SF 24 STG-T5	for PLS 5	957103						
				•		SF 24 STG-T8	for PLS 8	809020						
	•					SF 24 STG-T9	for PLS 9	809044						
	•	•		•		SF 24 STG-IG 1/4	for 1/4" male hose nozzle and PLS 9 A KPL	953259						
			•			SF 30 STG 12-T12	for PLS 12	809051						
					•	SF 35 IG 1/2-IG 1/2	for 1/2" male hose nozzle and PLS 16 HD KPL	072103						
						Item 6 Quick couplings							**Item 6.1**	
		•				T 4	Dia. 4	179208						
•						T 5	Dia. 5	179390						
•						T 6	Dia. 6	178331	1*				T6 ST ø 6	801796
				•		T 8	Dia. 8	178522		1*			T8 ST ø 8	801840
	•					T 9	Dia. 9	178386			1*		T9 ST ø 9	801819
			•			T 12 NW 12	Dia. 12	178423				1*		
						Item 7 Self-closing valve couplings with male thread							**Item 7.1**	
•	•	•				VKA 1/4	R 1/4" male	178232	1*				SVKA 1/4 DK	957080
•	•	•		•		VKA 1/2	R 1/2" male	178256		1*	1*		SVKA 1/2 DK	957097
			•		•	VKA 1/2 NW 12	R 1/2" male	178249				1*		
						Item 8 Self-closing valve couplings with female thread								
•	•	•		•		VKI 1/4	R 1/4" female	178270						
•	•	•		•		VKI 1/2	R 1/2" female	178287						
						Item 9 Complete oil mist devices (5 µm filter)								
•		•				ONG-A 1/4	R 1/4" female - R 1/4" female	801741	1*					
	•		•	•	•	ONG-A 1/2	R 1/2" female - R 1/2" female	801765		1*	1*	1*		
•	•		•	•		Special lubricating oil 1L ONG OEL (see page 122)		179338	1*	1*	1*	1*		
•	•		•	•		Special lubricating oil 5L ONG OEL (see page 122)		179321						
						Item 10 Lubricator, loose								
•		•				OE-A 1/4	R 1/4" female - R 1/4" female	801772						
	•		•	•		OE-A 1/2	R 1/2" female - R 1/2" female	801789						
						Item 11 Hose clamps								
•						K 9	for PLS 5	178539						
•				•		K 13	for PLS 6 + 8	178546	2*	2*				
	•					K 15	for PLS 9 A	644225						
	•					K 16	for PLS 9	178553			2*			
			•			K 20	for PLS 12	204801				2*		
					•	K 23-25	for PLS 16 HD	067253						
						Item 12 Double nipple								
•		•				DNA 1/4-1/4	R 1/4" male - 1/4" male	178577						
	•		•	•	•	DNA 1/2-1/2	R 1/2" male - 1/2" male	178584						
						Item 13 Threaded nut								
					•	GWI 1/2-1/2	R 1/2" female - R 1/2" female	068250						
						Item 14 Sealing ring								
•						DR 1/8"	Dia. 1/8"	189726						
•	•	•				DR 1/4"	Dia. 1/4"	189733						
	•		•	•	•	DR 1/2"	Dia. 1/2"	189757						
						Connecting set								
•						AS 1		351109	•					
				•		AS 2		351116		•				
	•					AS 3		351123			•			
			•			AS 4		351130				•		

● = matching accessories; dia. = the information refers to the inner dia. of the air hose in [mm].

* Pieces per set

Frequency damper



Description	EAN 4007220	Suitable for inner dia. of air supply hose [mm]	Suitable for exhaust hose dia. [mm]
FD 37-8-23,5	653357	8	23.5
FD 47-8-30,5	632666	8	30.5
FD 47-8-28 ID	776827	8	28
FD 47-9-30,5	968765	9	30.5

To make use much easier on the ears, we offer an optional frequency damper for selected drives with an exhaust hose.

Noise Filter

Electric grinders



Electric grinders are universal all-rounders. They offer a high power output in relation to their size and weight. They are particularly suitable for use with grinding tools that require a constant rotational speed.

Areas of application

Electric grinders can be used for nearly every application. They are used in many industries in different processes. The stepless electronic rotational speed control allows the use of various types of tools on one single tool drive. Electric grinders are not suitable for use in boiler construction and in very dusty conditions (especially work on aluminium).

The PFERD product range

PFERD provides a wide range of electric grinders: Micro motors, straight grinders, angle grinders, edge finish systems, drum grinders, belt grinders, special grinders with DIN 10 as well as fillet weld grinders. PFERD electric grinders meet the highest technical standards and incorporate the latest ergonomic findings and requirements. They were specially developed for the economic application of grinding, milling, brushing, cut-off and polishing tools, and cover a wide rotational speed range (80,000–100 RPM) and power range (1,750–260 watts). PFERD electric grinders have an electronic speed control for constant rotational speed values.

Advantages

- Compact, ergonomic design.
- Low weight.
- Sophisticated.
- High performance.
- Suitable for universal use.
- Simple power supply.
- Low-maintenance.
- Easy to service.
- Economical.

Equipment/special features

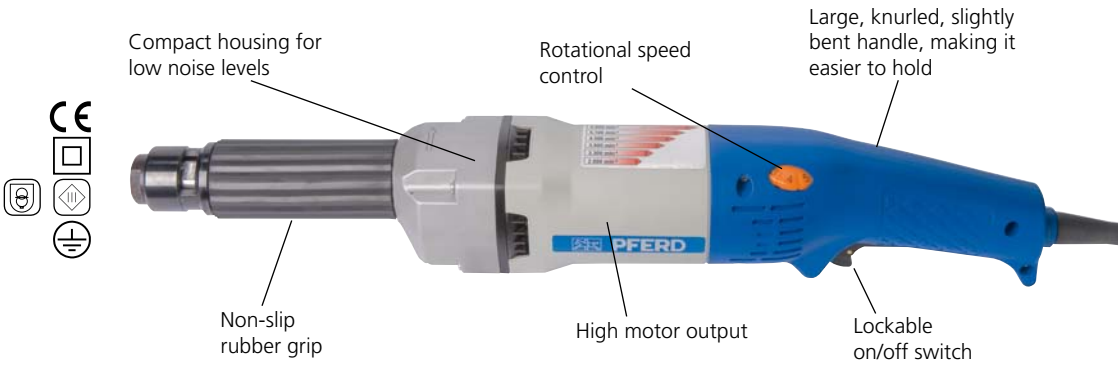
- **Smooth start-up:**
  The electronically regulated smooth start-up ensures a jolt-free start-up of the grinder.
- **Undervoltage protection/restart protection:**
  Should the power supply fail, PFERD electric grinders do not start up again inadvertently. The grinder will only restart after it has been switched off and on again.
- **Current limiting/blocking protection:**
  At double the nominal current input, the grinders switch off for approximately 0.2 seconds. By removing the load, the grinder is able to take up the initial rotational speed again.
- **Temperature overload protection:**
  When a critical temperature is reached, the safety electronic system switches to cooling mode. The grinder cannot be placed under loads when in cooling mode. The grinder will only start at the set operating speed after it has been switched off and on again.

Standards, safety, general guidelines

PFERD electric grinders:
- Bear the CE mark
- Are insulated and comply with protection class II
- Have safety extra-low voltage
- Are protectively earthed in accordance with protection class I

PFERD electric grinders comply with:
- EC Machinery Directive
- EC Low-Voltage Directive
- Electromagnetic Compatibility

National regulations must be observed.



Criteria for selecting the optimum electric grinder

The most important prerequisite for cost-effective work is the selection of the optimum tool. The appropriate tool drive is selected taking the following criteria into consideration:

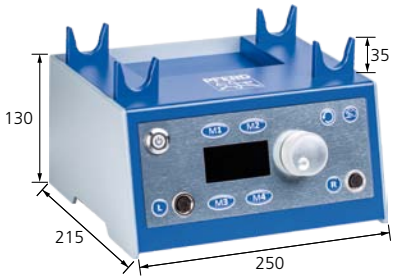
1. Design, shape and size
Each type of application places specific demands on the shape and size of the tool drive. The different designs can be used for various applications: The ideal tool drive should be selected for the task at hand depending on the dimensions, accessibility, type and frequency of the application.

2. Rotational speed
The tool drive should always be selected according to the rotational speed and cutting speed recommendations for the tool.
Please refer to catalogue sections 2–8 for these recommendations.

3. Power output
The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the material to be machined, the cutting characteristics of the tool and the contact pressure.

4. Tool mounting
Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 116–120 for an overview of collets and spindle extensions.
If you have any further questions, your personal PFERD sales representative will be happy to help you.

MIM STG3S 3/800 **80,000–1,000 RPM / 350 watts**



PFERDVALUE:

Noise Filter Energy Saving

Special features:
- Control device for stepless rotational speed control of micro motor handpieces.
- Rotational speed control is possible by hand or foot switch.
- Max. 80,000 RPM clockwise rotation.
- Max. 30,000 RPM anti-clockwise rotation.
- 2 switchable connection sockets for micro motor handpieces.
- 4 free rotational speed storage spaces per connected handpiece.
- Protectively earthed.
- Safety extra-low voltage.

Assembly according to application requirement.

Included in delivery:
2 m power cable, 2 handpiece supports.

Vario foot switch* MIM FU-R



On/off foot switch MIM FU-E/A



Extension cable MIM VLK HAS/WZS 3 m



Description	EAN 4007220	For micro motor handpieces [RPM]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Net weight [kg]
MIM STG3S 3/800 230 V	101889	80,000–1,000	230	50	2.980
MIM FU-R	071250	-	5	-	0.845
MIM FU-E/A	104033	-	5	-	0.310
MIM VLK HAS/WZS 3 m	071403	-	-	-	0.152

*Vario = stepless rotational speed control

Micro motor handpiece



MIM HAS 3/800 SP3

80,000–1,000 RPM / 350 watts

Special features:
- This handpiece is only compatible with the STG3S.
- High power stability.
- Very high rotation accuracy.
- SP = keyless fast clamping system with highest clamping force.
- Brushless motor.
- Start interlock without clamped tools.
- Extremely energy-efficient and quiet in comparison to air grinders.
- Safety extra-low voltage.

Included in delivery:
2 keys, 3 mm collet, 1.8 m handpiece cable.

Ordering notes:
- SP = keyless fast clamping system.
- For tool recommendations, see page 72.

PFERDVALUE:

Haptic Filter Energy Saving Waste Saving Time Saving Resource Saving

Description	EAN 4007220	Rotational speed [RPM]	Low voltage [volts]	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
MIM HAS 3/800 SP3	101896	80,000–1,000	50	350	approx. 180	17	0.330

Collets

Group	For shank dia.		
	2.35 mm	3 mm	1/8 inch
	EAN 4007220		
17	071465	071458	071472

Micro motor handpieces



Choose further matching handpieces for your individual application. Information and ordering data for micro motor handpieces can be found on page 73.

Special features:
- Control device for rotational speed control of micro motor handpieces.
- Max. 60,000 RPM clockwise rotation.
- Max. 30,000 RPM anti-clockwise rotation.
- Stepless rotational speed control is possible by hand or foot switch.
- High power stability.
- Protectively earthed.
- Safety extra-low voltage.

Included in delivery:
2 m power cable, 2 handpiece supports.

MIM STG2S 3/600

60,000–1,000 RPM / 260 watts



PFERDVALUE:

Noise Filter | Energy Saving

Vario foot switch* MIM FU-R



Extension cable MIM VLK HAS/WZS 3 m



Description	EAN 4007220	For micro motor handpieces [RPM]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Net weight [kg]
MIM STG2S 3/600 230 V	071236	60,000–1,000	230	36	2.338
MIM FU-R	071250	-	5	-	0.845
MIM VLK HAS/WZS 3 m	071403	-	-	-	0.152

*Vario = stepless rotational speed control

Micro motor handpieces



Choose the suitable handpieces for your individual application. Information and ordering data for micro motor handpieces can be found on page 73.



Tool mounting	Rot. speed	Drives	Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
Rot. speed range			**13,000–80,000 RPM**	**25,000–80,000 RPM**	**2,000–80,000 RPM**		**7,000–80,000 RPM**	**1,200–15,000 RPM**
Dia. 2.35 mm + 3 mm	**1,000–80,000 RPM**	**MIM HA 3/800 SP3**	**TC burrs** **Cut 3 PLUS, 4, 5, ALU, INOX, MICRO** Dia. up to 3 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. up to 5 mm Dia. 5 to 6 mm Width ≤ 13 mm Dia. 6 to 10 mm Width ≤ 10 mm	**Poliflex fine grinding points** Shank dia. 3 mm Bonds: **GHR** Dia. up to 4 mm **LR, TX** Dia. up to 6 mm		**Diamond grinding points** Dia. up to 4.5 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 5.5 mm Shank dia. 3 mm	**Miniature shank-mounted end brushes** crimped PBU dia. 5 mm **Miniature shank-mounted wheel brushes** crimped RBU dia. 16 to 22 mm **Miniature shank-mounted cup brushes** crimped TBU dia. 15 to 18 mm
Rot. speed range			**13,000–60,000 RPM**	**25,000–60,000 RPM**	**2,000–60,000 RPM**		**7,000–60,000 RPM**	**1,200–15,000 RPM**
Dia. 2.35 mm + 3 mm	**1,000–60,000 RPM**	**MIM HAS 2/600 SP3** **MIM HAS 3/600 SP3** **MIM HAS 3/600 S3**	**TC burrs** **Cut 3 PLUS, 4, 5, ALU, INOX, TITANIUM, MICRO** Dia. up to 6 mm Shank dia. 3 mm **HSS rotary cutters** **Special cuts** Dia. up to 1.6 mm Shank dia. 3 mm	**Mounted points** Shank dia. 3 mm: Dia. 2 to 10 mm Width ≤ 16 mm Dia. 11 to 25mm Width ≤ 6 mm	**POLICAP** Dia. up to 13 mm Shank dia. 2.35 + 3 mm **POLINOX mounted grinding wheels** Dia. up to 30 mm Shank dia. 2.35 + 3 mm **Self-adhesive abrasive discs and abrasive disc holders** Dia. up to 30 mm Shank dia. 2.35 + 3 mm **Felt points** Dia. up to 20 mm Shank dia. 2.35 + 3 mm **Felt wheels and lenses** Dia. up to 30 mm **Cloth rings** Dia. 22 mm Shank dia. 2.35 + 3 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 8 mm Shank dia. 3 mm **Mounted flap wheels** Dia. up to 30 mm Shank dia. 3 mm **POLISTAR** Dia. up to 30 mm **Poliflex fine grinding points** Dia. up to 10 mm Shank dia. 3 mm **Poliflex fine grinding discs and lenses** Dia. up to 30 mm matching **arbors** **BO 2,3/1,6 1-5** **BO 3/1,6 1-5**	**Diamond grinding points** Dia. 3.0 to 6.0 mm Shank dia. 3 mm **CBN grinding points** Dia. up to 6.0 mm Shank dia. 3 mm **Diamond cut-off wheels** Dia. 22 mm matching **arbor** **BO 3/1,7-1**	**Miniature shank-mounted end brushes** crimped PBU dia. 5 mm **Miniature shank-mounted wheel brushes** crimped RBU dia. 16 to 22 mm **Miniature shank-mounted cup brushes** crimped TBU dia. 15 to 18 mm
	1,000–50,000 RPM	**MIM HAS 1/500 SP3** **MIM HAS 3/500 VS-SP3**						
	1,000–30,000 RPM	**MIM WZS 3/300 90° S3** **MIM WZS 3/300 45° S3**						
Rot. speed range			**13,000–60,000 RPM**	**25,000–60,000 RPM**	**2,000–60,000 RPM**		**7,000–60,000 RPM**	**7,000–15,000 RPM**
Dia. 6 mm	**1,000–60,000 RPM**	**MIM HAS 3/600 S6**	**TC burrs** **Cut 3 PLUS, 4, 5, ALU, INOX, STEEL, CAST, TITANIUM, MICRO** Dia. up to 6 mm **HSS rotary cutters** **Special cuts** Dia. up to 1.6 mm	**Mounted points** Shank dia. 6 mm: Dia. 3 to 16 mm Width ≤ 40 mm	**POLICAP** Dia. up to 16 mm **POLINOX mounted grinding wheels** Dia. up to 40 mm **Felt points** Dia. up to 30 mm **Felt wheels and lenses** Dia. up to 45 mm **Cloth rings** Dia. 22 mm Shank dia. 2.35 + 3 mm matching **arbor** **BO 6/6 3-10** **Abrasive spiral bands and rubber drum holders** Dia. up to 30 mm	**Mounted flap wheels** Dia. up to 30 mm **POLISTAR** Dia. up to 50 mm matching **arbor** **BO 6/3 1-6** **POLINOX cross buffs** Dia. up to 38 mm matching **arbors** **BO PNST 6-75** **BO PNST 6-125** **Mounted felt flap wheels** Dia. up to 30 mm **Poliflex fine grinding points** Dia. up to 16 mm	**Diamond grinding points** Dia. 5.0 to 15.0 mm **CBN grinding points** Dia. 5.0 to 15.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbor** **BO 6/10-3** **Catalogue section 6** **Rot. speed range 23,000–31,000 RPM** **Cut-off wheels EHT** Dia. 30 to 40 mm matching **arbor** **BO 6/6 0-4**	**Shank-mounted end brushes** crimped PBU dia. 10 to 20 mm knotted PBG dia. 10 to 19 mm **Shank-mounted wheel brushes** crimped RBU dia. 20 to 30 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

MIM HAS 2/600 SP3



MIM HAS 3/600 SP3

60,000–1,000 RPM / 260 watts



MIM HAS 3/600 S3



MIM HAS 3/600 S6



MIM HAS 1/500 SP3



MIM HAS 3/500 VS-SP3

50,000–1,000 RPM / 260 watts



MIM WZS 3/300 90° S3



MIM WZS 3/300 45° S3

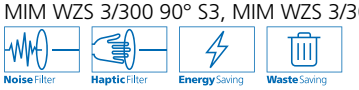
30,000–1,000 RPM / 260 watts



PFERDVALUE:
MIM HAS 2/600 SP3, MIM HAS 3/600 SP3,
MIM HAS 1/500 SP3, MIM HAS 3/500 VS-SP3



MIM HAS 3/600 S3, MIM HAS 3/600 S6,
MIM WZS 3/300 90° S3, MIM WZS 3/300 45° S3



Special features:
- Start/stop switch on handpiece.
- Automatic speed limitation.
- Brushless motor.
- Start interlock without clamped tools.
- Very high concentricity speed.
- Very quiet.
- Safety extra-low voltage.

Included in delivery:
1.8 m handpiece cable length, 2 keys,
3 or 6 mm collet.

Ordering notes:
- SP = keyless fast clamping system.
- S = changing tools with 2 keys.
- VS = with extended spindle.

Description	EAN 4007220	Rotational speed [RPM]	Low voltage [volts]	Power consumption [watts]	Power output [watts]	Collet group	Keys	Net weight [kg]
MIM HAS 2/600 SP3	071274	60,000–1,000	36/50	260	150	17	4	0.260
MIM HAS 3/600 SP3	071281	60,000–1,000	36/50	260	150	17	4, 5	0.315
MIM HAS 3/600 S3	071304	60,000–1,000	36/50	260	150	19	2, 7	0.393
MIM HAS 3/600 S6	071311	60,000–1,000	36/50	260	150	19	2, 7	0.405
MIM HAS 1/500 SP3	071267	50,000–1,000	36/50	260	120	17	3, 4	0.270
MIM HAS 3/500 VS-SP3	071298	50,000–1,000	36/50	260	150	17	4, 5	0.325
MIM WZS 3/300 90° S3	071328	30,000–1,000	36/50	260	120	18	1, 6	0.238
MIM WZS 3/300 45° S3	071342	30,000–1,000	36/50	260	120	18	1, 6	0.185

Keys

(1) 
(2) 
(3) 
(4) 
(5) 
(6)
(7) 

Item no.	Description	EAN 4007220
1	MIM ARH	071359
2	DM SW 10/10MM	071366
3	SKS SW 1,5MM	071373
4	MIM SPS DK D7	071410
5	MIM ARS HA D23,5	071434
6	DM SW 4/4MM	071441
7	MIM-DSTS SW11XD2,4MM	072158

Collets



Group	For shank dia.				
	2.35 mm	3 mm	6 mm	1/8 inch	1/4 inch
	EAN 4007220				
17	071465	071458	-	071472	-
18	071496	071489	-	071502	-
19	102756	071526	071519	102565	404453

Electric grinders
Straight grinders

UGER 11/330 SI ⊡

33,000–15,000 RPM / 1,050 watts



PFERDVALUE:

EnergySaving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.

Included in delivery:
3 m power cable, 6 mm collet, 2 keys.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 11/330 SI 230 V	777367	33,000–15,000	230	1,050	650	8	2.250

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	1/4 inch	3/8 inch
	EAN 4007220				
8	213674	213704	213711	213681	213728

For dimensions see table on page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 18 mm	206843

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, ALLROUND, TITANIUM** Dia. 4 to 16 mm **Cut 1, ALU, FVK, FVKS, PLAST, EDGE** Dia. 6 to 16 mm **HSS rotary cutters** **Special cuts** Dia. up to 3.2 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 50 mm Width ≤ 70 mm	**Poliflex** **fine grinding points** Dia. 6 to 25 mm **Abrasive spiral bands and rubber drum holders** Dia. 4 to 38 mm **POLICAP** Dia. 7 to 13 mm **POLIROLL/POLICO** Dia. 6 to 12 mm **Mounted flap wheels** Dia. 15 to 25 mm **Felt points** Dia. 6 to 12 mm	**Diamond** **grinding points** Dia. 6.0 to 20.0 mm **CBN grinding points** Dia. 9.0 to 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheel EHT** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank-mounted end brushes** crimped PBU dia. 10 to 13 mm knotted PBG dia. 19 to 23 mm **Shank-mounted wheel brushes** crimped RBU dia. 20 to 30 mm knotted RBG dia. 76 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Very easy-to-handle machine.

Included in delivery:
3 m power cable, 6 mm collet, 2 keys.

UGER 5/250 SI ⊡

25,000–11,000 RPM / 500 watts



PFERDVALUE:

HapticFilter EnergySaving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 5/250 SI 230 V	265581	25,000–11,000	230	500	300	11	1.350

Collets



Group	For shank dia.				
	3 mm	6 mm	8 mm	1/8 inch	1/4 inch
	EAN 4007220				
11	196236	196281	196304	196335	196328

For dimensions see table on page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 18 mm	206843

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND** Dia. 6 to 20 mm **Cut 1, ALU, FVK, FVKS, PLAST, EDGE** Dia. 6 to 16 mm **HSS rotary cutters** **Cut 1, 3, Special cuts** Dia. up to 4 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 50 mm Width ≤ 70 mm	**Abrasive spiral bands and rubber drum holders** Dia. up to 50 mm **POLICAP** Dia. up to 16 mm **POLIROLL** Dia. up to 15 mm **Mounted flap wheels** Dia. up to 30 mm **Poliflex fine grinding points** Dia. 8 to 25 mm **POLINOX cross buffs** Dia. up to 38 mm **Felt points** Dia. up to 15 mm	**Diamond grinding points** Dia. 6.0 to 25.0 mm **CBN grinding points** Dia. 12.0 to 25.0 mm **Diamond cut-off wheels** Dia. 22 to 50 mm matching **arbors** **BO 3/1,7 1** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheel EHT** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank-mounted end brushes** crimped PBU dia. 10 to 20 mm crimped with bridle PBUR dia. 13 mm knotted PBG dia. 19 to 30 mm **Shank-mounted wheel brushes** crimped RBU dia. 20 to 70 mm knotted RBG dia. 76 to 100 mm **Shank-mounted bevel brushes** crimped KBU dia. 50 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Electric grinders
Straight grinders

UGER 15/150 SI ⊡

15,000–6,800 RPM / 1,530 watts



PFERDVALUE:

Energy Saving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.

Included in delivery:
3 m power cable, 6 mm collet, 2 keys.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 15/150 SI 230 V	801864	15,000–6,800	230	1,530	1,050	12	3.050

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	12 mm	1/4 inch
	EAN 4007220				
12	195994	196014	196038	196045	196052

For dimensions see table on page 116.

Keys



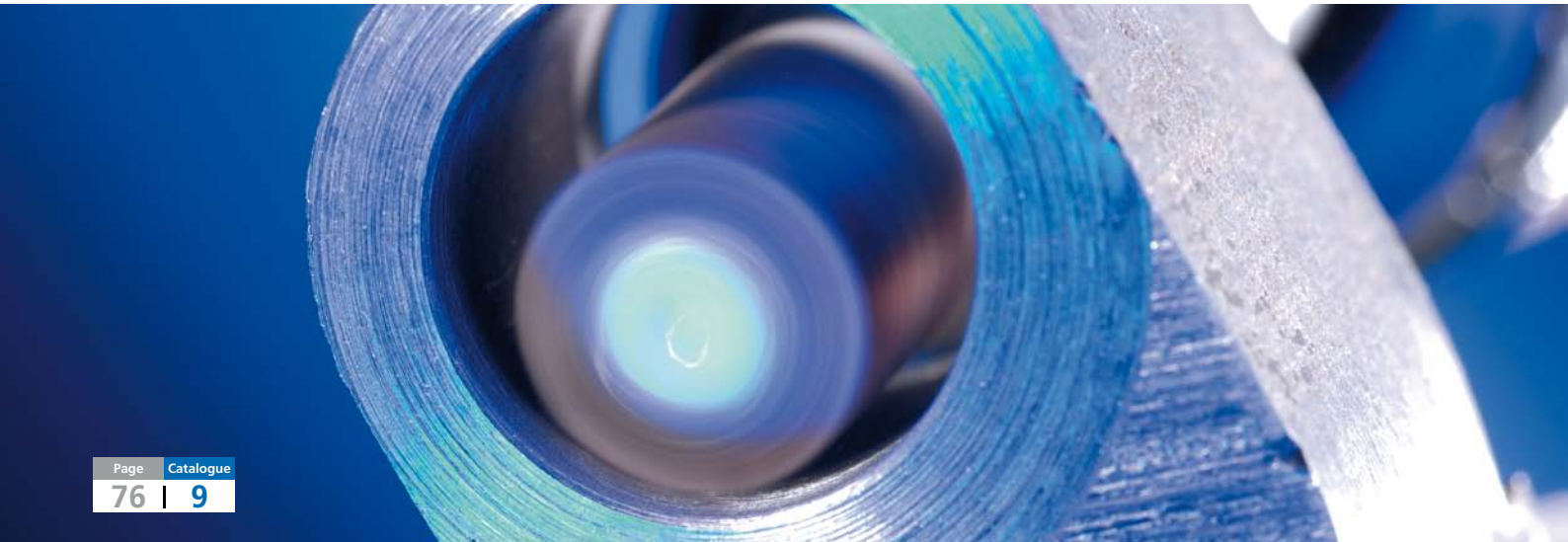
Description	EAN 4007220
EM SW 22 mm	206850

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 6	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, STEEL, INOX, NON-FERROUS, CAST, TOUGH, TOUGH-S, MICRO, TITANIUM, ALLROUND, EDGE** Dia. 12 to 20 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 5 to 7 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 50 mm Width ≤ 70 mm	**Abrasive spiral bands and rubber drum holders** Dia. 30 to 75 mm **Mounted flap wheels** Dia. 25 to 50 mm **POLINOX mounted grinding wheels** Dia. up to 40 mm **POLICLEAN tools** Dia. up to 50 mm **Poliflex fine grinding points** **Poliflex fine grinding discs** Dia. 10 to 30 mm **POLIROLL** Dia. up to 18 mm	**Diamond grinding points** Dia. 10.0 to 25.0 mm **CBN grinding points** Dia. 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Cut-off wheel EHT** Dia. up to 50 mm matching **arbor** **BO SPG 6/6 0-10** **Snagging wheels ER** Dia. up to 50 mm matching **arbors** **BO 6/6 3-10** **BO 8/10 6-20**	**Shank-mounted end brushes** crimped PBU dia. 10 to 30 mm crimped with bridle PBUR dia. 13 mm knotted PBG dia. 19 to 30 mm **Shank-mounted wheel brushes** crimped RBU dia. 20 to 70 mm knotted RBG dia. 76 to 100 mm **Shank-mounted bevel brushes** crimped KBU dia. 50 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Particularly suitable for POLINOX and POLIVLIES tools.

Included in delivery:
3 m power cable, 6 mm collet, 2 keys.

UGER 5/90 SI □

9,000–4,000 RPM / 500 watts



PFERDVALUE:

Haptic Filter · Energy Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 5/90 SI 230 V	267332	9,000–4,000	230	500	300	11	1.440

Collets



Group	For shank dia.				
	3 mm	6 mm	8 mm	1/8 inch	1/4 inch
	EAN 4007220				
11	196236	196281	196304	196335	196328

For dimensions see table on page 116.

Keys



Description	EAN 4007220
EM SW 14 mm	206836
EM SW 18 mm	206843

Support



Description	EAN 4007220
SU-D32	208403



POLINOX set
PNL/Z/R 6050 UGER 5/90 230 V

For detailed information and ordering data on the POLINOX set, please refer to catalogue section 4.

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, NON-FERROUS, TOUGH, TOUGH-S, EDGE** Dia. 16 to 20 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 7 to 10 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 50 mm Width ≤ 70 mm	**Poliflex fine grinding points** Bond: **PUR** Dia. 15 to 50 mm **Poliflex mounted texturing points PU-STRUC** Dia. up to 32 mm **POLIROLL cartridge rolls** Dia. 18 mm **POLISTAR** Dia. 30 to 50 mm **POLINOX mounted grinding wheels POLINOX unitized wheels PNER** Dia. up to 50 mm **Overlap slotted discs** Dia. 30 to 50 mm	**POLINOX cross buffs** Dia. up to 38 mm **POLICLEAN mounted tools** Dia. up to 50 mm **Felt points** **Mounted felt flap wheels** Dia. 30 to 50 mm **Felt wheels** Dia. up to 45 mm **Mounted flap wheels** Dia. up to 50 mm	**Diamond grinding points** Dia. 12.0 to 20.0 mm **CBN grinding points** Dia. 20.0 mm **Diamond cut-off wheels** Dia. 22 to 50 mm matching **arbors** **BO 3/1,7 1** **BO 6/10 3** **BO 8/10 3**	**Shank-mounted end brushes** crimped PBU dia. 10 to 30 mm crimped with bridle PBUR dia. 13 to 25 mm knotted PBG dia. 10 to 30 mm **Shank-mounted bevel brushes** crimped KBU dia. 70 to 95 mm **Shank-mounted cup brushes** crimped TBU dia. 30 to 50 mm **Shank-mounted wheel brushes** crimped RBU dia. 50 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

UGER 11/90 SI ⧈

8,300–3,800 RPM / 1,050 watts



PFERDVALUE:

Energy Saving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Supported version SU-D32 on request.

Included in delivery:
3 m power cable, 6 mm collet, 2 keys.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 11/90 SI 230 V	948842	8,300–3,800	230	1,050	650	12	2.370

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	12 mm	1/4 inch
	EAN 4007220				
12	195994	196014	196038	196045	196052

For dimensions see table on page 116.

Keys



Description	EAN 4007220
EM SW 19 mm	956878
EM SW 22 mm	206850

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*	Catalogue section 5	Catalogue section 8
TC burrs **Cut 3, 3 PLUS, 4, 5, NON-FERROUS, TOUGH, TOUGH-S, EDGE** Dia. 16 to 25 mm **HSS rotary cutters** **Cut 1, 2, 3, 5, Special cuts** Dia. 7 to 10 mm	**Mounted points** Shank dia. 6 mm: Dia. up to 16 mm Dia. 16 to 50 mm Width ≤ 70 mm **Catalogue section 4*** **Abrasive spiral bands and rubber drum holders** Dia. 100 mm **Poliflex fine grinding points** Bond: **PUR** Dia. 15 to 50 mm **Poliflex mounted texturing points PU-STRUC** Dia. 32 mm **POLIROLL cartridge rolls** Dia. 18 mm **Unmounted flap wheels** Dia. up to 100 mm **POLISTAR** Dia. 30 to 50 mm	**POLINOX mounted grinding wheels** Dia. up to 80 mm **POLINOX unitized wheels PNER** Dia. up to 75 mm **Overlap slotted discs** Dia. 30 to 50 mm **POLINOX cross buffs** Dia. up to 38 mm **POLICLEAN mounted tools** Dia. up to 75 mm **POLICLEAN discs** Dia. up to 100 mm **Felt points** **Mounted felt flap wheels** Dia. 30 to 50 mm **Felt wheels** Dia. up to 60 mm **Mounted flap wheels** Dia. up to 80 mm	**Diamond grinding points** Dia. 20.0 mm **Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Shank-mounted end brushes** crimped PBU dia. 10 to 30 mm crimped with bridle PBUR dia. 13 to 25 mm knotted PBG dia. 10 to 30 mm **Shank-mounted bevel brushes** crimped KBU dia. 70 to 95 mm **Shank-mounted cup brushes** crimped TBU dia. 30 to 50 mm **Shank-mounted wheel brushes** crimped RBU dia. 50 to 100 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.

Included in delivery:
3 m power cable, 12 mm collet, 2 keys.

UGER 15/60 SI ☐

5,900–2,800 RPM / 1,530 watts



PFERDVALUE:

Energy Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 15/60 SI 230 V	777251	5,900–2,800	230	1,530	1,050	12	3.050

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	12 mm	1/4 inch
	EAN 4007220				
12	195994	196014	196038	196045	196052

For dimensions see table on page 116.



Unmounted flap wheel set FR 15030 UGER 15/60 230 V

For detailed information and ordering data on the unmounted flap wheel set, please refer to catalogue section 4.

Keys



Description	EAN 4007220
EM SW 22 mm	206850

Suitable PFERD tools

Catalogue section 2	Catalogue section 3*	Catalogue section 4*		Catalogue section 5	Catalogue section 8
HSS rotary cutters Cut ALU, 1, 2, 3 Dia. 10 to 16 mm	**Mounted points RUBBER type** Shank dia. 6 mm: Dia. 16 mm Dia. 16 to 40 mm Width ≤ 32 mm	**Abrasive spiral bands and rubber drum holders** Dia. 75 to 100 mm **Mounted flap wheels** Dia. 60 to 80 mm **Unmounted flap wheels** Dia. 100 mm Dia. 150 mm Width 30 mm **Poliflex mounted texturing points PU-STRUC** Dia. 20 to 100 mm	**POLINOX mounted grinding wheels** Dia. 50 to 100 mm **POLINOX unitized wheels PNER** Dia. 75 to 100 mm **POLICLEAN mounted tools** Dia. up to 100 mm **POLICLEAN discs** Dia. up to 100 mm	**Diamond cut-off wheels** Dia. 30 to 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Shank-mounted wheel brushes** crimped RBU dia. 100 mm **Wheel brushes** crimped Narrow type RBU dia. 100 to 150 mm Wide type RBU dia. 100 to 150 mm matching **arbors** **BO 8/12-22,2 5-18** **BO 8/22,2 5-10** **BO 12/22,2 10-30** **Shank-mounted cup brushes** crimped TBU dia. 60 to 70 mm

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue sections 3/4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Electric grinders
Straight grinders

UGER 15/30 SI ☐

3,000–750 RPM / 1,530 watts



PFERDVALUE:

Energy Saving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.

Included in delivery:
3 m power cable, 12 mm collet, 2 keys.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Collet group	Net weight [kg]
UGER 15/30 SI 230 V	775912	3,000–750	230	1,530	1,050	12	3.050

Collets



Group	For shank dia.				
	6 mm	8 mm	10 mm	12 mm	1/4 inch
	EAN 4007220				
12	195994	196014	196038	196045	196052

For dimensions see table on page 116.

Keys



Description	EAN 4007220
EM SW 22 mm	206850



POLIFLAP set
PFL 17060 UGER 15/30 230 V

For detailed information and ordering data on the POLIFLAP set, please refer to catalogue section 4.

Suitable PFERD tools

Catalogue section 2	Catalogue section 4		Catalogue section 5	Catalogue section 8	
HSS rotary cutters **Cut 1, 2, 3** Dia. 16 mm	**Unmounted flap wheels** Dia. 150 to 165 mm **POLINOX mounted grinding wheels** Dia. 100 mm **POLINOX grinding wheels** Dia. 150 mm **POLICLEAN discs** Dia. 100 to 150 mm	**POLIFLAP grinding wheel** Dia. 170 mm **Cloth rings** Dia. 200 mm **Mounted felt flap wheels** Dia. 50 to 80 mm	**Diamond cut-off wheels** Dia. 50 mm matching **arbors** **BO 6/10 3** **BO 8/10 3**	**Shank-mounted cup brushes** crimped TBU dia. 60 mm **Shank-mounted wheel brushes** crimped RBU dia. 100 mm	**Wheel brushes** crimped Narrow type RBU dia. 100 to 150 mm Wide type RBU dia. 100 to 150 mm matching **arbors** **BO 8/12-22,2 5-18** **BO 8/22,2 5-10** **BO 12/22,2 10-30**

If no shank diameter is given, the shank dia. of 6 mm applies.

***Catalogue section 4:** This data applies to an unsupported shank length of 10 mm and the max. stated mounted point dimensions.
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

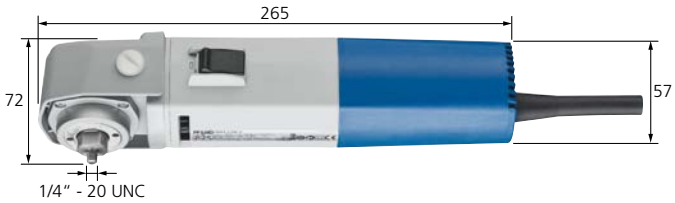


Special features:
- Special spindle for holding all COMBIDISC tools (use a backing pad without shank).
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Very easy-to-handle machine.

Included in delivery:
3 m power cable, 1 key.

UWER 5/200 SI ⧈

20,000–9,000 RPM / 500 watts



PFERDVALUE:

HapticFilter EnergySaving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Net weight [kg]
UWER 5/200 SI 230 V	598436	20,000–9,000	230	500	300	1/4-20 UNC	1.350

Keys



Description	EAN 4007220
EM SW 14 mm	206836

Extension for drive spindles



Description	EAN 4007220	Use for
SPV 20 CD 1/4-20 UNC	333167	COMBIDISC abrasive disc holder without threaded shank



COMBIDISC set
CD 50 UWER 5/200 230 V

For detailed information and ordering data on the COMBIDISC set, please refer to catalogue section 4.

Suitable PFERD tools

Catalogue section 4		
COMBIDISC Mini-POLIFAN	**COMBIDISC non-woven discs**	matching **COMBIDISC holders**
COMBIDISC abrasive discs	**COMBIDISC TX discs**	
COMBIDISC diamond abrasive discs	**COMBIDISC felt discs**	
COMBIDISC POLICLEAN discs	Dia. 20 to 55 mm	
Dia. 20 to 55 mm		

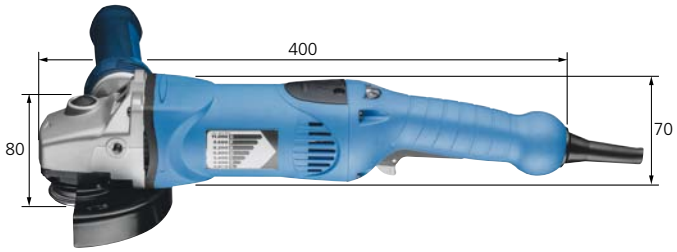
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





UWER 18/120 SI ☐

11,500–2,800 RPM / 1,750 watts



PFERDVALUE:

Energy Saving

Special features:
- **Tool diameter up to 115 mm**.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection with anti-kickback function.
- Restart protection in case of power failure.
- Lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

Included in delivery:
4 m power cable, 1 key, 1 clamping flange, 1 quick-mounting nut, surface guard, anti-vibration handle.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
UWER 18/120 SI 230 V	957110	11,500–2,800	230	1,750	1,150	M14	22.23	2.800

Clamping flanges



Description	EAN 4007220
SPF 98970043	853115
SSM14 98970042	853108

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853

Guards



Description	EAN 4007220	Tool cover dia. [mm]	Use for
H 45-115 HT-SV	964316	115	Cut-off grinding
H 45-115 FL-SV	881361	115	Surface grinding

Suitable PFERD tools

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
High Speed Disc ALUMASTER Dia. 115 mm	**Velcro-backed abrasive discs** **Fibre discs** **COMBICLICK tools** **POLICLEAN discs** **Self-adhesive discs** **Unmounted flap wheels for angle grinders** **POLINOX unmounted grinding wheels with thread** Dia. 100 to 115 mm	**Diamond cut-off wheels** **CC-GRIND-SOLID-DIAMOND** Dia. 115 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 115 mm	**Wheel brushes** crimped Type for angle grinders RBU dia. 115 mm knotted RBG dia. 100 to 115 mm **Pipeline wheel brushes** knotted RBG dia. 100 to 115 mm **Threaded bevel brushes** crimped KBU dia. 100 to 115 mm M14 knotted KBG dia. 100 to 115 mm M14	**Threaded cup brushes** crimped TBU dia. 60 to 75 mm M14 knotted TGB dia. 65 to 80 mm **Composite disc brushes** crimped DBU dia. 75 mm

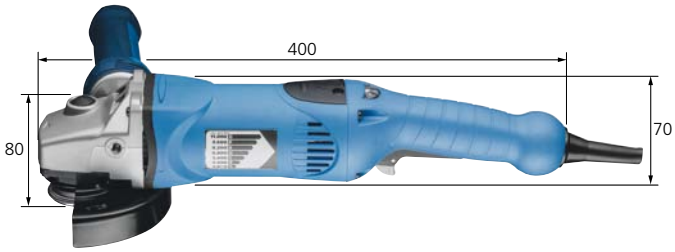
Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

Special features:
- **Tool diameter up to 125 mm**.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection with anti-kick function.
- Restart protection in case of power failure.
- Lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

Included in delivery:
4 m power cable, 1 key, 1 clamping flange, 1 quick-mounting nut, surface guard, anti-vibration handle.

UWER 18/110 SI

11,000–2,700 RPM / 1,750 watts



PFERDVALUE:

Energy Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
UWER 18/110 SI 230 V	957127	11,000–2,700	230	1,750	1,150	M14	22.23	2.800

Clamping flanges



Description	EAN 4007220
SPF 98970043	853115
SSM14 98970042	853108

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853

Guards



Description	EAN 4007220	Tool cover dia. [mm]	Use for
H 45-125 HT-SV	843277	125	Cut-off grinding
H 45-125 FL-SV	843284	125	Surface grinding

Suitable PFERD tools

Catalogue section 2	Catalogue section 4	Catalogue section 5	Catalogue section 6	Catalogue section 8	
High Speed Disc ALUMASTER Dia. 115 mm	**Velcro-backed abrasive discs** **Fibre discs** **COMBICLICK tools** **POLICLEAN discs** **Self-adhesive discs** **Unmounted flap wheels for angle grinders** **POLINOX unmounted grinding wheels with thread** Dia. 65 to 125 mm	**Diamond cut-off wheels** **CC-GRIND-SOLID-DIAMOND** Dia. 125 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 125 mm	**Wheel brushes** crimped Type for angle grinders RBU dia. 115 to 125 mm knotted RBG dia. 100 to 125 mm **Pipeline wheel brushes** knotted RBG dia. 100 to 125 mm **Threaded bevel brushes** crimped KBU dia. 100 to 125 mm knotted KBG dia. 100 to 125 mm	**Threaded cup brushes** crimped TBU dia. 60 to 75 mm M14 knotted TBG dia. 65 to 80 mm M14 **Composite disc brushes** crimped DBU dia. 75 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.

UWER 18/95 SI ⊡

9,500–2,300 RPM / 1,750 watts



PFERDVALUE:

Energy Saving

Special features:
- Max. **tool diameter up to 150 mm**.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection with anti-kickback function.
- Restart protection in case of power failure.
- Lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

Included in delivery:
4 m power cable, 1 clamping flange, 1 quick-mounting nut, 1 face pin spanner, surface guard, anti-vibration handle.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
UWER 18/95 SI 230 V	101384	9,500–2,300	230	1,750	1,150	M14	22.23	3.000

Clamping flanges



Description	EAN 4007220
SPF 98970043	853115
SSM14 98970042	853108

Keys



Description	EAN 4007220
STL SW 35 x 5 mm	193853

Guards



Description	EAN 4007220	Tool cover dia. [mm]	Use for
H 51-150 HT-SV	968628	150	Cut-off grinding
H 51-150 FL-SV	101964	150	Surface grinding

Suitable PFERD tools

Catalogue section 4	Catalogue section 6	Catalogue section 8	
Fibre discs Dia. up to 150 mm	**Cut-off and grinding wheels** **POLIFAN flap discs** **CC-GRIND grinding discs** Dia. up to 150 mm	**Wheel brushes** knotted RBG dia. 150 mm **Pipeline wheel brushes** knotted RBG dia. 150 mm	**Threaded cup brushes** crimped TBU dia. 75 to 100 mm M14 knotted TBG dia. 80 to 100 mm M14 **Composite disc brushes** crimped DBU dia. 75 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 4–8.

Keys



Description	EAN 4007220
SKS SW 5 mm	204467
HS 40-20	019122
SDR TX 15K	007419

UWER 18/110 EF-R3/45° TK and UWER 18/110 EF-30° TK

The drive and tools are supplied in a sturdy plastic case for optimal storage. Included in delivery:
- UWER 18/110 EF with 4 m power cable, three keys and anti-vibration handle.
- Cutting insert holder with guide bearing.
- Screw set for cutting inserts.

The ordering data can be found in the table below.

EDGE FINISH system for work on edges in transport case (TK)

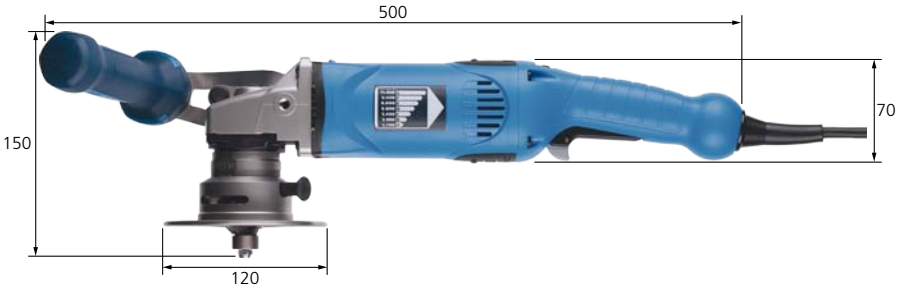


Special features:
- Max. chamfer height of 6 mm.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Restart protection in case of power failure.
- Anti-vibration handle.
- Smooth start-up to protect people, tools and the drive.
- Lockable on-off switch.
- Spindle lock pin.

Included in delivery:
4 m power cable, 3 keys, anti-vibration handle.

UWER 18/110 EF

11,000–2,750 RPM / 1,750 watts



PFERDVALUE:

Vibration Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Incl. cutting insert holder	Matching cutting insert holder	Net weight [kg]
EDGE FINISH UWER 18/110 EF-R3/45° TK 230V[1)]	004272	11,000–2,750	230	1,750	1,150	M14	EF-WSP-A R3/45°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF-30° TK 230V[1)]	004364	11,000–2,750	230	1,750	1,150	M14	EF-WSP-A 30°	EF-WSP-A R3/45°, EF-WSP-A 30°	7.360
EDGE FINISH UWER 18/110 EF 230V[2)]	973172	11,000–2,750	230	1,750	1,150	M14	-	EF-WSP-A R3/45°, EF-WSP-A 30°	3.640

[1)] The cutting inserts are not included in delivery. Please order these separately (see catalogue section 2).
[2)] The cutting insert holder with guide bearing, cutting inserts and screw set are not included in delivery. Please order these separately (see catalogue section 2).

Selecting suitable cutting inserts:

To determine the most suitable cutting insert, please proceed as follows:

❶ Select the material group to be machined.
❷ Select the cutting inserts.

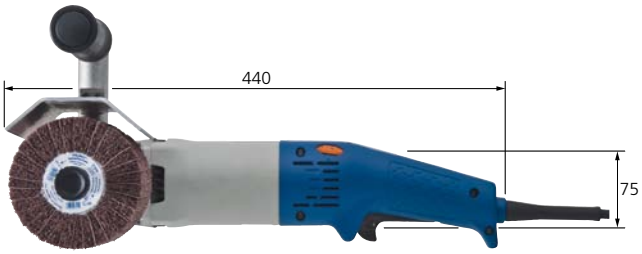
Ordering notes:
- Packaging unit: 1 piece each
- Set contains: 3 pieces

Material group	Matching cutting inserts	EAN 4007220	Recommended rotational speed range [RPM]	Max. depth of cut per process step [mm]	Max. chamfer width/radius to be created [mm]
Steel	EF-WSP-F STEEL	005118	8,700–7,100	3	6
	EF-WSP-R3 STEEL	005101	8,700–7,100	-	3
Stainless steel (INOX)	EF-WSP-F INOX	071182	8,000–7,500	2	3
Aluminium	EF-WSP-F ALU	039533	11,000	6	6



Electric grinders
Drum grinder

UWER 15/40 A-SI D19 ☐ 4,000–1,000 RPM / 1,530 watts



PFERDVALUE:

Energy Saving

Special features:
- Low-speed angle grinder/polisher with stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Smooth start-up to protect people, tools and the drive.
- Spindle lock pin.
- Drive spindle with two keyways for increased power transmission on drum tools.
- M14 drive spindle for mounting drum tools with female thread.

Included in delivery:
3 m power cable, 1 key, quick mounting screw, hand guard, lateral handle, detachable drive spindle.

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Max. tool diameter [mm]	Tool mounting dia. x width [mm]	Net weight [kg]
UWER 15/40 A-SI D19 230 V	896792	4,000–1,000	230	1,530	1,050	125	19 x 100	3.000

Keys



Description	EAN 4007220
EM SW 17 mm	204542



Drum set FR-W 100100 UWER 15/40 230 V

For detailed information and ordering data on the roller set, please refer to catalogue section 4.



M14

Direct mounting of threaded drum tools possible

Suitable PFERD tools

Catalogue section 4	Catalogue section 8
Flap drums **Poliflex texturing rollers** **POLINOX grinding drums** Dia 100 x 100 mm	**Wheel brushes for burnishing machines** Grinding drum mounting dia. 19x100 mm crimped WBU dia. 100 mm

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.





Special features:
- ***Belt length 610 mm** x width 3–20 mm with **adapter BSAD 41/36 x 610**.
- The belt grinder attachment can be pivoted on the drive system.
- Stepless rotational speed regulation.
- Digital electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Lockable on-off switch.

UBS 5/100 SI 925
- Incl. belt grinder attachment arm BSVA 9/25 x 520.

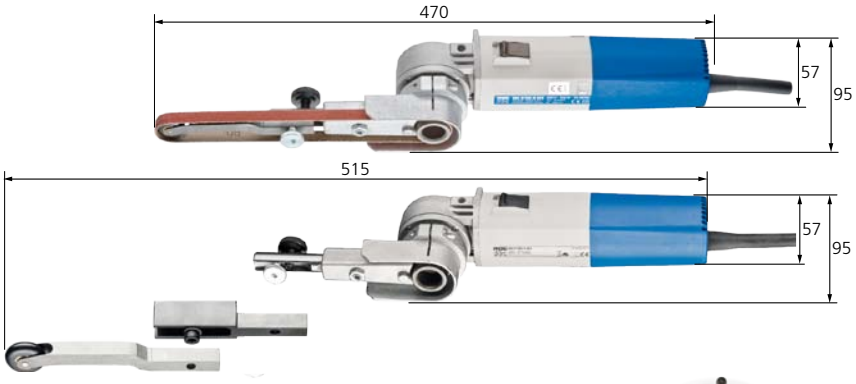
UBS 5/100 SI 925 TK
- Belt grinder in transport case.

UBS 5/100 SI oVA
- Please order belt grinder attachment arm separately (see below).

Included in delivery:
3 m power cable, 1 key.

UBS 5/100 SI 925 ⊡

Belt lengths: 520 (610*) mm x width: 3–20 mm




UBS 5/100 SI 925 TK


BSVH 41 + BSVA 9/25 x 520

PFERDVALUE:

Energy Saving

Description	EAN 4007220	Belt speed [m/s]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
UBS 5/100 SI 925 230 V	333006	6.5–16	230	500	300	1.900
UBS 5/100 SI 925 TK 230 V	957424	6.5–16	230	500	300	3.100
UBS 5/100 SI oVA 230 V	948811	6.5–16	230	500	300	1.800

Keys



Description	EAN 4007220
SKS SW 4 mm	204450

Protective cover



Description	EAN 4007220
SDVH-G	956861

Adapter



Description	EAN 4007220
BSAD 41/36 x 610	395967

Belt grinder attachment arms

BSVA 9/25



BSVA 9/25-1



BSVA 4/16



BSVA 9/16



BSVA 12/19



BSVA 18/23

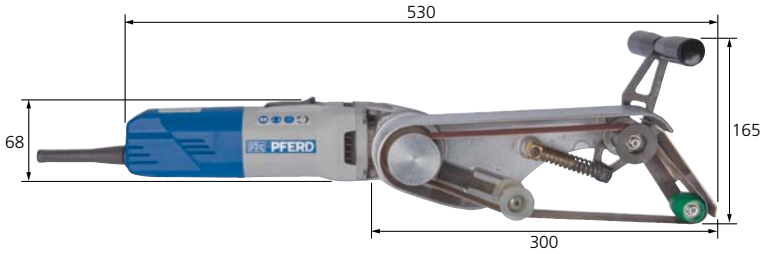


- Robust steel design.
- Use of the full roller width.
- Extremely slim fixing lugs on the facing roller.
- Asymmetrical arms for flush lateral grinding.
- Belt arm guide can be fixed.
- BSVA 9/25-1 with conical guide roller (range 1 mm).
- For detailed information and ordering data for abrasive and non-woven short belts, as well as for the belt grinder set BA 6-12/520 UBS 5/100 230 V, please refer to catalogue section 4.

Description	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
BSVA 9/25 x 520	323007	9 x 25	3, 6, 9, 12, 16	520, 610	0.095
BSVA 9/25-1 x 520	494288	9 x 25	3, 6, 9, 12	520, 610	0.095
BSVA 4/16 x 520	322987	4 x 16	3, 6, 9	520, 610	0.060
BSVA 9/16 x 520	322994	9 x 16	9, 12	520, 610	0.096
BSVA 12/19 x 520	323014	12 x 19	12, 16	520, 610	0.107
BSVA 18/23 x 520	349267	18 x 23	20	520, 610	0.150

UBS 11/90 SI-R

1,050 watts,
belt length: 610 mm x width: 12–30 mm



PFERDVALUE:

Energy Saving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Smooth start-up to protect people, tools and the drive.
- Adjustable belt guidance roller to match pipe diameters up to 70 mm.
- A surface contact angle on the workpiece of up to 220 degrees is possible.

UBS 11/90 SI-R TK
- Pipe belt grinder in transport case.

Included in delivery:
3 m power cable, 1 key.

Description	EAN 4007220	Belt speed [m/s]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
UBS 11/90 SI-R 230 V	777275	7–15.5	230	1,050	650	3.000
UBS 11/90 SI-R TK 230 V	957448	7–15.5	230	1,050	650	6.700

Keys



Description	EAN 4007220
SKS SW 4 mm	204450



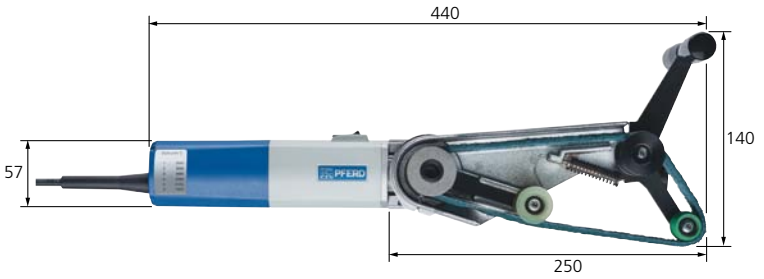
For detailed information and ordering data on abrasive and non-woven short belts, please refer to catalogue section 4.



Pipe belt grinder in transport case UBS 11/90 SI R-TK

UBS 5/70 SI-R

500 watts,
belt length: 533 mm x width: 30 mm



PFERDVALUE:

Energy Saving

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Smooth start-up to protect people, tools and the drive.
- Adjustable belt guidance roller to match pipe diameters up to 55 mm.
- A surface contact angle on the workpiece of up to 180 degrees is possible.

UBS 5/70 SI-R TK
- Pipe belt grinder in transport case.

Included in delivery:
3 m power cable, 1 key.

Description	EAN 4007220	Belt speed [m/s]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Net weight [kg]
UBS 5/70 SI-R 230 V	561263	5–11	230	500	300	2.350
UBS 5/70 SI-R TK 230 V	957431	5–11	230	500	300	5.800

Keys



Description	EAN 4007220
SKS SW 4 mm	204450



For detailed information and ordering data on abrasive and non-woven short belts, please refer to catalogue section 4.



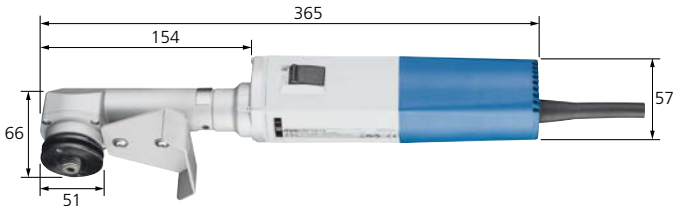
Pipe belt grinder in transport case UBS 5/70 SI-R TK

Special features:
- Max. **tool diameter 150 mm**.
- Tool mounting 25.4 mm (1") or 22.23 mm (reversible clamping flange WSPF).
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- Light, very easy to handle, good power output.

Included in delivery:
3 m power cable, 3 keys, 1 clamping flange, 1 reversible clamping flange, hand guard.

KNER 5/34 V-SI

3,400–1,500 RPM / 500 watts



PFERDVALUE:

HapticFilter EnergySaving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Work spindle thread	Tool mounting centre hole dia. [mm]	Net weight [kg]
KNER 5/34 V-SI 230 V	935217	3,400–1,500	230	500	300	M14	25.4 / 22.23	1.600

Clamping flanges



Description	EAN 4007220
WSPF 96473301	937839
SPM14 96473201	937822

Keys



Description	EAN 4007220
SKS SW 5 mm	204467
STL SW 35 x 5 mm	193853
STS D 4 mm	205020



POLINOX set
PNER 15003/06
KNER 5/34 230 V

For detailed information and ordering data on the POLINOX set PNER, please refer to catalogue section 4.

Suitable PFERD tools

Catalogue section 4	Catalogue section 8
POLINOX unitized wheels PNER Dia. up to 150 mm **POLINOX unitized discs PNER** Dia. up to 125 mm **POLINOX discs** Dia. up to 150 mm **POLIVLIES flap discs** Dia. up to 125 mm **POLINOX unmounted grinding wheels with thread** Dia. up to 125 mm	**Wheel brushes** crimped Narrow type RBU dia. 150 mm matching **arbor hole adapter 22.2 mm** **from adapter set AK 32**

Note: Please observe the recommended cutting speeds and the max. permitted rotational speeds in catalogue sections 2–8.



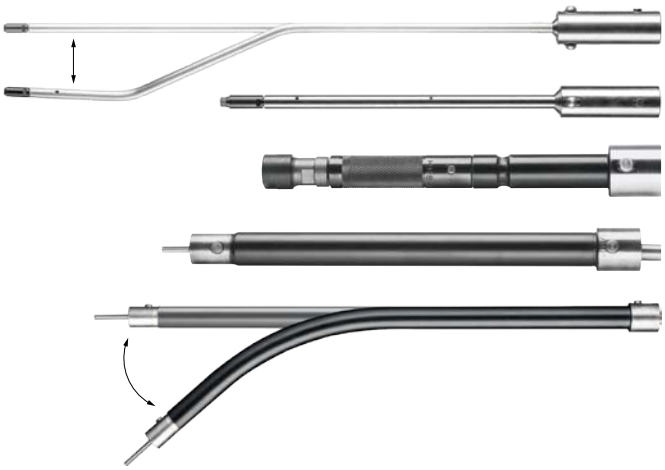
Rigid extensions

Max. 25,000 RPM (STV9 and STV13)

STV9
STV13

STV20

STV27
STV33



Special features:
- Rigid extensions for hard-to-reach processing areas.
- Special lengths and options for workpiece adaptation available on request.
- The potential bending point and the bending radius depend on the STV type and the desired bend.
- Bent types available as from a minimum length of 500 mm (see 2nd and 5th figure).

Included in delivery:
STV9
3 mm collet, 3 keys.
STV13
6 mm collet, 3 keys.
STV20 incl. HA 4 ZGA STV G16/G22
6 mm collet, 2 keys.

Description	EAN 4007220	Connection coupling [DIN]	Sliding coupling [G]	Dia. x length [mm]	Max. bending radius [mm]	Matching tool mounting	Matching drives	*	Net weight [kg]
STV9 L300	035092	10	-	9 x 300	150	Collet group 2	1, 2	*	0.430
STV9 L500	035108	10	-	9 x 500	150	Collet group 2	1, 2	*	0.520
STV9 L800	035115	10	-	9 x 800	150	Collet group 2	1, 2	*	0.640
STV9 L1000	035122	10	-	9 x 1000	150	Collet group 2	1, 2	*	0.720
STV13 L300	733004	10	-	13 x 300	150	Collet group 10	1, 2	*	0.520
STV13 L500	768242	10	-	13 x 500	150	Collet group 10	1, 2	*	0.670
STV13 L800	035139	10	-	13 x 800	150	Collet group 10	1, 2	*	0.890
STV13 L1000	035146	10	-	13 x 1,000	150	Collet group 10	1, 2	*	1.040
STV20 L200	272770	10	16/22	20 x 200	150	HA 4 ZGA STV G16/G22	1, 2	*	0.400
STV20 L400	179604	10	16/22	20 x 400	150	HA 4 ZGA STV G16/G22	1, 2	*	0.630
STV20 L600	179703	10	16/22	20 x 600	150	HA 4 ZGA STV G16/G22	1, 2	*	0.890
STV27 L250	282137	10	22	27 x 250	250	HA 7 ZGA G22, WZ 7 B STV G22, WZ 7-45° STV G22	1, 2, 3	*	0.550
STV27 L500	179499	10	22	27 x 500	250	HA 7 ZGA G22, WZ 7 B STV G22, WZ 7-45° STV G22	1, 2, 3	*	0.930
STV33 L250	179420	10	28	33 x 250	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	1.025
STV33 L500	179468	10	28	33 x 500	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	2.100
STV33 L1000	179758	10	28	33 x 1,000	300	HA 10 ZGE, HA 12 ZGA, WZ 10 B STV, WZ 10-45° STV	2, 3, 4, 5	*	3.250

* 1 = EMER 5/250 SI, 2 = EMER 15/150 SI, 3 = EMER 11/90 SI, 4 = EMER 15/60 SI, 5 = EMER 15/30 SI

Handpieces



HA 4 ZGA STV G16/G22



WZ 7 B STV G22



WZ 7-45° STV G22



WZ 10 B STV G28



WZ 10-45° STV G28

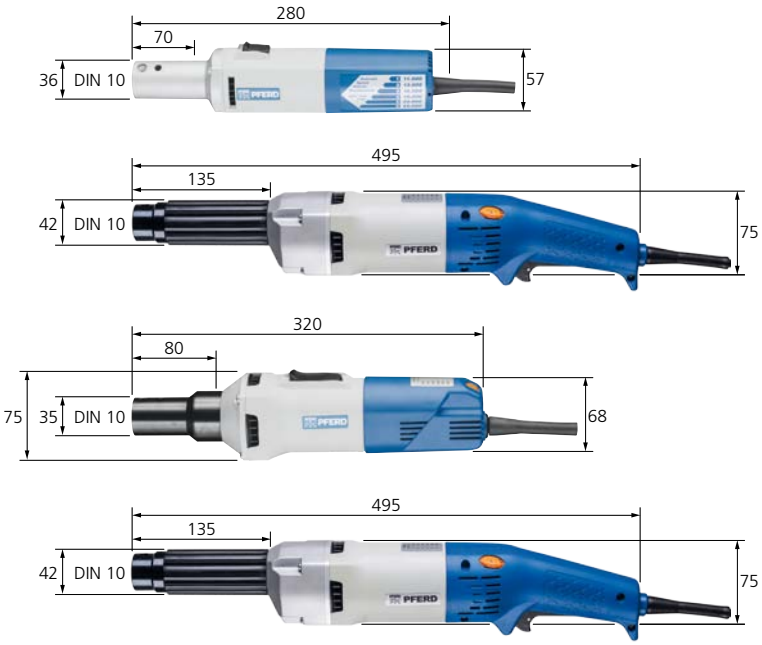
Description	EAN 4007220	Max. perm. rotational speed [RPM]	Sliding coupling [G]	Dia. x length [mm]	Transmission ratio	Incl. collet dia. [mm]	Collet group	Net weight [kg]
HA 4 ZGA STV G16/G22	247952	25,000	16/22	20 x 110	-	6	11	0.165
WZ 7 B STV G22	334645	17,100	22	55 x 157	1.3 : 1	6	6	0.710
WZ 7-45° STV G22	334614	17,100	22	57 x 175	1.3 : 1	6	6	0.750
WZ 10 B STV G28	334638	17,100	28	55 x 156	1.3 : 1	6	6	0.805
WZ 10-45° STV G28	334621	17,100	28	57 x 184	1.3 : 1	6	6	0.845

Other matching handpieces can be found on page 113.

Special features:
- Electric motors for rigid extensions with motor connection DIN 10.
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the machine.
- Restart protection in case of power failure.

Included in delivery:
3 m power cable, 2 keys.

EMER 5/250 SI — **25,000–11,000 RPM / 500 watts**
EMER 15/150 SI — **15,000–6,800 RPM / 1,530 watts**
EMER 11/90 SI — **8,300–3,800 RPM / 1,050 watts**
EMER 15/60 SI — **6,000–2,800 RPM / 1,530 watts**
EMER 15/30 SI — **3,000–750 RPM / 1,530 watts**



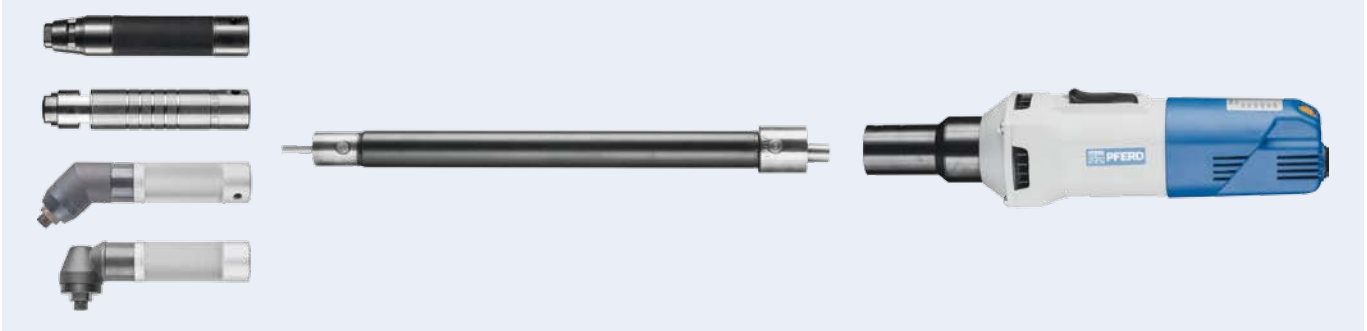
PFERDVALUE:
EMER 5/250 SI, EMER 11/90 SI
Energy Saving Time Saving

EMER 15/150 SI, EMER 15/60 SI, EMER 15/30 SI
Energy Saving

Item no.	Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Matching extension	Net weight [kg]
1	EMER 5/250 SI 230 V	948859	25,000–11,000	230	500	300	STV9, STV13, STV20, STV27	1.150
2	EMER 15/150 SI 230 V	101414	15,000–6,800	230	1,530	1,050	STV9, STV13, STV20, STV27, STV33	2.000
3	EMER 11/90 SI 230 V	948866	8,300–3,800	230	1,050	650	STV9, STV13, STV20, STV27	2.000
4	EMER 15/60 SI 230 V	101421	5,900–2,800	230	1,530	1,050	STV33	2.000
5	EMER 15/30 SI 230 V	101438	3,000–750	230	1,530	1,050	STV33	2.000

Keys

Description	EAN 4007220
STS D 4 mm	205020



Flexible shaft drive



Flexible shaft drives are multi-speed machines. They cover a wide rotational speed range and can be steplessly adjusted electronically or via gears to match individual tool requirements. Flexible shaft drives have very high drive outputs.
They can also be used with compact handpieces or extensions to work in difficult-to-reach areas.

Areas of application

Flexible shaft drives can be used for almost all jobs. They are used successfully in many industrial sectors for different processes. The rotational speed control allows the use of various tools on one single drive.

The PFERD product range

PFERD offers various types of flexible shaft drives, as well as a comprehensive range of matching flexible shafts, handpieces, angle drives, drum drives and special drives.

PFERD flexible shaft drives and their accessories are extremely robust, technically up to date and incorporate the latest ergonomic findings and requirements. This product range was developed especially for the economic use of grinding, milling, brushing, cut-off and polishing tools and covers a wide rotational speed range (40,000–100 RPM) and power range (6,100–500 watts).

Advantages

- Very compact and ergonomic handpieces.
- Very low weight of the handpieces.
- Drives that are very robust and designed for continuous use (Mammoth drives, Master Grinder).
- Sophisticated.
- Very high performance.
- Highly versatile.
- Simple power supply.
- Low-maintenance.
- Easy to service.
- Economical.

Standards, safety, general guidelines

Electrical safety
PFERD flexible shaft drives comply with the standard "Safety for Hand-Guided Motor-Driven Electric Tools".

1. Earthed electric drives (protection class I)
This design is indicated by the protective earthing ⏚ sign:
- Mini-Mammoth Electronic (page 101)
- Mammoth Electronic (page 100, 102)
- Mammoth MD (page 103)
- Maxi-Mammoth Electronic (page 104)
- Master Grinder SD (page 105)

2. Insulated electric grinders (protection class II)
This design is indicated by the insulation sign ⧈ and the supplement "SI":
- RUER 5/250 SI (page 98)
- RUER 10/250 SI (page 98)
- RUER 15/150 SI (page 99)
- RUER 15/60 SI (page 99)
- RUER 15/30 SI (page 99)
- RUG 19/120 SI (page 99)
- RUER 8/180 SI (page 101)

3. Safety extra-low voltage/protective separation
When using alternating current voltage in boilers, tanks, pipelines and similar narrow spaces made of electrically conductive materials, a safety extra-low voltage of 42 volts or protective separation must be used.

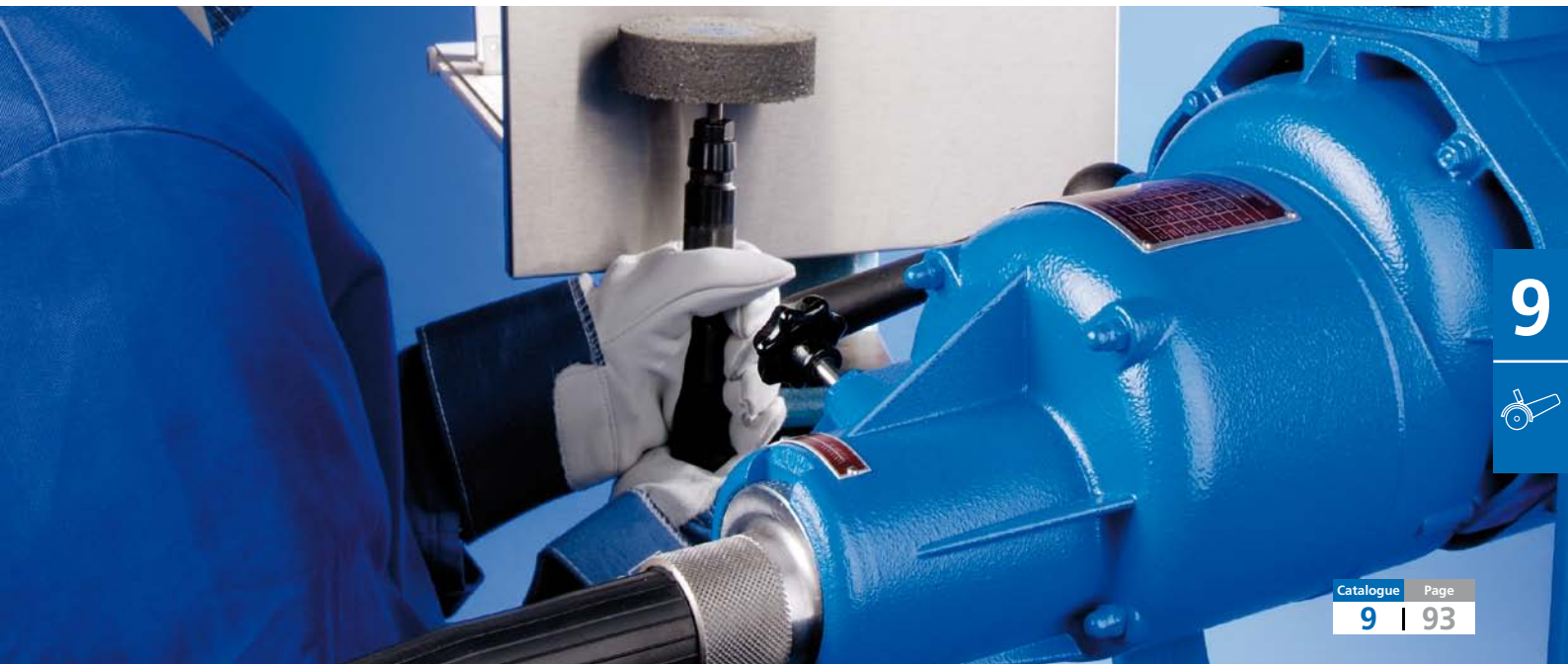
3.1 Electric grinders for safety extra-low voltage (protection class III)
These drives are operated with no more than 42 volts. The following drives are available in 42-volt designs:
- Mammoth MD (page 103)
- Master Grinder SD (page 105)

3.2 Protective separation
For flexible shaft tool drives, one alternative to a safety extra-low voltage is to isolate the drive motor from the mains voltage using a transformer of the same voltage rating.

PFERD electric grinders comply with:
- EC Machinery Directive
- Low Voltage Directive
- Electromagnetic Compatibility

PFERD electric grinders bear the CE mark. CE

Any special regulations (e.g. on the use of safety extra-low voltage) or country-specific regulations must be observed.



Flexible shaft drive
General information

Criteria for selecting the optimum flexible shaft drive

The most important prerequisite for cost-effective work is the selection of the optimum tool. The appropriate tool drive is selected taking the following criteria into consideration:

1. Design, shape and size
Each type of application places specific demands on the shape and size of the tool drive. The different designs can be used for various applications: The ideal tool drive should be selected for the task at hand depending on the dimensions, accessibility, type and frequency of the application.

2. Rotational speed
The tool drive should always be selected according to the rotational speed and cutting speed recommendation for the tool. Please refer to catalogue sections 2–8 for this recommendation.

3. Power output
The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the stock removal properties of the material to be machined, the cutting characteristics of the tool, the tool diameter, the contact surface and the contact pressure.

4. Tool mounting
Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to pages 116–120 for an overview of the collets and drive spindle extensions.

If you have any further questions, your personal PFERD sales representative will be happy to help you.

Flexible shafts (BW)

Flexible shafts consist of three components which can be combined in different ways:

Flexible core (SE)
The flexible core consists of 4 to 10 layers of wire, conforming to DIN 2076, and is specially designed for high-speed clockwise rotation. The coupling is securely press-fitted to the core. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated. The core and casing must be degreased and new special shaft grease must be applied to the core.

Flexible casing (SCH)
The flexible casing consists of oil-resistant rubber; the interior being a flat steel spiral and the outside being solid rubber. The connection couplings are pressed on firmly and encased in a rubber sheath as reinforcement.

Handpiece (HA)
The handpieces are light and easy to handle in relation to their power output transmission, and cover a wide rotational speed range. Because of low noise emission, continuous operation with little fatigue is possible. Replaceable collets or the special shank mounting for morse cones allow various tools to be mounted. The sliding coupling allows quick handpiece changes.

Repair
It is not possible to repair cores and flexible casings. We recommend replacement with pre-assembled new parts.

Radius of curvature
When using flexible shafts, please ensure that the shafts are not bent beyond the specified radius of curvature. The smallest possible radius of curvature is given for each flexible shaft.



How to find the matching flexible shaft to your drive

On the following double page, you will find a flexible shaft selection for the individual drives in accordance with the following explanation.

Flexible shafts and handpieces/attachments must always be selected according to the required rotational speed and power output. Maximum cost-effectiveness is achieved through the combination of a high-performance tool and an optimal drive.

❶ Drive
Alternative drive with DIN 10 connection. (Exceptions DIN 15).

❷ Flexible shaft (BW)
Possible flexible shafts.

❸ Catalogue page
Reference to the catalogue page on which the appropriate flexible shaft and handpieces are shown.

❹ Rotational speed [RPM]/power output [watts]
Rotational speed and power output ranges for which the flexible shaft is suitable.
Power output and rotational speed range of the drive system.

❺ Rotational speed and power output of the flexible shafts and handpieces

❻ Connection
Drive-side connection DIN 10 / DIN 15 and handpiece side connections (G16 to G35 and DPF, SRF).

❼ Suitable flexible shaft
● ideally suitable
❍ suitable
- unsuitable

❽ Handpieces/attachments
Please select your shape and design.

			❸ see page ▶	102	102	103	99	98	98	100
			❶ Drive motor with / without overdrive ST103 ▶	MEW 18/150 + ST103	ME 22/150 + ST103	MD 10 + ST103	RUG 19/120 SI + ST103	RUER 5/250 SI	RUER 10/250 SI	MEW 18/240
			❹ Power output [watts]: ▶	1,500	2,200	736	1,250	300	660	1,500
			❹ Rot. speed range [RPM]: ▶	40,000–15,000	40,000–15,000	36,000–24,000–17,100–9,600–6,300–4,800–2,550	36,000–18,000–9,000	25,000–11,000	25,000–11,000	24,000–100
Flexible shafts and accessories ▼	**❸ see page ▼**	**❺ Power output [watts] ▼**	**❺ Drive [RPM] ▼**							
❷ Flexible shaft										
BW 4 ZG DIN 10 (G16)	106	500–300	40,000–15,000	❼ ❍	❍	●	●	●	●	❍
BW 4 PST-T DIN 10 ❻	112	450–100	7,650–1,500	–	–	❍	–	–	–	❍
BW 6 ZG DIN 10 (G16)	106	1,460–660	25,000–11,000	●	●	●	●	●	●	●
...										
❽ BW – handpieces										
WZ 4 A G16	113	500–300	20,000	●*	●*	●*	●*	●*	●*	●*
BSVH 24 (G16)	121	500–300	5.3 m/s	●*	●*	●*	●*	●*	●*	●*
WZ 6 DPF/SRF	113	1,460–660	18,000	❍*	❍*	●*	●*	●*	●*	❍*
...										

❼ ● = ideally suitable ❍ = suitable – = unsuitable * = not with max. shaft rotational speed



Flexible shaft drive
Suitable drives and flexible shafts

			see page ▶	102	102	103	99	98	98	100
			Drive motor with / without overdrive ST103 ▶	MEW 18/150 + ST103	ME 22/150 + ST103	MD 10 + ST103	RUG 19/120 SI + ST103	RUER 5/250 SI	RUER 10/250 SI	MEW 18/240
			Power output [watts]: ▶	1,500	2,200	736	1,250	300	660	1,500
			Rot. speed range [RPM]: ▶	40,000–15,000	40,000–15,000	36,000–24,000–17,100–9,600–6,300–4,800–2,550	36,000–18,000–9,000	25,000–11,000	25,000–11,000	24,000–100
Flexible shafts and accessories ▼	**see page ▼**	**Power output [watts] ▼**	**Drive [RPM] ▼**							
Flexible shafts										
BW 4 ZG DIN 10 (G16)	106	500–300	40,000–15,000	❍	❍	●	●	●	●	❍
BW 4 PST-T DIN 10	112	450–100	7,650– 1,500	–	–	❍	–	–	–	❍
BW 6 ZG DIN 10 (G16)	106	1,460–660	25,000–11,000	●	●	●	●	●	●	●
BW 6 Z DIN 10 (DPF or SRF)	107	1,460–600	25,000–11,000	❍	❍	●	●	●	●	❍
BW 7 ZG DIN 10 (G22)	108	1,760–800	25,000–11,000	●	●	●	●	–	●	●
BW 7 ZGU DIN 10 2M (G22)	108	1,760–800	25,000–11,000	●	●	●	●	–	●	●
BW 7 PST-T DIN 10	112	1,000–370	4,250– 1,500	–	–	❍	–	–	–	❍
BW 10 ZG DIN 10 (G28)	109	2,450–140	18,000– 750	❍	❍	●	❍	–	❍	●
BW 10 ZG DIN 10 2M (G28)	109	2,450–140	18,000– 750	❍	❍	●	❍	–	❍	●
BW 10 ZG DIN 15 (G28)	109	2,450–140	18,000– 750	–	–	–	–	–	–	–
BW 12 ZGA DIN 10 (G28)	110	6,280–525	12,000– 850	–	–	❍	❍	–	–	●
BW 12 ZGA DIN 15 (G28)	110	6,280–525	12,000– 850	–	–	–	–	–	–	–
BW 12 KG DIN 10 (G35)	111	6,280–525	10,000– 850	–	–	❍	❍	–	–	●
BW 12 KG DIN 15 (G35)	111	6,280–525	10,000– 850	–	–	–	–	–	–	–
BW 15 KG DIN 15 (G35)	111	5,860–735	7,300– 1,000	–	–	–	–	–	–	–
BW – handpieces										
WZ 4 A G16	113	500–300	20,000	●*	●*	●*	●*	●*	●*	●*
BSVH 24 (G16)	121	500–300	5,3 m/s	●*	●*	●*	●*	●*	●*	●*
WZ 6 DPF/SRF	113	1,460–660	18,000	❍*	❍*	●*	●*	●*	●*	❍*
WZT 6 3.0 DPF/SRF	113	1,460–660	18,000	❍*	❍*	●*	●*	●*	●*	❍*
WZT 6 45° 6.0 DPF/SRF	113	1,460–660	18,000	❍*	❍*	●*	●*	●*	●*	❍*
WZ 7 B G22	113	1,760–800	17,100	❍*	❍*	●*	❍*	–	●*	●*
BSVH 36 (G22 + G28)	121	1,760–800	2,3 m/s	❍*	❍*	●*	❍*	–	●*	●*
WZ 7 45° G22	113	1,760–800	17,100	❍*	❍*	●*	❍*	–	●*	●*
WZ 10 B G28	113	2,450–140	17,100	❍	❍	●	❍	–	❍	●
WZ 10 45° G28	113	2,450–140	17,100	❍	❍	●	❍	–	❍	●
FSH G28	113	2,450–140	12,000	–	–	❍*	❍*	–	–	●*
BSG 10/35 E G28	114	2,450–140	7,000	–	–	❍*	–	–	–	●*
BSG 10/50 E G28	114	2,450–140	7,000	–	–	❍*	–	–	–	●*
WT 7 E M14 G22	115	1,760–800	25,000	●	●	●	●	–	●	●
BSVH 41 (G22)	121	1,760–800	1,6 m/s	●	●	●	●	–	●	●
WT 10 H G28	115	2,450–140	8,500	–	–	❍*	–	–	–	●*
WRS 12 ZGA (G28)	114	6,280–525	12,000– 850	–	–	–	–	–	–	●*
WRS WT 10 H (G28)	114	2,450–140	8,500	–	–	–	–	–	–	●*

● = ideally suitable ❍ = suitable – = unsuitable * = not with max. shaft rotational speed

100	101	99	102	102	104	105	103	101	99	99	99
ME 22/240	RUER 8/180 SI	RUER 15/150 SI	MEW 18/150	ME 22/150	MME 40/150 DIN 15	SD 25-40 DIN 15	MD 10	MMEW 11/120	RUG 19/120 SI	RUER 15/60 SI	RUER 15/30 SI
											
2,200	600	1,050	1,500	2,200	4,000	1,840	736	800	1,250	1,050	1,050
24,000–100	18,000–500	15,000–6,800	15,000–100	15,000–100	15,000–100	13,500–7,300–5,100–2,700–1,700–1,000	12,000–8,000–5,700–3,200–2,100–1,600–850	12,000–800	12,000–6,000–3,000	5,900–2,800	3,000–1,400
❍	❍	❍	❍	❍	–	–	–	–	–	–	–
❍	●	❍	❍	❍	–	–	❍	●	❍	●	❍
●	●	❍	❍	❍	–	–	❍	❍	❍	–	–
❍	●	❍	❍	❍	–	–	❍	❍	❍	–	–
●	❍	❍	❍	❍	–	–	❍	❍	❍	–	–
●	❍	❍	❍	❍	–	–	❍	❍	❍	–	–
❍	❍	–	❍	❍	–	–	●	●	❍	●	●
●	–	●	●	●	–	–	●	❍	●	❍	❍
●	–	●	●	●	–	–	●	❍	●	❍	❍
–	–	–	–	–	●	●	–	–	–	–	–
●	–	❍	●	●	–	–	❍	–	●*	–	–
–	–	–	–	–	●	●	–	–	–	–	–
●	–	❍	●	●	–	–	❍	–	❍	–	–
–	–	–	–	–	●	●	–	–	–	–	–
–	–	–	–	–	●	●	–	–	–	–	–
●*	❍*	❍*	❍*	❍*	–	–	–	–	–	–	–
●*	❍*	❍*	❍*	❍*	–	–	–	–	–	–	–
❍*	●*	●*	●*	●*	–	–	❍*	❍*	❍*	–	–
❍*	●*	●*	●*	●*	–	–	❍*	❍*	❍*	–	–
❍*	●*	●*	●*	●*	–	–	❍*	❍*	❍*	–	–
●*	❍*	❍*	❍*	❍*	–	–	❍*	❍*	❍*	–	–
●*	❍*	❍*	❍*	❍*	–	–	❍*	❍*	❍*	–	–
●*	❍*	❍*	❍*	❍*	–	–	❍*	❍*	❍*	–	–
●	–	●	●	●	●	●	●	❍	●	❍	–
●	–	●	●	●	●	●	●	❍	●	❍	–
●*	–	●*	●*	●*	●*	●*	●*	❍*	●*	❍*	–
●*	–	❍*	●*	●*	●*	●*	●*	–	●*	❍*	❍*
●*	–	❍*	●*	●*	●*	●*	●*	–	●*	❍*	❍*
●	❍	❍	❍	❍	–	–	❍	❍	❍	–	–
●	❍	❍	❍	❍	–	–	❍	❍	❍	–	–
●*	–	❍*	●*	●*	●*	●*	●*	–	❍*	–	–
●*	–	–	●*	●*	●*	●*	❍*	–	❍*	–	–
●*	–	–	●*	●*	●*	●*	●*	–	❍*	–	–

Flexible shaft drive
Multi-speed machines RUER



Record Universal Motor RUER 5/250 SI ⧈

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Pipe stand protects the drive.

Included in delivery:
3 m power cable, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.
- Drive with foot switch, on request.

PFERDVALUE:

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUER 5/250 SI 230 V	267325	25,000–11,000	230	500	300	10	285 x 57 x 102	2.140



Record Universal Motor RUER 10/250 SI ⧈

Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Pipe stand protects the drive.

Included in delivery:
3 m power cable, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUER 10/250 SI 230 V	348116	25,000–11,000	230	1,050	660	10	300 x 75 x 140	3.110





Record Universal Motors
RUER 15/150 SI □, RUER 15/60 SI □, RUER 15/30 SI □



Special features:
- Stepless rotational speed control.
- Digital electronics for constant rotational speed.
- Overload protection.
- Smooth start-up to protect people, tools and the machine.
- Restart protection in case of power failure.
- Pipe stand protects the drive.

Included in delivery:
3 m power cable, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:

Energy Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUER 15/150 SI 230 V	101629	15,000– 6,800	230	1,530	1,050	10	390 x 130 x 140	3.725
RUER 15/60 SI 230 V	101650	5,900–2,800	230	1,530	1,050	10	390 x 130 x 140	3.725
RUER 15/30 SI 230 V	101667	3,000–1,400	230	1,530	1,050	10	390 x 130 x 140	3.725

Record Universal Motor RUG 19/120 SI □



Special features:
- Speed-adjustable via excentric gears to 3,000, 6,000, 12,000 RPM.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Pipe stand protects the drive.
- Overdrive possible.

Included in delivery:
3 m power cable, 2 allen keys.

Recommendations for use:
- For daily, continuous operation in single or two-shift operation, we recommend our 3-phase AC flexible shaft drives (see pages 100–105).

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:

Time Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consump-tion [watts]	Power output [watts]	Flexible shaft con-nection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUG 19/120 SI 230 V	348109	12,000, 6,000, 3,000	230	1,700	1,250	10	530 x 95 x 175	9.200



Flexible shaft drive
Multi-speed machine Mammoth Electronic and accessories



Mammoth Electronic ME 22/240 ⏚, MEW 18/240 ⏚

Special features:
- With max. rotational speed 24,000 RPM.
- Most powerful and stable torque.
- Stepless rotational speed control.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Very low noise generation.
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- High torque, even within low rotational speed ranges.
- Easy to service, easy-to-remove housing with four main modules.

Included in delivery:
ME 22/240 with 3-phase AC
4 m power cable without plug, allen key.
MEW 18/240 with 1-phase AC
4 m power cable with plug, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:
Energy Saving | Waste Saving | Time Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
ME 22/240 400V	101681	24,000–100	380–480	2,700	2,200	10	445 x 200 x 320	24.500
MEW 18/240 230V	101674	24,000–100	200–240	2,000	1,500	10	445 x 200 x 320	24.500

Accessories for Mammoth Electronic



(1) (2) (3) (4) (5) (6) (7) (8+9)

(1) Remote control cable FSTK 22
For extension of the removable operating console with cover plate for protection of the drive (cable length 4 m).

(2) Foot switch FSE 22
For easy drive switch-on/switch-off (cable length 4 m).
With protective cover.

(3) Base FME
Stable base with pivot device.

(4) Overhead trolley B1 ME
Drive can be used in hanging position, shaft support available.

(5) Overhead trolley B2 ME
Drive on castors can be used in hanging position.

(6) Base trolley WA D ME
Trolley with tool tray, 4 steerable wheels of which 2 are lockable.
Dimensions L x W x H: 500 x 500 x 510 mm.

(7) Shaft support WAL 4-12
Support for flexible shaft that can be mounted onto the side of the drive.

(8) Direct connection DA 33 DIN 10/G28
For direct (rigid) connection of handpieces with the sliding coupling G28 to flexible shaft drive motors with DIN 10 connection.

(9) Pre-assembled replacement core SE DA 33 DIN 10/G28 for direct connection, please order separately if required.

Description	EAN 4007220	Description	Flexible shaft connection [DIN]	Sliding coupling [G]	Net weight [kg]
FSTK 22	772812	(1) Remote control cable	-	-	0.635
FSE 22	772799	(2) Foot switch	-	-	1.000
FME	617977	(3) Base	-	-	2.000
B1 ME	617984	(4) Overhead trolley	-	-	1.200
B2 ME	617991	(5) Overhead trolley on castors	-	-	1.800
WA D ME	618028	(6) Base trolley	-	-	14.200
WAL 4-12	618004	(7) Shaft support	-	-	0.460
DA 33 DIN 10/G28	179475	(8) Direct connection	10	28	0.305
SE DA 33 DIN 10/G28	284179	(9) Replacement core	10	28	0.107

Record Universal Motor RUER 8/180 SI ⧈ incl. combi-speed control



Special features:
- Stepless rotational speed control.
- Electronics for constant rotational speed.
- Overload protection.
- Restart protection in case of power failure.
- The combi-speed control KDR 8/180 SI can be used as a table-top or foot control. In table-top operation the rotational speed can be controlled individually using the potentiometer. For foot-controlled operation, the maximum rotational speed is preset using the potentiometer. Control is then achieved using the foot pedal. Only for use with motor RUER 8/180 SI.
- Very low noise generation.
- Particularly suitable for use in tool and mould construction.

Included in delivery:
2.5 m power cable, 2.25 m connection cable, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:

Noise Filter · Energy Saving · Time Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
RUER 8/180 SI 230 V	807408	18,000–500	230	1,020	600	10	222 x 98 x 98	1.650

Dimensions and the net weight refer to the motor.

Accessories for tool drives RUER

Table stand TS L 1400 with screw clamp for attachment to bench tops up to 65 mm in thickness.
The telescopic system allows individual height adjustment up to maximum 140 cm. Max. 10 kg carrying capacity.

Support TSA L 1400
This support matches the table stand and allows optimum placement of the various handpieces, ready for use.

Ordering notes:
- Please order support separately.



Description	EAN 4007220	Description	Net weight [kg]
TS L 1400	657683	Table stand	2.170
TSA L 1400	657690	Handpiece support	0.450

Mini-Mammoth Electronic MMEW 11/120 ⏚



Special features:
- Stepless rotational speed control.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Very low noise generation.
- Mounted grinding and polishing tools with diameter ≥ 60 mm are not suitable for continuous use with the Mini-Mammoth Electronic.

Included in delivery:
2.5 m power cable, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately. Hanging design, on request. Version with foot switch, on request.

PFERDVALUE:

Noise Filter · Energy Saving · Time Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
MMEW 11/120 230 V	657478	12,000-800	230	1,100	800	10	270 x 160 x 180	7.900

Flexible shaft drive
Multi-speed machine Mammoth Electronic and accessories



Mammoth Electronic ME 22/150 ⏚, MEW 18/150 ⏚

Special features:
- Stepless rotational speed control (with overdrive ST 103 DIN 10 up to max 40,000 RPM).
- Overload protection.
- Restart protection in case of power failure.
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.

Included in delivery:
ME 22/150 with 3-phase AC
4 m power cable without plug, allen key.

MEW 18/150 with 1-phase AC
4 m power cable with plug, 2 allen keys.

Ordering notes:
- The drive is supplied without flexible shaft, please order separately.

PFERDVALUE:

Noise Filter
Energy Saving | Waste Saving | Time Saving | Resource Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
ME 22/150 400 V	758694	15,000–100	380–480	2,700	2,200	10	445 x 200 x 320	24.500
MEW 18/150 230 V	788738	15,000–100	200–240	2,000	1,500	10	445 x 200 x 320	24.500

Accessories for Mammoth Electronic



(1) (2) (3) (4) (5) (6) (7) (8+9) (10+11)

(1) Remote control cable FSTK 22
For extension of the removable operating console with cover plate for protection of the drive (cable length 4 m).

(2) Foot switch FSE 22
For easy drive switch-on/switch-off (cable length 4 m).
With protective cover.

(3) Base FME
Stable base with pivot device.

(4) Overhead trolley B1 ME
Drive can be used in hanging position, shaft support available.

(5) Overhead trolley B2 ME
Drive on castors can be used in hanging position.

(6) Base trolley WA D ME
Trolley with tool tray, 4 steerable wheels of which 2 are lockable.
Dimensions L x W x H: 500 x 500 x 510 mm.

(7) Shaft support WAL 4-12
Support for flexible shaft that can be mounted onto the side of the drive.

(8) Overdrive ST 103 DIN 10
Transmits the drive operating speed in the ratio 1:3.
1 socket spanner is included.

Operating speeds with Mammoth Electronic:
36,000–15,000 RPM

Drive operating speed n max for overdrive:
12,000 RPM

Please refer to page 115 for detailed information regarding overdrive ST 103.

(9) Replacement core SE ST 103 DIN 10

(10) Direct connection DA 33 DIN 10/G28
For direct (rigid) connection of handpieces with the sliding coupling G28 to flexible shaft drive motors with DIN 10 connection.

(11) Pre-assembled replacement core SE DA 33 DIN 10/G28 for direct connection, please order separately if required.

Description	EAN 4007220	Description	Handpiece side connection [DIN]	Sliding coupling [G]	Net weight [kg]
FSTK 22	772812	(1) Remote control cable	-	-	0.635
FSE 22	772799	(2) Foot switch	-	-	1.000
FME	617977	(3) Base	-	-	2.000
B1 ME	617984	(4) Overhead trolley	-	-	1.200
B2 ME	617991	(5) Overhead trolley on castors	-	-	1.800
WA D ME	618028	(6) Base trolley	-	-	14.200
WAL 4-12	618004	(7) Shaft support	-	-	0.460
ST 103 DIN 10	182673	(8) Overdrive	10	-	1.600
SE ST 103 DIN 10	190524	(9) Replacement core	10	-	0.070
DA 33 DIN 10/G28	179475	(10) Direct connection	10	28	0.305
SE DA 33 DIN 10/G28	284179	(11) Replacement core	10	28	0.107

Mammoth MD 10

Special features:
- Speed-adjustable via excentric gears: 850, 1,600, 2,100, 3,200, 5,700, 8,000, 12,000 RPM.
- Restart protection in case of power failure.

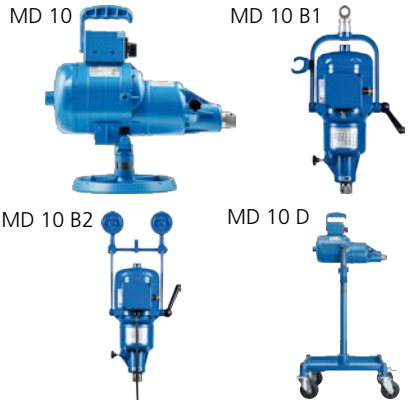
Recommendations for use:
- Suitable for universal use in milling, grinding and polishing work.
- Grinding and polishing tools with diameter ≥ 100 mm are not suitable for use with the Mammoth.

Included in delivery:
3 m power cable without plug, 2 allen keys.

Ordering notes:
- 3-phase AC design for voltages from 42 to 440 volts and 50 or 60 Hz is available on request at an extra charge.
- The drive motor is supplied without flexible shaft, please order separately.

PFERDVALUE:

Waste Saving Time Saving



Description	EAN 4007220	Type	Three-phase current 50 Hz [volts]	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Net weight [kg]
MD 10 400 V 50 Hz	181324	with base	400	1,000	736	10	16.500
MD 10 B1 400 V 50 Hz	181331	B1 hanging	400	1,000	736	10	16.000
MD 10 B2 400 V 50 Hz	181348	B2 on castors, hanging position	400	1,000	736	10	17.000
MD 10 D 400 V 50 Hz	181355	D with base trolley	400	1,000	736	10	39.000

Base trolley D

Base trolley, type D (without machine). 4 steerable wheels, 2 wheels with parking brake. Dimensions L x W x H: 460 x 460 x 605 mm.



Description	EAN 4007220	Net weight [kg]
WA D	182666	23.000

Overdrive ST 103 DIN 10

The overdrive ST 103 DIN 10 transmits the drive operating speed in a ratio of 1:3.

Recommendations for use:
- **Operating speeds with Mammoth** 2,550, 4,800, 6,300, 9,600, 17,100, 24,000, 36,000 RPM
- **Drive operating speed n max.** 12,000 RPM

Included in delivery:
Drive core, 1 socket spanner.

Ordering notes:
- Please refer to page 115 for detailed information regarding overdrive ST 103.

Safety notes:
- Observe the highest rotational speed for the flexible shaft used


SE ST 103 DIN 10

Description	EAN 4007220	Net weight [kg]
ST 103 DIN 10	182673	1.600
SE ST 103 DIN 10	190524	0.070

Direct connection DA 33

Direct connection DA 33 DIN 10/G28 For direct (rigid) connection of handpieces with the sliding coupling G28 to flexible shaft drive motors with DIN 10 connection.

Ordering notes:
- Please order pre-assembled replacement core SE DA 33 DIN 10/G28 for direct connection separately, if required.


SE DA 33 DIN 10/G28

Description	EAN 4007220	Flexible shaft connection [DIN]	Sliding coupling [G]	Net weight [kg]
DA 33 DIN 10/G28	179475	10	28	0.305
SE DA 33 DIN 10/G28	284179	10	28	0.107



Maxi-Mammoth Electronic MME 40/150

Special features:
- Stepless rotational speed control 0–15,000 RPM.
- MME 40/150 with 3-phase AC.
- I/O interface for remote control with safety extra-low voltage.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.
- Restart protection in case of power failure.
- Very low noise generation.
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- High torque over the entire rotational speed range.
- Base with pivot device for easy guidance of flexible shafts and adherence to the max. permissible radius of curvature.
- Suitable for tools up to diameter 300 mm.
- Easy to service, easy-to-remove housing with four main modules.

Recommendations for use:
- The Maxi-Mammoth Electronic is the most powerful drive motor provided by PFERD. It is suitable for use in combination with flexible shafts for grinding and polishing work with high-power output requirements.

Included in delivery:
4 m power cable without plug, 2 allen keys.

Ordering notes:
- The drive motor is supplied without flexible shafts, please order separately.

PFERDVALUE:

Noise Filter
Energy Saving
Waste Saving
Time Saving
Resource Saving

Description	EAN 4007220	Rotational speed [RPM]	Voltage [volts] 50–60 Hz	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]
MME 40/150 400 V	832486	15,000–100	340–480	6,100	4,000	15	470 x 220 x 490	36.160

Accessories for Maxi-Mammoth Electronic



(1)



(2)



(3)

(1) Remote control cable FSTK 40
For extension of the removable operating console with cover plate for protection of the motor (cable length 4 m).

(2) Foot switch FSE 22
For easy drive switch-on/switch-off (cable length 4 m) via the remote control interface. With protective cover.

(3) Base trolley WA D ME
Trolley with tool tray and 4 steerable wheels, 2 with parking brake.
Dimensions L x W x H: 500 x 500 x 510 mm.

Description	EAN 4007220	Voltage [volts]	Description	Net weight [kg]
FSTK 40	847053	24	(1) Remote control cable	0.635
FSE 22	772799	24	(2) Foot switch	1.000
WA D ME	618028	-	(3) Base trolley	14.200





For multi-speed machines Mammoth Electronic
Suspension device with steplessly height-adjustable operating console on request.

Master Grinder SD 25-40, SD 25-40 D

SD 25-40



SD 25-40 D



Special features:
- Speed-adjustable via excentric gears: 1,000, 1,700, 2,700, 5,100, 7,300, 13,500 RPM.

Recommendations for use:
- The Master Grinder is used for heavy grinding work with grinding wheels with ceramic- or fibre-reinforced bonds, unmounted flap wheels and industrial brushes with a diameter ≥ 100 mm.

Included in delivery:
3 m power cable without plug, 2 allen keys.

Ordering notes:
- If the desired voltage is not specified, we will supply you with a 50-Hz 3-phase AC motor set to 400 volts.
- 3-phase AC design for voltages from 42 to 440 volts and 50 or 60 Hz is available on request at an extra charge.
- The drive motors are supplied without a flexible shaft, please order separately.
- Special designs are available on request:
  - B1 hanging
  - B2 on castors, hanging position

PFERDVALUE:

Waste Saving | Time Saving

Description	EAN 4007220	Type	Three-phase current 50 Hz [volts]	Power consumption [watts]	Power output [watts]	Flexible shaft connection [DIN]	Net weight [kg]
SD 25-40 400 V 50 Hz	181416	A with base	400	2,400	1,840	15	30.000
SD 25-40 D 400 V 50 Hz	181447	D with base trolley	400	2,400	1,840	15	57.000

Base trolley D

Base trolley, type D (without machine).
4 steerable wheels, 2 wheels with parking brake.
Dimensions L x W x H: 460 x 460 x 605 mm.



Description	EAN 4007220	Net weight [kg]
WA D	182666	23.000



Flexible shaft drive
Flexible shaft 4 ZG, 6 ZG and handpieces

Flexible shaft 4 ZG
40,000–24,000 RPM / 500 watts

Flexible shaft 6 ZG
25,000–11,000 RPM / 1,460 watts

BW 4 ZG
BW 6 ZG

SE 4 ZG
SE 6 ZG

SCH 4 ZG
SCH 6 ZG



Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- **Flexible shaft 4 ZG**
  With low power output requirements, < 300 watts, it is possible to fall below the rotational speed range. The radius of curvature should not be smaller than 100 mm.
- **Flexible shaft 6 ZG**
  With low power output requirements, < 660 watts, it is possible to fall below the rotational speed range. The radius of curvature should not be smaller than 140 mm.

Ordering notes:
- Special lengths available on request.

Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	*	Net weight [kg]
Flexible shaft (incl. handpiece 4 ZGB G16)								
BW 4 ZG DIN 10	181751	40,000–24,000	500–300	10 / 30	16 / 16	13 x 1,390	*	0.600
BW 6 ZG DIN 10	658420	25,000–11,000	1,460–660	10 / 30	16 / 16	16 x 1,643	-	1.150
Replacement core								
SE 4 ZG DIN 10/G16	182079	40,000–24,000	500–300	10 / M10	16 / 3.5/2.45	4 x 1,329	*	0.120
SE 6 ZG DIN 10/G16	657829	25,000–11,000	1,460–660	10 / M10	16 / 3.5/2.45	6 x 1,583	-	0.270
Replacement casing								
SCH 4 ZG DIN 10/G16	182291	-	-	10 / 30	16 / 16	13 x 1,300	*	0.330
SCH 6 ZG DIN 10/G16	658390	-	-	10 / 30	16 / 16	16 x 1,553	-	0.740

* Cores and hoses with double-sided sliding coupling on request.



Maintenance sets for the maintenance of flexible shafts see page 122.

Handpieces



HA 4 ZGB G16



HA 4 ZGE G 16 INOX



WZ 4 A G 16

Handpiece HA 4 ZGE G16 INOX
- Corrosion protection and superior look due to stainless steel variant.
- Elastically suspended spindle.

Angle handpiece WZ 4 A G16
- When used with a 6 mm collet, the maximum permitted rotational speed is 15,000 RPM.

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
HA 4 ZGB G16	313374	6	40,000	19.5 x 110	-	9	0.140
HA 4 ZGE G16 INOX	101780	6	40,000	20 x 107	-	9	0.146
WZ 4 A G16	323267	3	20,000	43 x 111	1:1	10	0.270

For all available collets, see page 116.



Belt grinder attachment holder BSVH 24
For type with belt grinder attachment, see page 121.

Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- With low power output requirements, < 660 watts, it is possible to fall below the rotational speed range.
- The radius of curvature should not be smaller than 140 mm.

Ordering notes:
- Special lengths available on request.

Flexible shaft 6 Z

11,000–24,000 RPM / 1,460 watts

BW 6 Z DIN 10



DPF

BW 6 Z DIN 10



SRF

Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]
Flexible shaft (without handpiece having duplex spring coupling DPF)							
BW 6 Z DIN 10/DPF oH	657720	24,000–11,000	1,460–600	10 / 30	DPF / 10	12 x 1,250	0.800
Flexible shaft (without handpiece having expansion ring coupling SRF)							
BW 6 Z DIN 10/SRF oH	657737	24,000–11,000	1,460–600	10 / 30	SRF / 10	12 x 1,250	0.800



Maintenance sets for the maintenance of flexible shafts see page 122.

Handpieces



HA 6 Z DPF/SRF



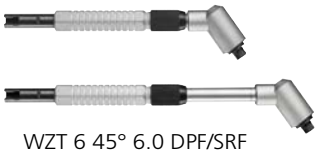
HA 6 Z SP 3.0 DPF/SRF



WZ 6 DPF/SRF



WZT 6 3.0 DPF/SRF



WZT 6 45° 6.0 DPF/SRF

All handpieces are suitable for use with the handpiece-side couplings DPF and SRF.

Handpiece HA 6 Z SP 3.0
- Handpiece with quick-coupling system.
- Handpiece with 2.34 mm collet on request.

Angle handpieces with telescopic system Telescoping fixed to maximum length
- WZT 6 3.0 – Dimensions 35 x 255 mm.
- WZT 6 45° 6.0 – Dimensions 45 x 260 mm.

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
HA 6 Z DPF/SRF	657751	6	24,000	DPF/SRF / 10	24 x 140	-	13	0.131
HA 6 Z SP 3.0 DPF/SRF	657768	3	24,000	DPF/SRF / 10	22 x 139	-	-	0.109
WZ 6 DPF/SRF	657775	6	18,000	DPF/SRF / 10	50 x 170	1.25:1	13	0.225
WZT 6 3.0 DPF/SRF	657782	3	18,000	DPF/SRF / 10	35 x 170	1.38:1	14	0.170
WZT 6 45° 6.0 DPF/SRF	657799	6	18,000	DPF/SRF / 10	45 x 200	1.53:1	13	0.210

For all available collets, see page 116.

Flexible shaft drive
Flexible shaft 7 ZG/ZGU and handpieces

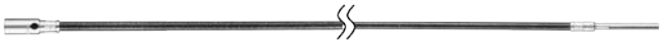
Flexible shaft 7 ZG/ZGU

25,000–11,000 RPM / 1,760 watts

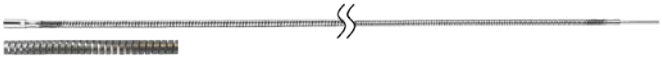
BW 7 ZG
BW 7 ZGU



SE 7 ZG



SE 7 ZGU



SCH 7 ZG
SCH 7 ZGU



Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- With low power output requirements, < 800 watts, it is possible to fall below the rotational speed range.
- The radius of curvature should not be smaller than 140 mm.
- The spiral added to core SE 7 ZGU provides very smooth running for flexible shaft BW 7 ZGU (2 m), particularly in the upper rotational speed range.

Ordering notes:
- Special lengths available on request.

Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	*	Net weight [kg]
Flexible shaft (incl. handpiece 7 ZGA G22)								
BW 7 ZG DIN 10	181768	25,000–11,000	1,760– 800	10 / 30	22 / 22	18 x 1,654	*	1.510
BW 7 ZGU DIN 10 2 m	181775	25,000–11,000	1,760– 800	10 / 30	22 / 22	18 x 2,154	-	2.000
Replacement core								
SE 7 ZG DIN 10/G22	182086	25,000–11,000	1,760– 800	10 / M10	22 / 5/3.85	7 x 1,589	*	0.400
SE 7 ZGU DIN 10/G22 2 m	182093	25,000–11,000	1,760– 800	10 / M10	22 / 5/3.85	7 x 2,089	*	0.600
Replacement casing								
SCH 7 ZG DIN 10/G22	182307	-	-	10 / 30	22 / 22	18 x 1,553	*	0.850
SCH 7 ZGU DIN 10/G22 2 m	182314	-	-	10 / 30	22 / 22	18 x 2,053	*	1.100

* Cores and hoses with double-sided sliding coupling on request.



Flexible shaft adapter BWA G22/DIN 10
(EAN 4007220**918944**)
For coupling flexible shafts or as connector for rigid extensions STV.

Flexible shaft 7 ZG DIN 10 with rigid extension
Dimensions according to customer's requirements. Information about curvature radii on request.



TMS remote switching
Available on handpiece with G22 (2-pole) (EAN 4007220**101711**) in conjunction with ME and TMS shafts.

Handpieces



HA 7 ZGA G22



HA 7 ZGE G22 INOX



WZ 7 45° G22



WZ 7 B G22

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
HA 7 ZGA G22	181928	6	25,000	27 x 132	-	11	0.320
HA 7 ZGE G22 INOX	101797	6	25,000	27 x 128	-	11	0.289
WZ 7 45° G22	303900	6	17,100	57 x 175	1.3:1	6	0.665
WZ 7 B G22	323250	6	17,100	55 x 157	1.3:1	6	0.600

For all available collets, see page 116.





WT 7 E M14 G22
+ BSVH 41

Angle drive WT 7 E M14 G22

The **angle drive** reduces the drive operating speed from 25,000 to 9,300 RPM.
- For fibre discs, grinding wheels and cut-off wheels up to diameter 115 mm (80 m/s).
- For further information, please see page 115.

Angle drive WT 7 E M14 G22
Type with belt grinder attachment holder BSVH 41
For belt grinder attachment holders, see page 121.

Description	EAN 4007220	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Transmission ratio	Spindle thread	Tool mounting [mm]	Net weight [kg]
WT 7 E M14 G22	301708	25,000	72 x 178	2.7:1	M14	22.23	0.660

Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- The radius of curvature should not be smaller than 170 mm.

Ordering notes:
- Special lengths available on request.

Flexible shaft 10 ZG

18,000–750 RPM / 2,450 watts

BW 10 ZG



SE 10 ZG



SCH 10 ZG



Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	*	Net weight [kg]
Flexible shaft (incl. handpiece 10 ZGE G28)								
BW 10 ZG DIN 10	181782	18,000–750	2,450–140	10 / 30	28 / 28	22 x 1,683	*	2.500
BW 10 ZG DIN 10 2 m	181850	18,000–750	2,450–140	10 / 30	28 / 28	22 x 2,173	*	2.950
BW 10 ZG DIN 15	181874	18,000–750	2,450–140	15 / 40	28 / 28	22 x 1,700	-	2.550
Replacement core								
SE 10 ZG DIN 10/G28	182109	18,000–750	2,450–140	10 / M10	28 / 7.5/5.85	10 x 1,600	*	0.650
SE 10 ZG DIN 10/G28 2 m	182116	18,000–750	2,450–140	10 / M10	28 / 7.5/5.85	10 x 2,100	*	0.950
SE 10 ZG DIN 15/G28	182406	18,000–750	2,450–140	15 / M14	28 / 7.5/5.85	10 x 1,611	-	0.700
Replacement casing								
SCH 10 ZG DIN 10/G28	182321	-	-	10 / 30	28 / 28	22 x 1,553	*	1.400
SCH 10 ZG DIN 10/G28 2 m	182338	-	-	10 / 30	28 / 28	22 x 2,053	*	1.550
SCH 10 ZG DIN 15/G28	182444	-	-	15 / 40	28 / 28	22 x 1,570	-	1.400

* Cores and hoses with double-sided sliding coupling on request.



Flexible shaft adapter BWA G28/DIN 10
(EAN 4007220**912515**)
For coupling flexible shafts or as connector for rigid extensions STV.



Flexible shaft 10 ZG with rigid extension
Dimensions according to customer's requirements. Information about curvature radii on request.



Maintenance sets for the maintenance of flexible shafts see page 122.

Handpieces



HA 10 ZGE G28



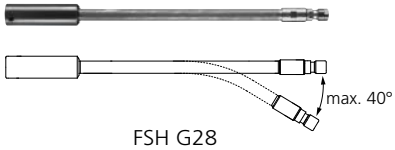
HA 12 ZGA G28



WZ 10 45° G28



WZ 10 B G28



FSH G28



HA 10 ZGE G28 INOX



HA 12 ZGE G28 INOX

Handpieces HA 10 ZGE G28, HA 10 ZGE G28 INOX, HA 12 ZGE G28 INOX
- Elastically suspended spindle.

Flexible special handpiece FSH G28
- This handpiece can be bent once (max. 40°) up to a bending radius of 200 mm (as per customer specification).

Ordering notes:
- Special lengths available on request.

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
HA 10 ZGE G28	181966	6	18,000	33 x 163	-	11	0.515
HA 10 ZGE G28 INOX	101803	6	18,000	33 x 165	-	12	0.540
HA 12 ZGA G28	181959	12	18,000	33 x 162	-	12	0.510
HA 12 ZGE G28 INOX	101827	12	18,000	33 x 165	-	12	0.530
WZ 10 45° G28	303917	6	17,100	57 x 184	1.3:1	6	0.638
WZ 10 B G28	323243	6	17,100	55 x 166	1.3:1	6	0.760
FSH G28	182062	6	12,000	24 x 525	-	11	1.000

For all available collets, see page 116.



Belt sanders BSG
For further information, please see page 114.



Angle drive WT 10 H G28
For further information, please see page 115.



TMS remote switching
Available on handpiece with G28 (2-pole) (EAN 4007220**460252**) in conjunction with ME and TMS shafts.

Flexible shaft drive
Flexible shaft 12 ZGA and handpieces

Flexible shaft 12 ZGA

12,000–850 RPM / 6,280 watts

BW 12 ZGA



SE 12 ZGA



SCH 12 ZGA



Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- The radius of curvature should not be smaller than 240 mm.

Ordering notes:
- Special lengths available on request.

Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	*	Net weight [kg]
Flexible shaft (incl. handpiece 12 ZGA G28)								
BW 12 ZGA DIN 10	181799	12,000–850	6,280–525	10 / 30	28 / 28	25 x 2,173	*	4.250
BW 12 ZGA DIN 15	181881	12,000–850	6,280–525	15 / 40	28 / 28	25 x 2,187	-	4.300
Replacement core								
SE 12 ZGA DIN 10/G28	182130	12,000–850	6,280–525	10 / M10	28 / 7.5/5.85	12 x 2,102	*	1.300
SE 12 ZGA DIN 15/G28	182420	12,000–850	6,280–525	15 / M14	28 / 7.5/5.85	12 x 2,112	-	1.300
Replacement casing								
SCH 12 ZGA DIN 10/G28	182352	-	-	10 / 30	28 / 28	25 x 2,045	*	2.450
SCH 12 ZGA DIN 15/G28	182468	-	-	15 / 40	28 / 28	25 x 2,059	-	2.500

* Cores and hoses with double-sided sliding coupling on request.



Flexible shaft adapter BWA G28/DIN 10
(EAN 4007220**912515**)
For coupling flexible shafts or as connector for rigid extensions STV.

Flexible shaft 12 ZGA with rigid extension
Dimensions according to customer's requirements. Information about curvature radii on request.



Maintenance sets for the maintenance of flexible shafts see page 122.

Handpieces



HA 10 ZGE G28



HA 12 ZGA G28



WZ 10 45° G28



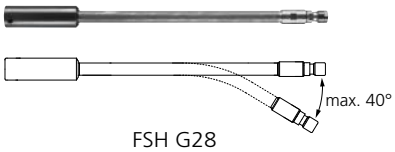
WZ 10 B G28



HA 10 ZGE G28 INOX



HA 12 ZGE G28 INOX



FSH G28

Handpieces HA 10 ZGE G28, HA 10 ZGE G28 INOX, HA 12 ZGE G28 INOX
- Elastically suspended spindle.

Flexible special handpiece FSH G28
- This handpiece can be bent once (max. 40°) up to a bending radius of 200 mm (as per customer specification).

Ordering notes:
- Special lengths available on request.

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
HA 10 ZGE G28	181966	6	18,000	33 x 163	-	11	0.515
HA 10 ZGE G28 INOX	101803	6	18,000	33 x 165	-	12	0.540
HA 12 ZGA G28	181959	12	18,000	33 x 162	-	12	0.510
HA 12 ZGE G28 INOX	101827	12	18,000	33 x 165	-	12	0.530
WZ 10 45° G28	303917	6	17,100	57 x 184	1.3:1	6	0.638
WZ 10 B G28	323243	6	17,100	55 x 166	1.3:1	6	0.760
FSH G28	182062	6	12,000	24 x 525	-	11	1.000

For all available collets, see page 116.



Belt sanders BSG
For further information, please see page 114.



Angle drive WT 10 H G28
For further information, please see page 115.



TMS remote switching
Available on handpiece with G28 (2-pole) (EAN 4007220**460252**) in conjunction with ME and TMS shafts.

Recommendations for use:
- The rotational speed and power output should not fall below or exceed the specified ranges.
- Flexible shaft 12 KG – the radius of curvature should not be smaller than 240 mm.
- Flexible shaft 15 KG – the radius of curvature should not be smaller than 300 mm.

Ordering notes:
- Special lengths available on request.

Flexible shaft 12 KG
flexible shaft 15 KG

10,000–850 RPM / 6,280 watts
7,300–1,000 RPM / 5,860 watts

BW 12 KG
BW 15 KG

SE 12 KG
SE 15 KG

SCH 12 KG
SCH 15 KG



Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]
Flexible shaft (incl. handpiece 12/15 KG MK1 G35)							
BW 12 KG DIN 10	181812	10,000–850	6,280–525	10 / 30	35 / 35	25 x 2,205	5.150
BW 12 KG DIN 15	181904	10,000–850	6,280–525	15 / 40	35 / 35	25 x 2,205	5.200
BW 15 KG DIN 15	181829	7,300–1,000	5,860–735	15 / 40	35 / 35	30 x 2,205	6.500
Replacement core							
SE 12 ZG/KG DIN 10/G35	182123	10,000–850	6,280–525	10 / M10	35 / 11/8.85	12 x 2,102	1.300
SE 12 ZG/KG DIN 15/G35	182413	10,000–850	6,280–525	15 / M14	35 / 11/8.85	12 x 2,108	1.350
SE 15 KG DIN 15/G35	182147	7,300–1,000	5,860–735	15 / M14	35 / 11/8.85	15 x 2,108	2.000
Replacement casing							
SCH 12 ZG/KG DIN 10/G35	182345	-	-	10 / 30	35 / 35	25 x 2,060	2.450
SCH 12 ZG/KG DIN 15/G35	182451	-	-	15 / 40	35 / 35	25 x 2,060	2.500
SCH 15 KG DIN 15/G35	182369	-	-	15 / 40	35 / 35	30 x 2,060	3.750

Handpieces



HA 12/15 KG MK1 G35



HA 12 ZG G35

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Dimensions dia. x length [mm]	Collet group	Safety thread	Tool mounting [mm]	Net weight [kg]
HA 12/15 KG MK1 G35	181973	-	10,000	42 x 143	-	M16 x 1r.	MK 1	1.100
HA 12 ZG G35	181942	12	10,000	42 x 215	12	-	-	1.280

Collets



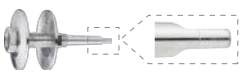
Group	For shank dia.				
	6 mm	8 mm	10 mm	12 mm	1/4 inch
	EAN 4007220				
12	195994	196014	196038	196045	196052

For dimensions see table on page 116.



TMS remote switching
Available on handpiece with G35 (2-pole) (EAN 4007220**101766**) in conjunction with ME, MME and TMS shafts.

Arbors



BO MK1/8 15-35



BO 12/14 1-30



BO SPG 6/6 0-10



BO SPG 6/10 0-10

Please refer to catalogue section 4 and catalogue section 8 for more arbors.

Description	EAN 4007220	Shank mounting	Tool mounting [mm]	Suitable for	Net weight [kg]
BO MK1/18 15-35	182734	MK 1	Dia. 18 x 15-35	Handpiece 12/15 KG	0.800
BO 12/14 1-30	182819	Dia. 12 mm	Dia. 14 x 1-30	Handpiece, tool mounting 12 mm shank	0.200
BO SPG 6/6 0-10	104590	SPG6	Dia. 6 x 0-10	All drives with SPG6	0.035
BO SPG 6/10 0-10	104606	SPG6	Dia. 10 x 0-10	All drives with SPG6	0.035

Flexible shaft drive
Special flexible shafts for inner grinding of pipes

Flexible shafts PST-T for pipe grinding

These special flexible shafts do not have a handpiece for tool mounting and are particularly flexible in the front section. The POLISTAR-TUBE flexible tools are attached directly to the core of the flexible shaft with screws (INOX type). POLINOX flexible tools PNST are screwed on with adapter AD M4 or AD M5 (accessories). This combination is highly suitable for gradual fine grinding and cleaning of inner surfaces of pipes and pipe bends. Both pipe bend ends can be deburred from the entry side.



Recommendations for use:

- Flexible shaft motors with stepless rotational speed regulation are recommended as tool drives.
- Before the POLISTAR-TUBE and the shaft are introduced into the pipe, the tool should be preformed and adjusted to the pipe diameter.
- At the moment of introduction, it is recommended to reduce the respective operating speed of the POLISTAR-TUBE.
- The grinding of pipes with more than three bends should be performed from both ends whenever possible.
- When the tool flaps emerge at the end of the pipe, they can be withdrawn while in rotation. This way, the rear side of the POLISTAR-TUBE deburrs the pipe end and at the same time polishes the inside of the tube during the reverse motion.
- All flexible shaft drives with rotational speed range 7,650–1,500 RPM and flexible shaft connection DIN 10 can be used.

Ordering notes:

- Special lengths available on request.

Flexible shaft 4 PST-T — 7,650–1,500 RPM / 450–100 watts
Flexible shaft 7 PST-T — 4,250–1,500 RPM / 1,000–370 watts

BW 4 PST-T
BW 7 PST-T



SE 4 PST-T
SE 7 PST-T



SCH 4 PST-T
SCH 7 PST-T



Flexible shaft 4 PST-T DIN 10/M4 (1.5 m)
This flexible shaft is exclusively for use with POLISTAR-TUBE PST dia. 50, 60, 70 and 80 mm. Maintenance set 4 ZG for flexible shafts (EAN 4007220**182970**).

Flexible shaft 7 PST-T DIN 10/M5 (2.0 m)
This flexible shaft is exclusively for use with POLISTAR-TUBE PST dia. 90 and 100 mm. Maintenance set 7 ZG for flexible shafts (EAN 4007220**182994**).

Description	EAN 4007220	Rotational speed range [RPM]	Power range [watts]	Drive-side coupling DIN / dia. [mm]	Dimensions dia. x length [mm]	Fastening threads	Tool mounting [mm]	Net weight [kg]
Flexible shaft								
BW 4 PST-T DIN 10/M4 1,5 m	810804	7,650–1,500	450–100	10 / 30	13 x 1,550	M4	4	0.480
BW 7 PST-T DIN 10/M5 2 m	811191	4,250–1,500	1,000–370	10 / 30	18 x 2,052	M5	5	1.320
Pre-assembled replacement core								
SE 4 PST-T DIN 10/M4 1,5 m	835685	7,650–1,500	450–100	10 / M10	4 x 1,540	M4	4	0.124
SE 7 PST-T DIN 10/M5 2 m	835692	4,250–1,500	1,000–370	10 / M10	7 x 2,042	M5	5	0.447
Pre-assembled replacement casing								
SCH 4 PST-T DIN 10/M4 1,5 m	835715	-	-	10 / 30	13 x 1,550	-	-	0.353
SCH 7 PST-T DIN 10/M5 2 m	835722	-	-	10 / 30	18 x 2,052	-	-	0.871

Accessories for flexible shafts BW 4 PST-T, 7 PST-T

AD M4/8-32 UNC
AD M5/8-32 UNC



FLS M4
FLS M5



EM SW 7 mm
EM SW 8 mm G



Description	EAN 4007220	Tool mounting [mm]	Suitable for	Net weight [kg]
AD M4/8-32 UNC	922750	8-32 UNC	BW 4 PST-T	0.002
AD M5/8-32 UNC	922767	8-32 UNC	BW 7 PST-T	0.003
FLS M4	833667	4 mm	BW 4 PST-T	0.002
FLS M5	833674	5 mm	BW 7 PST-T	0.003
EM SW 7 mm	592885	-	BW 4 PST-T	0.008
EM SW 8 mm G	206867	-	BW 7 PST-T	0.014

Suitable PFERD tools

Catalogue section 4

POLISTAR-TUBE
Dia. 50 mm for inside pipe dia. 35 to 40 mm
Dia. 60 mm for inside pipe dia. 40 to 45 mm
Dia. 70 mm for inside pipe dia. 45 to 50 mm
Dia. 80 mm for inside pipe dia. 50 to 55 mm
Dia. 90 mm for inside pipe dia. 55 to 60 mm
Dia. 100 mm for inside pipe dia. 60 to 65 mm

POLINOX flexible tools
Dia. up to 50 mm

Observe the recommended and maximum permitted rotational speeds of the tool for the rotational speed setting of the motor.

Handpieces


HA 4 ZGB G16


HA 6 Z DPF/SRF


HA 7 ZGA G22


HA 10 ZGE G28


HA 12 ZGA G28


HA 4 ZGE G16 INOX


HA 6 Z SP 3.0 DPF/SRF


HA 7 ZGE G22 INOX


HA 10 ZGE G28 INOX


HA 12 ZGE G28 INOX


HA 12 ZG G35


WZ 4 A G16


WZ 7 B G22

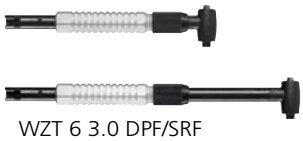

WZ 10 B G28

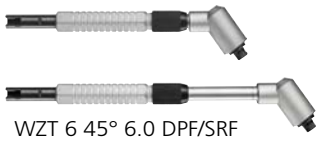

HA 12/15 KG MK1 G35

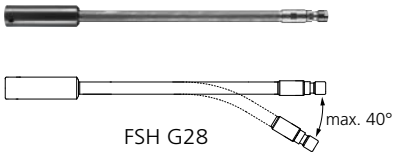

WZ 6 DPF/SRF


WZ 7 45° G22


WZ 10 45° G28


WZT 6 3.0 DPF/SRF


WZT 6 45° 6.0 DPF/SRF



FSH G28

Handpiece HA 6 Z SP 3.0 DPF/SRF
- Handpiece with 2.34 mm collet on request.

Angle handpiece WZ 4 A G16
- When used with a 6 mm collet, the maximum permitted rotational speed is 15,000 RPM.
- For belt grinder attachment holder BSVH 24, see page 121.

Angle handpieces WZ 7B G22 and WZ 10 B G28
- For belt grinder attachment holder BSVH 36, see page 121.

Angle handpieces with telescopic system Telescoping fixed to maximum length
- WZT 6 3.0 DPF/SRF – Dimensions 35 x 255 mm.
- WZH 6 45° 6.0 DPF/SRF – Dimensions 45 x 260 mm.

Flexible special handpiece FSH G28
- This handpiece can be bent once (max. 40°) up to a bending radius of 200 mm (as per customer specification).
- Special lengths available on request.

Description	EAN 4007220	Incl. collet dia. [mm]	Max. perm. rotational speed [RPM]	Handpiece side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]
Straight handpieces								
HA 4 ZGB G16	313374	6	40,000	16 / 16	19.5 x 110	-	9	0.140
HA 4 ZGE G16 INOX	101780	6	40,000	16 / 16	20 x 107	-	9	0.146
HA 6 Z DPF/SRF	657751	6	24,000	DPF/SRF / 10	24 x 140	-	13	0.131
HA 6 Z SP 3.0 DPF/SRF	657768	3	24,000	DPF/SRF / 10	22 x 139	-	-	0.109
HA 7 ZGA G22	181928	6	25,000	22 / 22	27 x 132	-	11	0.320
HA 7 ZGE G22 INOX	101797	6	25,000	22 / 22	27 x 128	-	11	0.289
HA 10 ZGE G28	181966	6	18,000	28 / 28	33 x 163	-	11	0.515
HA 10 ZGE G28 INOX	101803	6	18,000	28 / 28	33 x 165	-	12	0.540
HA 12 ZGA G28	181959	12	18,000	28 / 28	33 x 162	-	12	0.510
HA 12 ZGE G28 INOX	101827	12	18,000	28 / 28	33 x 165	-	12	0.530
HA 12 ZG G35	181942	12	10,000	35 / 35	42 x 215	-	12	1.280
HA 12/15 KG MK1 G35	181973	-	10,000	35 / 35	42 x 143	-	-	1.100
Angle handpieces								
WZ 4 A G16	323267	3	20,000	16 / 16	43 x 111	1:1	10	0.270
WZ 6 DPF/SRF	657775	6	18,000	DPF/SRF / 10	50 x 170	1.25:1	13	0.225
WZ 7 B G22	323250	6	17,100	22 / 22	55 x 157	1.3:1	6	0.600
WZ 7 45° G22	303900	6	17,100	22 / 22	57 x 175	1.3:1	6	0.665
WZ 10 B G28	323243	6	17,100	28 / 28	55 x 166	1.3:1	6	0.760
WZ 10 45° G28	303917	6	17,100	28 / 28	57 x 184	1.3:1	6	0.638
Angle handpieces with telescopic system								
WZT 6 3.0 DPF/SRF	657782	3	18,000	DPF/SRF / 10	35 x 170	1.38:1	14	0.170
WZT 6 45° 6.0 DPF/SRF	657799	6	18,000	DPF/SRF / 10	45 x 200	1.53:1	13	0.210
Flexible special handpiece								
FSH G28	182062	6	12,000	28 / 28	24 x 525	-	11	1.000

BSG 10/35 E G28



BSG 10/50 E G28



Belt sanders

Types "E" with elastic spindle bearing. Can be connected to flexible shafts without handpiece.

Ordering notes:
- More detailed information and ordering data for grinding belts and non-woven belts can be found in catalogue section 4.

Description	EAN 4007220	Max. perm. rotational speed [RPM]	Matches flexible shafts of types	Matches handpiece-side flexible shaft coupling G / dia. [mm]	Matching belts	Dimensions D x L [mm]	Net weight [kg]
BSG 10/35 E G28	183212	7,000	BW 10 ZG, BW 12 ZGA	28 / 28	VB 35/450, BA 35/450	35 x 450	1.500
BSG 10/50 E G28	183199	7,000	BW 10 ZG, BW 12 ZGA	28 / 28	VB 50/450, BA 50/450	50 x 450	1.580

ATR



ULR



Replacement rollers for belt sanders

Recommendations for use:
- **Drive roller, soft:**
  For seamless fine grinding on stainless steel (INOX), we recommend the soft type drive roller (approx. 25 Shore).

Description	EAN 4007220	Description	D x T [mm]	Suitable for belt sanders	Net weight [kg]
ULR BSG 10/35 E	183229	Guide roller	50 x 30	BSG 10/35 E G28	0.125
ATR BSG 10/35 E	183236	Drive roller	100 x 30	BSG 10/35 E G28	0.250
ATR-W BSG 10/35 E	801826	Drive roller, soft	100 x 30	BSG 10/35 E G28	0.250
ULR BSG 10/50 E	183205	Guide roller	50 x 40	BSG 10/50 E G28	0.145
ATR BSG 10/50 E	183090	Drive roller	100 x 40	BSG 10/50 E G28	0.300
ATR-W BSG 10/50 E	746424	Drive roller, soft	100 x 40	BSG 10/50 E G28	0.300

Drum grinders for flexible shafts



WRS 12 ZGA



WRS WT 10 H

Drum equipment sets for handpieces

Drum equipment set WRS 12 ZGA
Using this set, the straight flexible shaft handpiece 12 ZGA can be adapted for use with grinding drums.

Drum equipment set WRS WT 10 H
Using this set, the angle drive WT 10 H can be adapted for use with grinding drums.

Ordering notes:
- Please refer to catalogue sections 4 and 8 for information regarding drum tools (flap drums, POLINOX grinding drums, Poliflex texturing rollers, wheel brush for burnishing machines) and rotational speeds.

Description	EAN 4007220	Spindle dia. [mm]	Max. tool diameter [mm]	Suitable for	Contents	Net weight [kg]
WRS 12 ZGA	485859	19	125 x 100	BW HA 12 ZGA	mounting adapter, guard with handle, spindle extension	1.285
WRS WT 10 H	649602	19	125 x 100	WT 10 H	guard with handle, spindle extension	1.150

Angle drive WT 7 E M14 G22
Accessories AF 14-1/4 CD



Can be connected to flexible shafts 7 ZG/7 ZGU G22 (instead of handpiece).
Connection to flexible shaft can be pivoted 360°.

Included in delivery:
2 keys, lateral handle, clamping flange and guard diameter 115 mm.

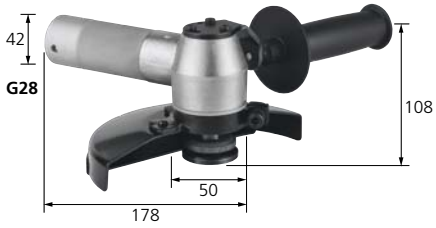
Accessories:
(please order separately)
Arbor:
AF 14-1/4 CD for COMBIDISC

Backing pad:
GT 115 MF M14,
H-GT 115 MF M14,
CC-GT 115-125 M14 (see catalogue section 4).

For belt grinder attachment holder with arms, see page 121.

Description	EAN 4007220	Drive operating speed n max. [RPM]	Transmission ratio	Output speed at n max [RPM]	Spindle thread	Tool mounting [mm]	Net weight [kg]
WT 7 E M14 G22	301708	30,000	2.7:1	11,100	M14	22.23	0.660
AF 14-1/4 CD	302026	-	-	-	M14	1/4"-20 UNC	0.064

Angle drive WT 10 H G28



Can be connected to flexible shafts 10 ZG/12 ZGA (instead of handpiece).
Connection to flexible shaft can be pivoted 360°.

Included in delivery:
Key, lateral handle, clamping flange and guard diameter 178 mm.

Accessories:
(please order separately):
Backing pad:
GT 178 MF M14,
CC-GT 180 M14,
H-GT 178 MF M14 (see catalogue section 4).

Suitable tools:
- POLIVLIES grinding discs
- POLIVLIES self-adhesive discs
- Fibre discs
- Grinding wheels
- POLIFAN flap discs
- Wheel brushes
- Cup brushes

Please refer to catalogue sections 4, 6 and 8 for detailed information and ordering data.

Description	EAN 4007220	Drive operating speed n max. [RPM]	Transmission ratio	Output speed at n max [RPM]	Spindle thread	Tool mounting [mm]	Net weight [kg]
WT 10 H G28	349250	10,200	1.2:1	8,500	M14	22.23	1.240

Overdrive ST 103 DIN 10 for flexible shaft drives



Transmits the drive operating speed in the ratio 1:3.
The rotational speed is dependent on the machine speed and the diameter of the flexible shaft.
Please note that the torque to be transmitted increases as the rotational speed increases. The power output is limited by the shaft diameter.

Safety notes:
- The drive operating speed must not exceed 12,000 RPM.
- Maximum rotational speeds:
  40,000 RPM for shaft 4 ZG;
  25,000 RPM for shaft 7 ZG/ZGU;
  18,000 RPM for shaft 10 ZG.

Included in delivery:
Drive core, 1 angle socket spanner.

Ordering notes:
- Please order pre-assembled replacement core SE ST 103 DIN 10 separately, if required. Overdrive type ST 103 DIN 15 on request.

Description	EAN 4007220	Connections motor side dia.	Connections shaft side dia.	Suitable for machine types	Net weight [kg]
ST 103 DIN 10	182673	DIN 10, dia. 30 mm	DIN 10, dia. 30 mm	Mammoth, Mammoth Electronic, RUG 19/120 SI	1.600
SE ST 103 DIN 10	190524	DIN 10	DIN 10	Overdrive ST 103	0.070

The fast way to the best collet

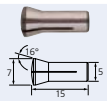
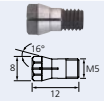
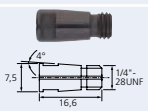
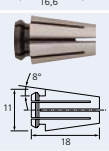
❶ To find the collet group for the selected tool drive, please refer to the overview below.
❷ Based on the collet group, determine the first part of the designation and EAN.
❸ Using the required diameter, determine the second part of the designation and EAN.
❹ By joining together the designation and EAN you will obtain the full details that you need for an order.

❹ Ordering example:
Collet group 6
SPZ 950325 03 = Collet 3 mm
for air grinder PGAS 5/180 HV:

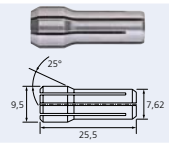
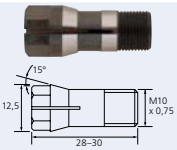
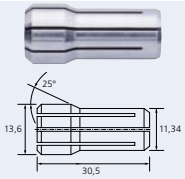
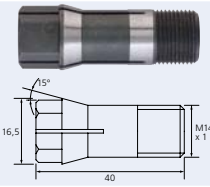
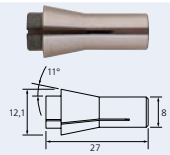
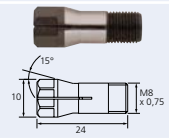
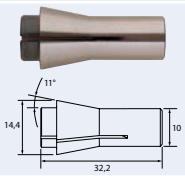
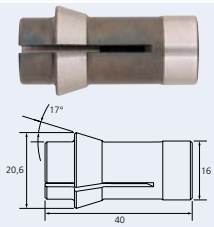
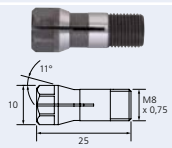
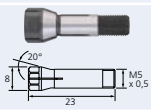
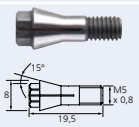
The full **designation** is **SPZ 950325 03** and the full **EAN** is 4007220 **212875.**

Overview of collet groups

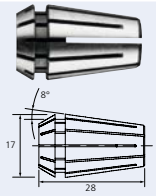
Page	Drives/handpieces	❶ Collet group
12	PGTA 1/1010	1
12	PGT 1/1000	1
13	PGAS 2/800 E	1
13	PGAS 2/800 E-HV	1
14	PGAS 1/750	1
15	PGAS 1/700	15
15	PGAS 1/700 HV	15
16	PGTA 3/700	4
17	PGAS 1/600	1
18	PGAS 1/550	15
19	PG 3/500 S	5
19	PGAS 3/500 HV	5
20	PGAS 3/440 DH	6
20	PGZA 3/440	6
20	PGZA 3/440 E	6
21	PG 3/380 DH	6
22	PGAS 4/350 E	6
23	PGAS 5/280 HV	6
24	PG 3/250 S	5
25	PGAS 7/250 E-HV	16
26	PGAS 5/230 HV	6
26	PGAS 5/230 VE-HV	6
27	PG 8/220 HV	7
27	PGAS 8/220 HV	7
28	PG 8/220 V-HV	7
28	PGAS 8/220 VS-HV	5
29	PG 3/210 DH	6
30	PGAS 10/200 V-HV	8
31	PGAS 5/180 HV	6
31	PGAS 5/180 VE-HV	6
32	PGAS 9/180 V-HV	8
33	PG 8/160 HV	7
33	PGAS 8/160 VM-HV	7
34	PGAS 10/160 V-HV	8
35	PGAS 7/120 E-HV	16
36	PGAS 9/120 V-HV	8
37	PG 8/100 HV	7
37	PGAS 8/100 HV	7
38	PG 8/100 V-HV	7
38	PGAS 8/100 V-HV	7
38	PGAS 8/100 VM-HV	7
39	PG 8/50 V-HV	7
40	PGAS 5/40 V-HV	6
40	PGAS 10/40 V-HV	8
41	PWS 1/800	2
41	PWSA 1/800	2
42	PWSA 1/250	3
43	PWSA 5/210 HV	6
44	PWSA 3/220 DH	6
44	PWS 3/200 DH	6
45	PWSA 4/200 HV	5
46	PWSA 5/170-45 HV	6
47	PWSA 5/160 HV	6
48	PWSA 5/130 HV	6
49	PWSA 4/45 HV	6
70	Micro motor handpc. MIM HAS 3/800 SP3	17
62, 90	Rigid extensions STV9...	2
62, 90	Rigid extensions STV13...	10
73	Micro motor handpc. MIM HAS 2/600 SP3	17
73	Micro motor handpc. MIM HAS 3/600 SP3	17
73	Micro motor handpc. MIM HAS 3/600 S3	19
73	Micro motor handpc. MIM HAS 3/600 S6	19
73	Micro motor handpc. MIM HAS 1/500 SP3	17
73	Micro motor handpc. MIM HAS 3/500 VS-SP3	17
73	Micro motor handpc. MIM WZS 3/300 90° S3	18
73	Micro motor handpc. MIM WZS 3/300 45° S3	18
74	UGER 11/330 SI	8
75	UGER 5/250 SI	11
76	UGER 15/150 SI	12
77	UGER 5/90 SI	11
78	UGER 11/90 SI	12
79	UGER 15/60 SI	12
80	UGER 15/30 SI	12
113	Handpiece HA 4 ZGB G16	9
113	Handpiece HA 4 ZGB G16 INOX	9
113	Angle handpiece WZ 4 A G16	10
113	Handpiece HA 6 Z DPF/SRF	13
113	Angle handpiece WZ 6 DPF/SRF	13
113	Angle handpiece WZT 6 3.0 DPF/SRF	14
113	Angle handpiece WZT 6 45° 6.0 DPF/SRF	13
113	Handpiece HA 7 ZGA G22	11
113	Handpiece HA 7 ZGE G22 INOX	11
113	Angle handpiece WZ 7 45° G22	6
113	Angle handpiece WZ 7 B G22	6
113	Handpiece HA 10 ZGE G28	11
113	Handpiece HA 10 ZGE G28 INOX	12
113	Angle handpiece WZ 10 45° G28	6
113	Angle handpiece WZ 10 B G28	6
113	Flexible special handpiece FSH G28	11
113	Handpiece HA 12 ZGA G28	12
113	Handpiece HA 12 ZG G35	12
119	Spindle extensions SPV 50-3...	2
119	Spindle extensions SPV 75...	10
119	Spindle extension SPV 36-6-S6	10
119	Spindle extension SPV 50-6 S8	10
119	Spindle extensions SPV 100...	10
119	Spindle extension SPV 50-1/8 S1/4	2
119	Spindle extensions SPVH9...	2
119	Spindle extensions SPVH13...	10

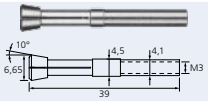
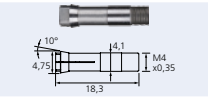
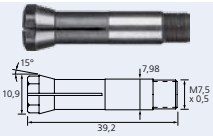
Collet group		❷ Description EAN	❸ Description and EAN supplement										
			Dia. [mm]							Dia. [inch]			
			2.34	3	5	6	8	10	12	3/32	1/8	1/4	3/8
1		SPZ 914913..	01	02						07	03		
		4007220	**196342**	**196359**						**196373**	**196366**		
2		SPZ 947016..	04	01						03	02		
		4007220	**851999**	**207840**						**207864**	**207857**		
3		SPZ 900002..		73						85	82		
		4007220		**188262**						**188378**	**188354**		
4		SPZ 957717..		03		01					04	02	
		4007220		**349311**		**349298**					**349328**	**349304**	

Continued on next page

Collet group		❷ Description EAN	❸ Description and EAN supplement									
			Dia. [mm]							Dia. [inch]		
			2.34	3	5	6	8	10	12	3/32	1/8	1/4	3/8
5		SPZ 900003.. **4007220**		39 **299944**		40 **299951**					39 **299944**	01 **606032**	
6		SPZ 950325.. **4007220**		03 **212875**	06 **212899**	01 **212851**	17 **212936**			16 **234969**	04 **212882**	02 **212868**	
7		SPZ 900001.. **4007220**		45 **187074**		23 **186855**	43 **187050**				45 **187074**	44 **187067**	00 **186633**
8		SPZ 952034.. **4007220**				02 **213674**	05 **213704**	07 **213711**				03 **213681**	09 **213728**
9		SPZ 914900.. **4007220**	09 **195864**	11 **195888**	16 **195925**	18 **195932**				09 **195864**	19 **195949**	20 **195956**	
10		SPZ 957663.. **4007220**		01 **331279**	04 **398647**	03 **331262**					02 **331286**	51 **738719**	
11		SPZ 914909.. **4007220**	09 **196212**	12 **196236**	17 **196274**	19 **196281**	23 **196304**			09 **196212**	27 **196335**	26 **196328**	
12		SPZ 914902.. **4007220**			03 **195987**	04 **195994**	06 **196014**	08 **196038**	09 **196045**			10 **196052**	11 **196069**
13		SPZ 901018.. **4007220**	23 **668252**	30 **668269**	50 **668306**	60 **668313**				23 **668252**	18 **668320**	14 **668337**	
14		SPZ 901104.. **4007220**	23 **668382**	30 **668399**						23 **668382**	18 **668405**		
15		SPZ 989800.. **4007220**		00 **851814**						02 **851838**	01 **851821**		

Continued on next page

Collet group		❷ Description EAN	❸ Description and EAN supplement									
			Dia. [mm]							Dia. [inch]		
			2.34	3	5	6	8	10	12	3/32	1/8	1/4	3/8
16		SPZ 989801.. **4007220**				63 **956984**	64 **957004**	65 **957028**				66 **957035**	

Collet group		❷ Description EAN	❸ Description and EAN supplement									
			Dia. [mm]							Dia. [inch]		
			2.35	3	5	6	8	10	12	3/32	1/8	1/4	3/8
17		SPZ 900140.. **4007220**	51 **071465**	50 **071458**							52 **071472**		
18		SPZ 900140.. **4007220**	61 **071496**	60 **071489**							62 **071502**		
19		SPZ 900140.. **4007220**	73 **102756**	71 **071526**		70 **071519**					72 **102565**	74 **104453**	

RZH 63
RZH 6234



AF M5 CD 1/4-20UNC



Reducing collets and adapter

These reducing collets fit into an existing collet for 6 mm shank tools and are used as adapters for 3 mm or 2.34 mm shank tools.

Description	EAN 4007220	Reducing shank mounting	Suitable for	Net weight [kg]
RZH 63	355862	from 6 mm on 3 mm diameter	-	0,004
RZH 6234	184486	from 6 mm on 2.34 mm diameter	-	0,004
AF M5 CD 1/4-20 UNC	064702	-	cordless angle grinder with SBH/SBHR 20, 25, 38, 50	0,006

Guide sleeves and guide rolls

Guide sleeves for PFERD air and electric straight grinders for processing edges and borders, pipe ends (interior and exterior) and openings on request.





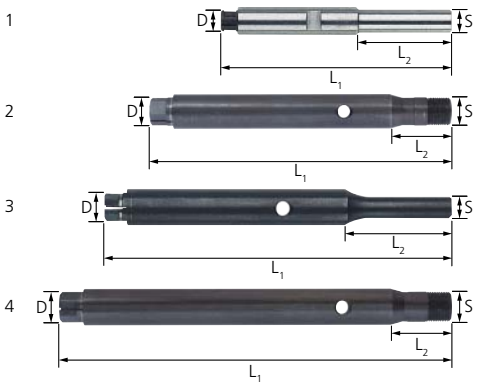


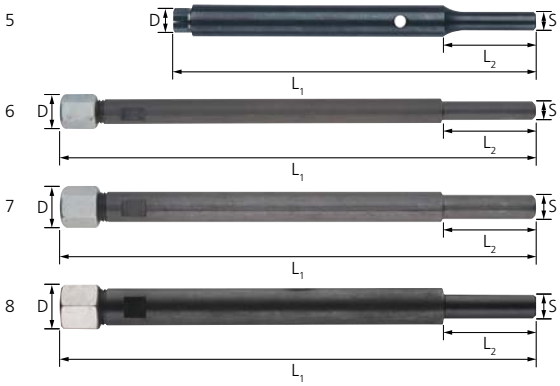






Extensions for drive spindles





With drive spindle extensions, shanks of grinding and milling tools can be extended. They allow access to difficult-to-reach areas. The extensions are clamped into the collet of the machine (air- or electric-powered) or into the flexible shaft handpiece.
Drive spindle extensions are a cost effective alternative to special made-to-order burrs and mounted points with long shanks.

Safety notes:
Caution! When using spindle extensions, please observe the valid safety regulations and the accident prevention regulations.
When working with long shank lengths, it is vital that the tool is inserted into the workpiece (e.g. bores, pipes, ducts or keyways) before the drive system is switched on. The extension must not run freely with the tool outside the workpiece.
If this rule is not observed, there is an increased risk of accidents! In unfavourable conditions, the extension with the tool clamped in it may buckle. **The extensions are only intended for manual use** in connection with suitable air grinders, electric grinders or flexible shaft handpieces for tools with standard shanks. The extension and a tool permitted for use at the appropriate rotational speed are clamped into an impact-free collet. Do not clamp on the transition radius.

Clamping of a second extension or of tools with excessively long shanks is not permitted.

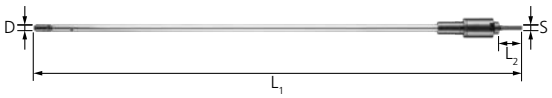
Item no.	Description	EAN 4007220	Max. perm. rotational speed [RPM]	Shank mounting dia. S [mm]	Tool mounting [mm]	Overall length L_1 [mm]	Mounting pin length L_2 [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]
Metric version											
1	SPV 50-3 S6	185285	44,000	6	3	76	30	9.5	3	2	0.028
1	SPV 50-3 S8	185254	44,000	8	3	78	30	9.5	3	2	0.035
2	SPV 75-6 SPG6	333143	20,000	SPG6	6	104	Special	12	6	10	0.073
3	SPV 36-6 S6	061411	20,000	6	6	58	18	12	6	10	0.025
3	SPV 50-6 S8	604205	20,000	8	6	95	30	12	6	10	0.055
3	SPV 75-6 S8	185278	20,000	8	6	120	30	12	6	10	0.076
4	SPV 100-6 SPG6	656051	20,000	SPG6	6	129	Special	12	6	10	0.096
5	SPV 100-6 S8	185261	20,000	8	6	144	30	12	6	10	0.100
6	SPV 150-3 S6	185308	10,000	6	3	150	30	11.5	-	-	0.055
7	SPV 150-6 S8	185315	10,000	8	6	150	30	13.5	-	-	0.082
8	SPV 150-8 S8	184400	10,000	8	8	150	30	15.9	-	-	0.110

Item no.	Description	EAN 4007220	Max. perm. rotational speed [RPM]	Shank mounting dia. S [inch]	Tool mounting [inch]	Overall length L_1 [inch]	Mounting pin length L_2 [inch]	Max. spindle dia. D [inch]	Incl. collet dia. [mm]	Collet group	Net weight [kg]
Imperial version											
1	SPV 50-1/8 S1/4	851913	44,000	1/4	1/8	3.07	1.18	0.37	1/8	2	0.028
2	SPV 75-1/4 SPG6	851944	20,000	SPG6	1/4	4.09	Special	0.47	1/4	10	0.073
2	SPV 75-1/4 S3/8	851937	20,000	3/8	1/4	4.72	1.18	0.47	1/4	10	0.077
4	SPV 100-1/4 SPG6	851951	20,000	SPG6	1/4	5.08	Special	0.47	1/4	10	0.096
5	SPV 100-1/4 S3/8	851982	20,000	3/8	1/4	5.67	1.18	0.47	1/4	10	0.100
6	SPV 150-1/8 S1/4	851890	10,000	1/4	1/8	5.91	1.18	0.45	-	-	0.055
7	SPV 150-1/4 S3/8	851906	10,000	3/8	1/4	5.91	1.18	0.53	-	-	0.082

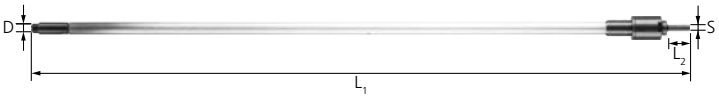
For all available collets, see pages 116–118.

Extensions for drive spindles

1



2



With drive spindle extensions, shanks of grinding and milling tools can be extended. They allow access to difficult-to-reach areas and particularly deep cores. The extensions are clamped into the collet of the machine (air- or electric-powered) or into the flexible shaft handpiece. They must also be guided by hand. Drive spindle extensions are a cost effective alternative to special made-to-order burrs and mounted points with long shanks.

Safety notes:
Caution! When using spindle extensions, please observe the valid safety regulations and the accident prevention regulations. Please do not clamp tools which are too large on the extension since they are driven by a core. The extension and machine must be guided in a line. Levering and tilting result in damage to the extension.
When working with long shank lengths, it is essential that the tool is inserted into the workpiece (e.g. bores, pipes, ducts or keyways) before the drive system is switched on.

The extensions are only intended for manual use in connection with suitable air grinders, electric grinders or flexible shaft handpieces for tools with standard shanks. The extension and a tool permitted for use at the appropriate rotational speed are clamped into an impact-free collet. Do not clamp on the transition radius.

Clamping of a second extension or of tools with excessively long shanks is not permitted.

Item no.	Description	EAN 4007220	Max. perm. rotational speed [RPM]	Shank mounting dia. S [mm]	Tool mounting [mm]	Overall length L_1 [mm]	Mounting pin length L_2 [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]
1	SPVH9 L300-3 S6	748718	25,000	6	3	406	28	9	3	2	0.130
1	SPVH9 L500-3 S6	907641	25,000	6	3	606	28	9	3	2	0.340
1	SPVH9 L800-3 S6	938218	25,000	6	3	906	28	9	3	2	0.520
1	SPVH9 L1000-3 S6	101926	25,000	6	3	1,106	28	9	3	2	0.640
2	SPVH13 L300-6 S6	971741	25,000	6	6	406	28	13	6	10	0.320
2	SPVH13 L500-6 S6	854365	25,000	6	6	606	28	13	6	10	0.500
2	SPVH13 L800-6 S6	101957	25,000	6	6	906	28	13	6	10	0.770
2	SPVH13 L1000-6 S6	936313	25,000	6	6	1,106	28	13	6	10	0.950
2	SPVH13 L300-6 S8	739105	25,000	8	6	406	28	13	6	10	0.322
2	SPVH13 L500-6 S8	730478	25,000	8	6	606	28	13	6	10	0.502
2	SPVH13 L800-6 S8	739129	25,000	8	6	906	28	13	6	10	0.772
2	SPVH13 L1000-6 S8	793602	25,000	8	6	1,106	28	13	6	10	0.952

For all available collets, see pages 116–118.



Belt grinder attachment holders and arms

BSVH 24
BSVH 25,5



SDVH-K

BSVH 36
BSVH 41



SDVH-G

BSAD 41/36 x 610



BSVAK 9/25



BSVAK 9/25-1



BSVAK 4/16



BSVAK 9/9



BSVAK 9/16



BSVA 9/25



BSVA 9/25-1



BSVA 4/16



BSVA 9/16



BSVA 12/19



BSVA 18/23



Small belt grinder attachments BSVH 25,5 and BSVH 24 for belt length 305 mm.
Large belt grinder attachments BSVH 36 and BSVH 41 for belt lengths 520 and 610 mm.

Special features:

- The belt grinder attachment can be pivoted on the respective drive system or handpiece and therefore allows flexible adaptation to each individual work situation.
- Highly precise belt guidance due to adjustable belt clamping force and fixable belt arm.
- Easy, quick belt replacement due to spring clamping.

Description	EAN 4007220	Mountingdia. [mm]	Drive roller dia. [mm]	Suitable for machine types	Net weight [kg]
BSVH 24	544877	24	20	WZ 4 A G16	0.155
BSVH 25,5	544860	25.5	20	PWS 3/200 DH, PWSA 3/220 DH, PBS 3/200 DH 99	0.175
BSVH 36	322970	36	30	WZ 7 B G22, WZ 10 B G28, PWSA 5/130 HV, PWSA 5/160 HV, PWSA 5/210 HV, PBSA 5/160 HV	0.420
BSVH 41	322963	41	30	WT 7 E M14 G22, PWAS 9/120 HV, UBS 5/70 SI-R, UBS 5/100 SI 925	0.315
SDVH-K	544938	-	-	BSVH 25,5, BSVH 24	0.027
SDVH-G	956861	-	-	BSVH 36, BSVH 41	0.040

Description	EAN 4007220	Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]
Adapter					
BSAD 41/36 x 610	395967	-	-	610	0.080
matches BSVH 36 and BSVH 41					
BSVA 9/25 x 520	323007	9 x 25	3, 6, 9, 12, 16	520, 610	0.095
BSVA 9/25-1 x 520	494288	9 x 25	3, 6, 9, 12	520, 610	0.095
BSVA 4/16 x 520	322987	4 x 16	3, 6, 9	520, 610	0.060
BSVA 9/16 x 520	322994	9 x 16	9, 12	520, 610	0.096
BSVA 12/19 x 520	323014	12 x 19	12, 16	520, 610	0.107
BSVA 18/23 x 520	349267	18 x 23	20	520, 610	0.150
matches BSVH 25,5 and BSVH 24					
BSVAK 9/25 x 305	544914	9 x 25	3, 6, 9, 12, 16	305	0.083
BSVAK 9/25-1 x 305	544921	9 x 25	3, 6, 9, 12	305	0.082
BSVAK 4/16 x 305	544884	4 x 16	3, 6, 9	305	0.052
BSVAK 9/9 x 305	544891	9 x 9	9, 12	305	0.075
BSVAK 9/16 x 305	544907	9 x 16	9, 12	305	0.088

* Belt length 610 mm only in conjunction with adapter BSAD 41/36 x 610.



Anti-vibration handle SENSOHANDLE

Vibration-damping, ergonomically optimized handle for use on all common angle grinders with M8, M10 or M14 female threads.

Included in delivery:
1 handle
3 adapters (M8, M10 and M14)

Adapter M8 matches all common angle grinders with an M8 female thread.
Matching PFERD tool drives:
- PWAS 9/120 HV
- PWAS 13/120 AVH
- PWT 26/120 HV M14
- PWT 26/100 HV M14
- PWT 26/85 HV M14
- UWER 18/120 SI
- UWER 18/110 SI
- UWER 18/95 SI
- WT 7 E M14 G22
- WT 10 H G28

Adapters M10 and M14 match all common angle grinders with M10 or M14 female threads.

Advantages:
- Significant reduction in vibration transmission because vibration source and handgrip surface are decoupled.
- Moreover, the vibration energy is absorbed/reduced by the special rubber mixture.
- Safe and comfortable working thanks to ergonomically optimized shape and dimensions of the handle.
- Secure hold due to the structured surface of the handle.

PFERDVALUE:
Vibration Filter Haptic Filter

Description	EAN 4007220	Net weight [kg]
SENSOHANDLE	901649	0.500

Maintenance products

Lubricants

(1) 
(2) 
(3) 
(4) 
(5) 
(6) 

(1+2) Special lubricating oil
For air-powered devices with oil mist lubrication.
Protects against icing up.
Advantages:
- Good spray qualities.
- Good lubrication qualities.
- Low viscosity.
- Protects against corrosion.
- Highly water-resistant.

(3) Gear grease FT 3
For gears on flexible shaft machines, angle drives and angle handpieces.

(4) Ball bearing grease FT 5
For all ball bearings. Light moistening of grease slingers to protect them against dust.

(5) Flexible shaft grease FT 4
Grease with special lubrication and adhesive properties for flexible shafts 4 ZG to 15 KG.

After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated. Degrease the core and casing and reapply the special shaft grease to the core.

(6) Maintenance set consists of:
1 hose brush for removing the old grease from the flexible casing.
2 non-linting cleaning cloths (400 x 330 mm).
Degrease the core with a degreasing agent and a cleaning cloth (do not use cotton waste!). Apply new grease onto a second cloth and pull the core through.

Ordering notes:
- Hose brushes can be re-ordered if required.

Description	EAN 4007220	Contents	Use for		Net weight [kg]
5 L ONG OEL	179321	(1) Special lubricating oil 5 L	Oil mist device	1	4.900
1 L ONG OEL	179338	(2) Special lubricating oil 1 L	Oil mist device	1	0.990
FT 3	182956	(3) Gear grease 450 g	Gears	1	0.450
FT 5	181249	(4) Ball bearing grease 100 g	Ball bearing	1	0.100
FT 4	182963	(5) Flexible shaft grease 450 g	Flexible shafts	1	0.450
P-SET 4 ZG	182970	(6) 2 cloths, flexible shaft grease FT 4, hose brush 4 ZG	BW 4 ZG, BW 6 Z, BW 6 ZG	1	0.770
P-SET 7 ZG	182994	(6) 2 cloths, flexible shaft grease FT 4, hose brush 7 ZG	BW 7 ZG	1	0.770
P-SET 10/12 ZG	182987	(6) 2 cloths, flexible shaft grease FT 4, hose brush 10/12 ZG	BW 10 ZG, BW 12 KG	1	0.770

Safety glasses SB TB-5



Modern and sporty safety glasses with excellent wearing comfort and optimum fit thanks to the twisting frame.

Advantages:
- Good mechanical resistance (class F:45 m/s; low energy impact).
- High scratch and chemical resistance on the outside.
- Excellent ventilation for good eye conditions, fog-free on the inside.
- 100 % UV protection (UV 400), very easy to clean.
- Can be combined well with other protection equipment.
- Adjustment-free head fit due to flexible twisting frame.
- Rubber forehead and nose contact for a perfect and non-slip fit.

Description	EAN 4007220		Net weight [kg]
SB TB-5	101919	5	0.030

Safety glasses SB BT-5



Very light and comfortable safety glasses that are particularly well suited to people already wearing glasses.

Advantages:
- Good mechanical resistance (class F:45 m/s; low energy impact).
- High scratch and chemical resistance on the outside.
- Excellent ventilation for good eye conditions, fog-free on the inside.
- 100 % UV protection (UV 400), very easy to clean.
- Can be combined well with other protection equipment.
- Adjustable frame with soft frame ends.
- Unrestricted side view.

Description	EAN 4007220		Net weight [kg]
SB BT-5	808689	5	0.037

Safety glasses SB M-2



Comfortable, full-view safety glasses with panoramic vision. Also perfectly suitable for people already wearing glasses. Pressure-free wear with comprehensive side protection.

Advantages:
- High mechanical resistance (class B:120 m/s; medium energy impact).
- High scratch and chemical resistance on both sides.
- Ventilation for good eye conditions, permanently fog-free on the inside.
- 100 % UV protection (UV 400), very easy to clean.
- Optimum adjustment to the field of vision.
- Can be well combined with other protection equipment.

Description	EAN 4007220		Net weight [kg]
SB M-2	808696	2	0.081

HFS



HS



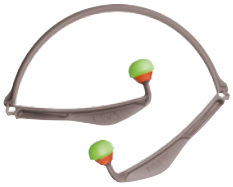
SensoGrip protective gloves

SensoGrip protective gloves provide optimum protection with maximum comfort and the best finger flexibility. Viscoelastic pads on the contact surfaces dampen vibrations by 30 % and allow longer working times (according to ISO 5349 parts 1 and 2).
SensoGrip protective gloves are made from robust special nappa leather. They have heat- and spark-resistant aramid seams and provide protection from mechanical injuries caused by stabs, splinters or abrasion. Suitable for those allergic to chrome since they contain no hexavalent chrome. The elasticated wrist provides a skin-tight fit.

Advantages:
- SensoGrip HFS: Optimum hand/finger protection, ideal for grinding, cut-off and welding work.
- SensoGrip HS: Optimum hand protection,ideal for light grinding and polishing work, e.g. when using air-powered filing machines and smaller straight grinders.

Ordering notes:
- Available in 3 sizes: M, L and XL.
- Protective gloves are supplied in pairs.
- Please specify the desired glove size.

Description	Glove size				Net weight [kg]
	9 (M)	10 (L)	11 (XL)		
	EAN 4007220				
HFS	809273	809280	809297	1	0.250
HS	809303	809310	809327	1	0.150



BGS ear protection

Fold-away ear protection with an extremely low weight and comfortable fit due to oval-shaped, soft foam plugs. This is a hygienic product, as the ear protection does not need to be touched while it is being put in.

Advantages:
- Can be used for a continuous noise level of up to 95 dB(A) or up to 100 dB(A) impulse noise.
- Reduces the noise level by 23 dB(A) to normal conversation levels.
- Can be used several times.

Description	EAN 4007220		Noise reduction value SNR [dB(A)]	Net weight [kg]
BGS	808702	1	23	0.016



ASM FFP breathing protection masks

Secure and comfortable breathing protection masks of protection classes 2 and 3. Can be used for welding, in particular for aluminium, for casting, soldering and when working on very dusty materials and asbestos. They provide optimum protection against dust. The respiratory air valve minimizes congestion of respiratory heat and moisture.

Advantages:
- **ASM FFP 2-10:** Comfortable fit due to broad headband strap; protects against dust **up to 10 times** the MAK and TRK limit values.
- **ASM FFP 3-5:** Comfortable fit via 4-point headband; safe fit due to circumferential comfort sealing lip; nosepiece is flexible, ensuring that the mask fits securely, even across the nose; protects against dust **up to 30 times** the MAK and TRK limit values.

MAK = Maximum workplace concentration
TRK = Technical reference concentration limit for carcinogenic substances

Description	Protection class			Net weight [kg]
	2	3		
	EAN 4007220			
ASM FFP 2-10	808719	-	10	0.018
ASM FFP 3-5	-	808726	5	0.028

Material	Subgroups/ differentiation	Examples/brands	Properties	Recommendations for use	More information
Steel and cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	■ Easy to machine ■ Good heat conductor	■ Use tools at the maximum cutting speed to achieve the most economic results. ■ Use a high drive output to increase economic efficiency. ■ Preferably use tools named STEEL, STEELOX or ST. ■ In catalogue section 6, suitable tools can be recognized by the colour black in the colour-coding system. In catalogue section 8 they can be recognized by the colour grey.	■ Standards ■ Steel keys ■ Steel iron list **PFERD-PRAXIS** PFERD tools for use on construction steel 
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	■ Difficult to machine ■ Good heat conductor		
	Cast steel	Non-alloyed cast steel, low-alloyed cast steel	■ Easy to machine ■ Good heat conductor		
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels, e.g. Name EN AISI V2A 1.4301 304 V2A 1.4310 301 V4A 1.4401 316 V4A 1.4571 316Ti	■ Tough material that is therefore difficult to machine ■ Very poor heat conductor ■ Discolours at a temperature of over > 300°C ■ Risk of overheating during processing => corrosion	■ Reducing the cutting speed and contact pressure increases the tool life and efficiency. ■ Preferably use tools named INOX, STEELOX, COOL, FREEZE or INOX-TOTAL. ■ To avoid corrosion, remove discolouration and adhered particles. ■ To avoid corrosion, do not use tools alternately on steel and stainless steel (INOX). ■ Suitable tools have been manufactured without the addition of ferrous, chlorinated or sulphurous fillers. ■ In catalogue sections 6 and 8, suitable tools can be recognized by the colour blue in the colour-coding system.	**PFERD-PRAXIS** PFERD tools for work on stainless steel (INOX) 
Non-ferrous metals – Aluminium	Soft aluminium alloys	Non-hardening and hardening wrought alloys	■ Very good heat conductor ■ Lubricates very quickly	■ Reducing the cutting speed and contact pressure increases the tool life and efficiency. ■ Use burrs at the maximum cutting speed to achieve the most economic results. ■ Preferably use tools named ALU or COOL. ■ Caution! A special extraction system is required for grinding aluminium. Risk of explosion! ■ In catalogue section 6, suitable tools can be recognized by the colour silver in the colour-coding system.	■ Standards ■ Aluminium keys **PFERD-PRAXIS** PFERD tools for work on aluminium 
	Tough aluminium alloys	Aluminium-cast alloys with a low percentage of silicon			
	Hard aluminium alloys	Aluminium-cast alloys without silicon			
	Soft non-ferrous metals	Brass, copper, zinc	■ Very good heat conductor		
	Hard non-ferrous metals	Bronze, titanium, titanium alloys	■ Very poor heat conductor	■ Reducing the cutting speed and contact pressure increases the tool life and efficiency. ■ Preferably use tools with ceramic oxide grain (CO) or diamond as abrasives or tools named COOL.	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (Inconel, Hastelloy), titanium, engine and turbine construction	■ Very poor heat conductor		
Cast materials	Cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG)	■ Relatively hard material ■ Short-chipping, does not lubricate ■ Good heat conductor	■ Diamond tools are an economical tool solution for work on grey and nodular cast iron. ■ Use tools at the maximum cutting speed to achieve the most economic results. ■ Use a high drive output to increase economic efficiency. ■ Preferably use tools named CAST. ■ In catalogue section 6, suitable tools can be recognized by the colour red in the colour-coding system.	EN 1561 EN 1562 EN 1563 **Brochure** Electroplated diamond tools – economic machining of grey and nodular cast iron 
	Annealed cast iron	White annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)			
Plastics	Thermoplastics	Polypropylene (PP), polyethylene (PE), polyamide (PA), polyvinyl chloride (PVC)	■ Very poor heat conductor	■ Use thin cut-off wheels with silicon carbide (C/SiC) (type PSF CAST+STONE) or tools with the FVK, FVKS or PLAST cut. ■ Use diamond tools with grit size D 357 and D 427 for work on duroplastics. ■ Use grinding points named RUBBER for work on rubber.	**PFERD-PRAXIS** PFERD tools for use on plastics 
	Duroplastics	Epoxy resin, GRP, CRP			
	Elastomers	Rubber, styrene-butadiene rubber (SBR), ethylene propylene diene monomer rubber (EPDM)			
Stone	Cotto, pumice, light concrete, sandstone, concrete, reinforced concrete, concrete block, roofing tiles, granite, clinker bricks, exposed aggregate concrete, tiles, ceramic tiles, slate		■ Very poor heat conductor ■ Creates lots of dust during processing	■ Use tools with diamond or silicon carbide (C/SiC) as abrasives. ■ Wear a dust mask! ■ In catalogue section 6, suitable tools can be recognized by the colour green in the colour-coding system. In catalogue section 5 they can be recognized by the colours green and orange (for universal building materials).	**Catalogue section 5** Further information on diamond cut-off wheels 

Further information can be found in catalogue sections 1 to 9.

Index
Keywords and synonyms

Term	Cat. section	Page
A		
Abrasive belt holders - see shop roll holder	4	59
Abrasive belt support - see shop roll holder - see rubber drum holder	4 4	59 68, 80
Abrasive belts - see short belts - see long belts - see abrasive spiral bands	4 4 4	48-52 52-54 64-67
Abrasive cap holder	4	74-75, 77-78
Abrasive caps and holders - see POLICAP	4	74-79
Abrasive cloth - see abrasive sheets	4	55-56
Abrasive cones - see POLICAP - see POLICO	4 4	74-79 70-71
Abrasive cord	4	60
Abrasive disc holder for self-adhesive abrasive discs	4	27
Abrasive disc holders - see COMBIDISC abrasive disc holders	4	43
Abrasive discs - see abrasive sheets - see COMBIDISC abrasive discs - see fibre disc - see POLINOX discs	4 4 4 4	55-56 31-38 20-24 118
Abrasive drums - see flap drums - see POLINOX grinding drums	4 4	90 116-117
Abrasive flap discs - see COMBIDISC Mini-POLIFAN - see POLIFAN flap discs - see POLIVLIES flap discs	4 6 4	30 31-41 121
Abrasive flap wheels - see COMBIDISC Mini-POLIFAN - see POLIFAN flap discs - see POLIVLIES flap discs - see unmounted flap wheels	4 6 4 4	30 31-41 121 86-89
Abrasive paper - see abrasive sheets	4	55-56
Abrasive segments	3	46
Abrasive sheets	4	55-56
Abrasive sleeves and holders - see abrasive spiral bands and rubber drum holders - see POLICAP abrasive caps and holders - see POLICAP abrasive spiral bands and rubber drum holders	4 4 4	63, 68 74-79 80
Abrasive spiral bands	4	63-67, 80
Accessories - for brushes - flexible shaft PST-T - Mammoth Electronic - Maxi-Mammoth Electronic - tool drives - tool drives RUER	8 9 9 9 9 9	49, 55-56 112 100, 102 104 113-122 101
Adapter	9	58-59, 87
Adapter for - belt arms - brushes - COMBIDISC - hole saws - wheel brushes	9 8 4 2 8	58-59 56 43 117 56
Adapter pairs	8	56
Adapter set	8	56
Adjustable holder for car body files	1	22
Adjusting imbalance - see machines with Autoblancer	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Air grinders	9	12-68
Air grinders with frequency damper	9	16, 20, 23, 26-28, 30-34, 36-38, 40, 43-44, 46-48, 51, 58, 63
Air-powered angle grinder	9	41-56
Air-powered grinders - see air grinders	9	12-68
Air-powered motors	9	62-63
Air-powered polisher - see air grinders	9	12-68
Air-powered straight grinder	9	12-40
Air-powered straight grinder with belt grinder attachment	9	57-60
Air-powered straight grinder with rigid extension	9	62-63
Allround brushes - see wheel brushes, crimped, slim, stationary	8	23
ALLROUND cut for versatile use	2	26-32
All-round wheel brushes - see wheel brushes, crimped, wide face, general purpose	8	24
ALU cut for aluminium/non-ferrous metals	2	50-56
Alu cutting wheel - see High Speed Disc **ALU**MASTER	2	102-105
ALU mounted points	3	31
ALUMASTER High Speed Disc	2	102-105
ALUMASTER service sets	2	105
ALUMASTER with HICOAT coating	2	104
Aluminium files	1	16
American shape - see US shape	3	9-10, 14-15, 19-20, 23, 26-27, 29-36, 38
Angle drives	9	115
Angle grinder - see air-powered angle grinder - see electric angle grinder	9 9 9	41-56, 81-84 41-56 81-84
Angle grinder wheels - see COMBICLICK - see cut-off wheels - see fibre disc - see grinding wheels - see POLICLEAN discs - see POLIFAN flap discs - see Poliflex discs - see POLIVLIES flap discs - see unmounted flap wheels for angle grinders	4 6 4 6 4 6 4 4 4	11-19 12-29 20-24 51-61 125 30-41 131 121 89
Angle grinder with collet	9	41-49
Angle grinder with threaded spindle	9	50-56, 81-84
Animal hair brushes - see miniature brushes	8	45-47
Anti-vibration handle for angle grinders	9	122
Arbor extension - see extension for drive spindles - see extension for hole saws	2 3 9 2	25 8 119-120 117
Arbor for - COMBIDISC grinding tools - COMBIDISC Mini-POLIFAN - diamond cut-off wheels - felt wheels and cloth rings - grinding and polishing stones - grinding wheels - Mini-POLIFAN - overlap slotted disc - POLICLEAN discs - Poliflex fine grinding discs	4 4 5 4 3 6 4 4 4 4	43 30 35 152 45 63 30 93 124 131, 137, 142
Arbor for - Poliflex marbling tool holder - POLINOX cross buffs - POLINOX discs - POLINOX grinding wheels - POLINOX marbling tool holder - POLINOX unitized/convolute wheels - POLIROLL, POLICO - POLISCRATCH brushes - POLISTAR and POLISTAR-TUBE - POLIVLIES self-adhesive discs - self-adhesive abrasive discs - small cut-off wheels - tools with female thread - wheel brushes	4 4 4 4 4 4 4 8 4 4 4 6 2 8	132 110 119 113 120 102 71 55 96 122 27 27 97 55
Arbors	2 4 5 6 8 9	97 26-27, 30, 43, 71, 93, 96, 102, 110, 113, 119-120, 122, 124, 131-132, 137, 142, 152 35 27,63 55 32, 34, 36, 40, 42, 61
Arbors FR/VR	4	88
Assortments - see sets		
ATB disc brushes - see composite disc brushes, crimped	8	29-31
Attachment arms	9	57-60, 87, 121
Autoblancer - see drives with elastically mounted spindle	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Automatic-machine brushes - see composite brushes	8	27-31
B		
Band saw files	1	30
Barbecue brushes - see scratch brushes, curved - see scratch brushes, general purpose	8 8	53 53
BBQ brushes - see scratch brushes, curved - see scratch brushes, general purpose	8 8	53 53
Belt arms - see belt grinder attachment arms	9	57-60, 87
Belt file - see air-powered angle grinder with belt grinder attachment - see air-powered belt sanders - see belt grinder attachment for flexible-shaft angle handpiece - see belt sanders for flexible shafts - see electric belt grinder - see electric pipe belt grinder	9 9 9 9 9 9	41-56 41-56 121 114 87 88
Belt grinder	9	57-60, 87
Belt grinder attachment arms	9	121
Belt grinder attachment for flexible-shaft angle handpiece	9	121
Belt grinder attachment holder	9	121
Belt grinder set	4	51
Belt sanders	9	114
Belt sanders for flexible shafts	9	114
Bench grinder brushes - see wheel brushes, crimped	8	22-26
Bench grinding wheels	3	41-43

Term	Cat. section	Page
Bevel brushes	8	15-16, 37, 44
- crimped	8	16, 37, 44
- knotted	8	15-16
Bevel brushes, wavy		
- see threaded bevel brushes, crimped	8	16
- see shank-mounted bevel brushes, crimped	8	37, 44
Block brushes with a handle	8	54
Bolt sets for cutting inserts	2	105
Bolts		
- see arbors		
Bottle brushes		
- see tube brushes	8	48-52
Bottom roll		
- see drive roll	9	114
Bottom roller		
- see drive roll	9	114
Breathing protection	9	124
Brite Rite		
- see COMBIDISC non-woven discs	4	39-41
Brush sets	8	40
Brushes for robot applications		
- see composite brushes	8	27-31
Brushes for table deburrers		
- see wheel brushes, crimped, deburring brushes	8	26
Brushes with plastic body		
- see composite brushes	8	27-31
Buffing discs		
- see cloth rings	4	150-151
Buffing wheels		
- see cloth rings	4	150-151
Burnishing brushes		
- see wheel brushes for burnishing machines, crimped	8	41
Burnishing machines		
- see drum grinder	9	86, 114
Burnishing rollers		
- see POLINOX grinding drums	4	116-117
Burrs		
- see HSS rotary cutters	2	87-99
- see TC burrs	2	6-86

C

Term	Cat. section	Page
Cabinet files	1	38
Cabinet rasps	1	40
Cantsaw file	1	29
Car body file blades	1	23
Car body files	1	22-23
Car body files, tanged type	1	23
CARBIDE bench grinding wheels	3	43
CARBIDE grinding and polishing stones	3	45
Cartridge rolls		
- see grinding disc	5	29, 33, 38
- see POLIROLL	4	70-71
- see shop rolls	4	58-59
CAST cut for cast iron	2	57-61
CAST EDGE mounted points	3	34-37
CAST mounted points	3	32-33
CAST STEEL mounted points	3	38-39
CBN grinding discs	5	33
CBN grinding points	5	30-32
CBN grinding tools	5	30-33, 42
CC-GRIND	6	42-52
- see COMBICLICK	4	11-19
CC-GRIND	6	42-50
- clamping flange set	6	45, 46, 49, 50
- FLEX	6	46, 50
- SOLID	6	43-50
- SOLID-DIAMOND	5	38
- STRONG	6	47
CC-GRIND grinding discs	6	42-50
- see COMBICLICK	4	13-15
CERAMIC		
- see CERAMIC cut-off wheels	6	21
- see CERAMIC grinding wheels	6	56, 59
Ceramic fibre files	4	143
CERAMIC grinding wheels	6	56, 59
Chain saw files	1	32-33
Chain saw files in plastic pouch	1	33
Chain saw gauge	1	34
CHAIN SHARP chain saw sharpeners	1	35
CHOPSAW	7	10-11
CHOPSAW cut-off wheels		
- see CHOPSAW stationary cut-off wheels	7	10-13
CHOPSAW HD	7	12-13
CHOPSAW stationary cut-off wheels	7	10-11
CHOPSAW wheels		
- see CHOPSAW stationary cut-off wheels	7	10-13
CHOPSAW-HD stationary cut-off wheels	7	12-13
Chromium nickel brushes		
- see wheel brushes, knotted, INOX-TOTAL	8	42
Circular brushes		
- see wheel brushes	8	17-28, 38-40, 42
Clamping assemblies		
- see collets	9	116-118
Clamping bolt		
- see arbors		
Clamping devices		
- see collets	9	116-118
Clamping flange set for thin 180/230 mm cut-off wheels	6	22
Clamping flanges	4	88, 106, 113
	5	36, 38
	6	22, 45-46, 49-50
	9	51-55, 82-84, 89
Clamping lid		
- see clamping flanges		
Clamping nuts for backing pads	4	24
Cleaner	4	156
Cleaning discs		
- see POLICLEAN	4	38, 123-125
Cloth rings	4	150-151
Cloth rings with arbor hole	4	151
Cloth-backed abrasive sheets	4	55
CNC brushes		
- see composite brushes	8	27-31
Coated abrasive wheels		
- see flap wheels	4	81-96
Coated abrasives	4	9-10, 45-62
Collets	9	116-118
Combi rotational speed controller	9	101
COMBICLICK	4	11-19
- backing pad	4	19
- felt discs	4	18
- fibre discs	4	12-15
- non-woven discs	4	16-17
- set	4	19
COMBIDISC	4	28-44
- abrasive disc holder	4	43
- abrasive discs	4	31-38
- accessories	9	115
- felt discs	4	42
- holder	4	152
- non-woven discs	4	39-41
- set	4	44
- Mini-POLIFAN and arbor	4	30
COMBITWIST	8	14, 16, 19, 21, 42
COMPACT		
- see POLIFAN-POWER	6	35
Compact wheels		
- see POLINOX unitized/convolute wheels	4	99-106
Composite brushes	8	27-31
Composite disc brushes	8	29-30
Composite end brushes		
- see composite shank-mounted end brushes	8	31
Composite shank-mounted end brushes	8	31
Composite wheel brushes	8	27-28
Compressed air machines		
- see air grinders	9	12-68
Compressed-air angle grinders		
- see air-powered angle grinders	9	41-56
Compressed-air angle grinder with belt grinder attachment		
- see air-powered angle grinders with belt grinder attachment	9	51, 57-60
Compressed-air belt sanders		
- see air-powered belt sanders	9	57-60
Compressed-air machines		
- see air grinders	9	12-68
Compressed-air polisher		
- see air grinders	9	12-68
Concave brushes		
- see bevel brushes	8	15-16, 37, 44
Concave radius burrs	2	84
Conical brushes		
- see bevel brushes	8	15-16, 37, 44
Conical diamond files	5	19
Conical flexible sleeves		
- see abrasive spiral bands	4	63-68
Connecting set	9	13-52, 63, 64
Conversion set		
- see bevel brushes	8	15-16, 37, 44
Conversion set		
- see drum equipment sets	9	114
Convolute wheels PNK		
- see POLINOX convolute wheels PNK	4	104-106
Cooling lubricants		
- see grinding oil	4	153-156
CORINOX files	1	46
CORINOX needle files	1	47
Cross buffs		
- see POLISTAR	4	94-96
Cup brushes	8	12-14
Cup brushes, knotted		
- see threaded cup brushes, knotted	8	13-14
Cup brushes, wavy wire		
- see cup brushes, crimped	8	12, 36
Cup grinding disc		
- see cup wheels	6	62
Cup wheels	6	62
Cup wheel, diamond		
- see diamond tools with resinoid bond	5	41
CURVE		
- see POLIFAN-CURVE	6	40-41
Cut-off wheels	5	34-36, 50-52
	6	9-29
	7	1-20

Index
Keywords and synonyms

Term	Cat. section	Page
Cut-off wheels for chop saws - see CHOPSAW, CHOPSAW-HD, LABOR stationary cut-off wheels	7	10-15
Cut-off wheels for manual applications - see cut-off wheels - see diamond cut-off wheels	6 5	12-29 34-36, 48-52
Cut-off wheels for petrol cutters and cut-off grinders	6	28-29
Cut-off wheels for portable machines - see cut-off wheels for petrol cutters and cut-off grinders	6	28-29
Cut-off wheels for rails - see stationary cut-off wheels RAIL	7	14
Cut-off wheels for stationary cutting - see cut-off wheels for stationary applications	7	1-20
Cut-off wheels for stationary machines - see cut-off wheels for stationary applications	7	1-20
Cut-off wheels for straight grinders	6	26
Cut-off wheels with a large diameter - see cut-off wheels for stationary applications	7	1-20
Cut-off wheels X-SLIM - see cut-off wheels with width 0.8 mm	6	14, 19, 22, 26
Cut-off wheels, diamond	5	34-36, 50-52
Cutter - see burrs	2	6-99
Cutting insert holder	2	108
Cutting wheel Alu - see High Speed Disc **ALU**MASTER	2	102-105
Cutting wheels - see cut-off wheels	6	9-29
Cylinder brushes - see threaded tube brushes - see tube brushes - see tube brushes with eyelet	8 8 8	48 48-52 52
Cylindrical abrasive sleeves - see abrasive spiral bands	4	63-67, 80
Cylindrical tube brushes - see tube brushes	8	48-52

D

Term	Cat. section	Page
Deburrer - see hand deburrer	1	59
Deburring brushes	8	26
Deburring files	1	17
Deburring wheel brushes - see wheel brushes, crimped, wide face, industrial use	8	25
Decarbonization brushes - see shank-mounted wheel brushes, crimped	8	38-39
Decarbonization brushes, plastic-bonded - see shank-mounted wheel brushes, crimped, encapsulated	8	39
Depressed-centre brushes - see bevel brushes	8	15-16, 37, 44
Depth gauge files	1	37
Diamond and CBN tools - electroplated bond - resinoid bond	5 5 5	1-52 12-38 40-47
Diamond blades - see diamond cut-off wheels	5	34-36, 48-52
Diamond burr - see diamond grinding points (with coarse grit)	5	24-28
Diamond cut-off wheels	5	34-36, 48-52
Diamond cut-off wheels and grinding points for foundries	5	36
Diamond cut-off wheels for dry cutting - see diamond cut-off wheels	5	34-36
Diamond cut-off wheels for grey and nodular cast iron	5	36
Diamond cut-off wheels for the construction industry	5	49-52
Diamond cut-off wheels with continuous edge for easy cutting (TURBO)	5	51
Diamond cut-off wheels with continuous edge for very fine cutting	5	35, 52
Diamond discs - see CC-GRIND-SOLID-DIAMOND - see diamond cut-off wheels	5 5	38 34-36, 48-52
Diamond dresser	3	46
Diamond escapement files and sets	5	16
Diamond files	5	16-20, 22
Diamond files for air-powered filing machines - see diamond files for manual filing machines	5	22
Diamond files for manual filing machines	5	22
Diamond grinding discs - see CC-GRIND-SOLID diamond grinding disc - see COMBIDISC diamond abrasive disc	5 5 4	29, 38 38 37
Diamond grinding pins - see diamond grinding points	5	24-28, 36
Diamond grinding point set	5	28
Diamond grinding points	5	24-28, 36
Diamond grinding points for grey and nodular cast iron	5	36
Diamond grinding tools	5	16-29, 35-38, 41-42, 50-52
Diamond hand machine files - see diamond files for manual filing machines	5	22
Diamond handy files and sets	5	19
Diamond machinist's files	5	20
Diamond needle files and sets	5	17
Diamond polishing pastes	4	154
Diamond riffler files and sets	5	18
Diamond sabre saw blades	5	38
Diamond saw blade - see diamond cut-off wheels	5	38
Diamond sheets	5	21
Die grinder - see air-powered straight grinder - see air-powered straight grinder with rigid extension - see electric straight grinder - see electric straight grinder with rigid extension	9 9 9 9	12-40 62-63 74-80 90
Die points - see grinding/mounted points	3	9-40
Die sinklers files and sets - see key files and sets	1	18-20
Diprofil files - see diamond files for manual filing machines	5	22
Direct connection	9	103
Disc brushes - see composite disc brushes - see wheel brushes	8 8	29-30 17-28, 38-40, 42
Disc brushes with plastic body - see composite disc brushes, crimped	8	29-30
Discs for marbling tools - see marbling discs	4	120
Discs for orbital sanders - see velcro-backed abrasive discs	4	61-62
DIY files - see Perfect file	1	8-12, 14-15, 18-19, 28-31, 33, 35-36, 39-40
Double grinding machine wheel - see bench grinding wheels	3	41-43
Double nipple	9	61
Dremel brushes - see miniature brushes	8	45-47
Dresser stone - see dressing stone	3	46
Dressing stones	3	46
Drive roll	9	114
Drive spindle extensions	2 3 9	25 8 50, 56, 81, 119-120
Drives with frequency damper	9	16, 20, 23, 26-28, 30-34, 36-38, 40, 43-44, 46-48, 51, 58, 63
Drives with elastic spindle bearing - see drives with elastically mounted spindle	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Drives with elastically mounted spindle	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Drum grinder	9	86, 114
DUODISC	6	15, 25

E

Term	Cat. section	Page
Eccentric grinding discs - see Velcro-backed abrasive discs	4	61
Ecomomy rolls and holder - see shop rolls	4	58-59
EDGE FINISH	2	106-108
EDGE FINISH cutting insert sets	2	108
EDGE FINISH in transport case	9	85
EDGE FINISH system for work on edges	2 9	106-108 85
EDGE, Z3, Z3 PLUS, Z5 and special cut for work on edges	2	80-86
Elastic bearing - see drives with elastically mounted spindle	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Elastically bonded tools - see Poliflex tools	4	126-142
Electric angle grinder	9	81-84
Electric belt grinder	9	87
Electric belt sanders	9	87
Electric file - see electric belt grinder - see electric pipe belt grinder	9 9	87 88
Electric grinders	9	70-92
Electric pipe belt grinder	9	88
Electric straight grinder	9	74-80
Electric straight grinder with rigid extension	9	90
Empty plastic sleeves	1	58

Term	Cat. section	Page
End brushes	8	31-35, 43
End brushes, knotted - see shank-mounted end brushes, knotted	8	34-35
End brushes, plastic-bonded - see shank-mounted end brushes, encapsulated	8	33
End brushes, wavy wire - see shank-mounted end brushes, crimped	8	32-34
Engraving pen - see marking pen	9	64
Equalling files - see hand files	5	20
Ergonomic file handles	1	34, 56
Extension for tube brushes	8	49
Extensions for drive spindles	2 3 9	25 8 50, 56, 81, 119-120
F		
Fan grinder assortment - see mounted flap wheel set	4	85
Fan grinders - see mounted flap wheels	4	83-85
Featheredge file	1	30
Felt discs	4	18, 42
Felt flap discs	4	149
Felt points	4	145-148
Felt polishing points - see felt points	4	145-148
Felt sheets	4	150
Felt wheels and lenses	4	149
Fibre discs - see COMBICLICK	4 4	20-24 11-19
Fibre wheels - see fibre disc	4	20-24
File brushes - see scratch brushes for files	8	54
File handles	1	56
File rasp	1	14
File set	1	13
File sleeves	1	58
File with handle - see file in POS packaging	1	8-12, 14-15, 18-19, 28-31, 33, 35-36, 39-40
Files and rasps for wood	1	38-43
Files for air-powered filing machines - see ceramic fibre files - see diamond files for manual filing machines - see grinding and polishing stones	 4 5 3	 143 22 44-45
Files for aluminium	1	16
Files for manual filing tools - see ceramic fibre files - see diamond files for manual filing machines - see grinding and polishing stones	 4 5 3	 143 22 44-45
Files for plastics - see diamond files	1 5	17 16-22
Files for reciprocating filing machines - see ceramic fibre files - see diamond files for manual filing machines - see grinding and polishing stones	 4 5 3	 143 22 44-45
Files for the workshop	1	8-21
Files in POS packaging	1	8-15, 18-19, 28-31, 32, 35-36, 39-40
Files with a handle - see files in POS packaging	1	8-15, 18-19, 28-31, 32, 35-36, 39-40
Filing machines	9	61
Fillet weld brushes - see bevel brushes - see scratch brushes for fillet welds	8 8	15-16 53
Fillet weld grinder	9	89
Fine brushes - see scratch brushes for precision mechanics	8	54
Fine grinding and polishing tools	4	1-156
Fine grinding points - see Poliflex fine grinding points	4	130, 135-141
Fine grinding tools - see Poliflex tools	4	126-142
Fine saw file	1	29
Fine scratch brushes - see scratch brushes for precision mechanics	8	54
Fitter's file	1	15
Fitting brushes - see threaded tube brushes	8	48
Fittings	9	65-67
Flange - see clamping flanges		
Flange for cut-off wheels - see clamping flange set for cut-off wheels	6	22
Flange sets - see clamping flanges		
Flap discs - see POLIFAN flap discs - see POLIVLIES flap discs	6 4	30-41 121
Flap drums	4	90
Flap grinding wheels - see unmounted flap wheels	4	86-89
Flap tools	4	81-96
Flap wheels	4	81-96
Flap wheels, mounted - see mounted flap wheels	4	83-85
Flap wheels, unmounted - see unmounted flap wheels	4	86-89
Flapper - see POLIFAN	6	30-41
Flaring cup brushes - see bevel brushes	8	15-16, 37, 44
Flat chain saw files for depth gauge	1	37
FLEX - see CC-GRIND-FLEX	6	46, 50
Flexible bands - see abrasive spiral bands	4	63-67, 80
Flexible diamond files	5	21
Flexible shaft	9	96-97
Flexible shaft and handpieces	9	106-113
Flexible shaft drives	9	93-112
Flexible shaft with air grinder	9	12-67
Flexible shaft with flexible shaft drive	9	96-112
Flexible sleeves - see abrasive spiral bands	4	63-68
Freehand cut-off wheels - see cut-off wheels - see diamond cut-off wheels	6 5	9-29 34-36, 48-52
FREEZE - see POLIFAN-STRONG-FREEZE	6	37, 39
Frequency damper	9	67
Front flanges - see clamping flanges		
FVK and FVKS cut for GRP/CRP	2	66-67
G		
GR/GHR bond	4	135-137
Grill brushes - see scratch brushes, curved - see scratch brushes, universal	 8 8	 53 53
Grinder - see air-powered angle grinder - see air-powered belt sanders - see belt sanders for flexible shafts - see air-powered straight grinder - see electric angle grinder - see electric belt sanders - see electric straight grinder	 9 9 9 9 9 9 9	 41-56 57-60 114 12-40 81-84 87 87
Grinding and polishing pastes	4	153
Grinding and polishing stones	3	44-45
Grinding cylinder - see abrasive spiral bands - see grinding/mounted points - see Poliflex tools	 4 3 4	 63-67, 80 9-40 126-142
Grinding disc adapter set	9	43, 47-48
Grinding discs - see bench grinding wheels - see CC-GRIND grinding discs - see CC-GRIND-SOLID-DIAMOND - see COMBICLICK - see cut-off wheels - see diamond grinding discs - see grinding wheels - see POLIFAN flap discs - see Poliflex fine grinding discs - see POLINOX grinding discs - see POLIVLIES flap discs - see Velcro-backed abrasive discs	 3 6 5 4 6 5 6 6 4 4 4 4	 41-43 42-50 38 12-19 12-29 29, 38 51-61 30-41 131, 137, 142 115 121 61-62
Grinding discs, diamond	5	29
Grinding drum drives	9	86, 114
Grinding drum drives for flexible shafts	9	114
Grinding drums - see flap drums - see POLINOX grinding drums	 4 4	 90 116-117
Grinding emulsion - see grinding oil	4	153-156
Grinding file - see air-powered angle grinder with belt grinder attachment - see air-powered belt sanders - see air-powered straight grinder with belt grinder attachment - see belt sanders for flexible shafts - see belt grinder attachment for flexible-shaft angle handpiece - see electric belt grinder - see electric pipe belt grinder	 9 9 9 9 9 9	 41-56 57-60 57-60 114 121 87 88
Grinding flaps - see mounted flap wheel - see POLINOX mounted points	 4 4	 81-85 108-109
Grinding oils	4	155
Grinding pastes	4	153
Grinding pattern brushes - see wheel brushes for burnishing machines, crimped	8	41
Grinding pockets - see mounted flap wheels	4	83-85
Grinding points - see mounted points - see Poliflex fine grinding points	3 4	9-40 130, 135-136, 138-141
Grinding sheets - see abrasive sheets	4	55-56
Grinding stone - see bench grinding wheels - see grinding/mounted points	3 3	41-43 9-40

Index
Keywords and synonyms

Term	Cat. section	Page
- see grinding disc	5	29, 33, 38
- see mounted points	3	9-40
- see Poliflex fine grinding points	4	130, 135-136, 138-141
Grinding tools		
- see grinding/mounted points	3	9-40
- see Poliflex tools	4	126-142
Grinding wheels	6	51-61
- see bench grinding wheels	3	41-43
- see CC-GRIND	6	42-50
- see COMBICLICK	4	11-19
- see cut-off wheels	6	9-29
- see diamond grinding wheels	5	29, 38
- see fibre discs	4	20-24
- see mounted flap wheel	4	83-85
- see mounted points	3	9-40
- see POLICLEAN discs	4	38, 125
- see Poliflex discs	4	131
- see Poliflex fine grinding wheels	4	131, 137, 142
- see POLINOX grinding wheels	4	112-114
- see POLIVLIES flap discs	4	121
- see snagging wheels	6	63
- see unmounted flap wheels	4	86-89
- see unmounted flap wheels for angle grinders	4	89
- see velcro-backed abrasive discs	4	61-62
Grinding points	3	9-40
- see Poliflex fine grinding points	4	130, 135-136, 138-141
GRP/CRP cut		
- see FVK, FVKS, PLAST cut	2	66-67
Guards	9	82-84
Guide bearing	2	108
Guide plate and sleeve	9	29
Guide roll	9	114
Guide sleeves and guide roller	9	118

H

Term	Cat. section	Page
Habilis file		
- see diamond handy file	5	19
- see handy files	1	50
Hand deburrer	1	59
Hand dressers	3	46
- see sharpening block	5	52
Hand files	5	20
Hand machine files		
- see ceramic fibre files	4	143
- see diamond files for manual filing machines	5	22
- see grinding and polishing stones	3	44-45
Hand pads	4	57
Hand tube brushes		
- see tube brushes, without thread	8	50-52
Hand-held brushes with stem		
- see scratch brushes	8	53-54
Hand-held cut-off wheels		34-36,
- see diamond cut-off wheels	5	50-52
- see cut-off wheels	6	12-29
Hand-operated cut-off wheels		
- see cut-off wheels, diamond	5	48-52
- see cut-off wheels	6	12-29
Handpieces	9	113
Handy file sets	1	50
Handy files	1	50
Handy files, diamond	5	19
Hearing protection	9	124
HEAVY DUTY stationary cut-off wheels	7	16
HICOAT cutting insert sets	2	105
High Speed Disc **ALU**MASTER	2	102-105
Hobby file	1	14
Holder for file blades	1	26
Holder for tungsten carbide files	1	27
Hole brushes		
- see tube brushes	8	48-52
Hole drills		
- see HSS hole saws	2	112-113
Hole saw accessories	2	115
Hole saw arbors	2	115
Hole saw set for		
- craftsmen	2	113
- electricians (German standard sizes)	2	114
- electricians (international standard sizes)	2	114
- fitters	2	113
- mechanics	2	114
Hole saw sets	2	113-114
Hole saws		
- see HSS hole saws	2	112-114
Hollow drill		
- see hole saws	2	112-114
Horse shoe file	1	41
Horse shoe rasp, tanged type	1	41
HSS aluminium cutters with female thread	2	97
HSS antenna cutter	2	96
HSS bench grinding wheels	3	42
HSS edge trimming cutter	2	96
HSS engraving cutters	2	97
HSS finishing cutters and set	2	98-99
HSS hole saw accessories	2	115-117
HSS hole saw arbors	2	115
HSS hole saw set for		
- craftsmen	2	113
- electricians (German standard sizes)	2	114
- electricians (international standard sizes)	2	114
- fitters	2	113
- mechanics	2	114
HSS hole saw sets	2	113-114
HSS hole saws	2	112-113
HSS pilot drill for HSS hole saws	2	116
HSS pilot drill for TC hole cutters	2	120
HSS rotary cutters	2	88-99
HSS rotary cutters for fine and coarse stock removal	2	88-95
HSS rotary cutters for special shapes	2	96-97
HSS step drill with HICOAT coating	2	110

I

Term	Cat. section	Page
In-line fine filter	9	12-61, 63-64, 66-67
INOX cut for stainless steel (INOX)	2	44-49
INOX EDGE mounted points	3	28-30
INOX mounted points	3	26-27
INOX SHINER maintenance product	4	156
INOX-TOTAL	8	42-44

K

Term	Cat. section	Page
Key file sets	1	20
Key files	1	18-20
Keys	9	12-61, 63, 73-89, 91
Knife files	1	12
Knife sharpening files	1	30
Knotted cup brushes		
- see threaded cup brushes, knotted	8	13-14
Knotted end brushes		
- see shank-mounted end brushes, knotted	8	32-34
Knotted single discs		
- see wheel brushes, knotted	8	18-21, 40, 42
Knotted wheel brushes		
- see wheel brushes, knotted	8	18-21, 40, 42
- see wheel brushes, knotted, stationary	8	21

L

Term	Cat. section	Page
LAB cut-off wheels		
- see LABOR stationary cut-off wheels	7	15
LABOR stationary cut-off wheels	7	15
Laboratory cut-off wheels		
- see LABOR stationary cut-off wheels	7	15
Lamellar grinding discs		
- see COMBIDISC Mini-POLIFAN	4	30
- see POLIFAN flap discs	6	30-41
- see POLIVLIES flap discs	4	121
Large cut-off wheels		
- see cut-off wheels for stationary applications	7	1-20
Large cut-off wheels for stationary cutting		
- see cut-off wheels for stationary applications	7	1-20
Lathe files	1	17
Locksmith's files and sets		
- see key files and sets	1	18-19
Long belts	4	52-54
LR/LHR bond	4	138-139
Lubricant	9	122
- see grinding oil	4	155
Lubricator		
- see oil mist device	9	66-67

M

Term	Cat. section	Page
Machine brushes		
- see shank-mounted wheel brushes	8	38-40
Machines with autobalancer		
- see drives with elastically mounted spindle	9	13, 20, 22, 25-26, 31, 35, 106, 109-110
Machines with frequency damper		
- see drives with frequency damper	9	16, 20, 23, 26-28, 30-34, 36-38, 40, 43-44, 46-48, 51, 58, 63
Machinist's files in plastic pouch	1	13
Machinist's files in plastic pouch with cardboard box	1	13
Machinist's files, DIN series	1	8-13
Maintenance accessories	9	122
Maintenance unit for air-powered machines		
- see fittings	9	65-67
Mammoth and accessories	9	103
Mammoth Electronic and accessories	9	100-102, 104
Marbling discs	4	120
Marbling holders		
- see POLINOX marbling tool holders	4	120
Marbling tools		
- see Poliflex marbling tools	4	132
- see POLINOX marbling tools	4	120
Marking pen	9	64
Masking tape	4	119
Master Grinder	9	105
Matting brushes		
- see wheel brushes for burnishing machines, crimped	8	41
Maxi-Mammoth Electronic	9	104

Term	Cat. section	Page
METALCORE cut-off wheel	7	20
MICRO cut - see MICRO cut for finishing work	2	74-79
MICRO cut for finishing work	2	74-79
Micro motor handpieces	9	73
Micro motor system	9	70-72
Midget mounted flap wheels - see COMBIDISC Mini-POLIFAN	4	30
Mill saw files	1	31
Milled tooth file blades	1	26
Milled tooth files	1	24-26
Milled tooth files, tanged type	1	25
Milling cutter - see High Speed Disc **ALU**MASTER	2	102-102
Milling tools	2	1-120
Milling tools with cutting inserts	2	102-108
Milling wheel - see High Speed Disc **ALU**MASTER	2	102-105
Mini brushes - see miniature brushes	8	45-47
Miniature brushes - cup brushes, crimped - end brushes, crimped - wheel brushes, crimped	8 8 8	46 45 47
Miniature cup brushes - see miniature brushes, cup brushes, crimped	8	46
Miniature cups - see miniature brushes, cup brushes, crimped	8	46
Miniature end brushes - see miniature brushes, end brushes, crimped	8	45
Miniature end-type brushes - see miniature brushes, end brushes, crimped	8	45
Minibest brushes - see miniature brushes, wheel brushes, crimped	8	47
Mini-Mammoth Electronic	9	101
Mini-POLIFAN - see COMBIDISC Mini-POLIFAN	4	30
Motors for rigid extensions	9	63, 91
Mounted felt flap wheels	4	148
Mounted flap wheel set	4	85
Mounted flap wheels	4	83-85
Mounted point sets	3	12, 21
Mounted points - see Poliflex fine grinding points - see POLINOX mounted grinding wheels	3 4 4	9-40 130, 135-136, 138-141 108-109
Mounted points for edge grinding - on grey and nodular cast iron - on stainless steel (INOX) - on steel and cast steel	3 3 3	34-37 28-30 13-21
Mounted points for - foundries - grey and nodular cast iron - materials that are difficult to machine - plastics - soft non-ferrous metals - steel and cast material - surface grinding on grey and nodular cast iron - universal use on cast steel - universal use on materials that are difficult to machine - universal use on plastic - universal use on soft non-ferrous metals - universal use on stainless steel (INOX) - universal use on steel and cast steel	3 3 3 3 3 3 3 3 3 3 3 3	36-38 32-33 22-25 40 31 38-39 32-33 38-39 22-25 40 31 26-27 9-12
Mounted polishing tools - see felt points	4	145-148
Mounted wheels - see mounted points - see Poliflex fine grinding points	3 4	9-40 130, 135-136, 138-141
Multi-cut files - see PLUS-Files	1	12
Multi-mop - see POLINOX mounted grinding wheels - see POLINOX grinding drums - see POLINOX unmounted grinding wheels	4 4 4	130, 135-136, 138-141 116-117 112-114
Multi-purpose files - see PLUS-Files	1	12
Multi-speed machines - Mammoth Electronic and accessories - Master Grinder and accessories - Maxi-Mammoth Electronic and accessories - MME - ME, MEW - MMEW - RUER - RUG	9 9 9 9 9 9 9 9 9	98-105 100-102, 104 105 104 104 100, 102 101 98 99
N		
Needle file holder	1	57
Needle file sets - see diamond needle file sets	1 5	49 17
Needle files - see diamond needle files	1 5	47-49 17
Needle rasp set	1	43
Needle rasps	1	43
NIROSTA brushes - see wheel brushes, knotted, INOX-TOTAL	8	19
NON-FERROUS cut for aluminium/ non-ferrous metals	2	50-54
Non-woven - see non-woven tools - see POLICLEAN - see POLINOX mounted points	4 4 4	97-125 108-109
Non-woven abrasive - see non-woven tools	4	97-125
Non-woven abrasive points - see POLINOX mounted points	4	108-109
Non-woven abrasive wheels - see POLINOX grinding wheels	4	112-114
Non-woven cleaning fabric - see POLICLEAN	4	38, 123-125
Non-woven discs	4	16-17, 39-41
Non-woven drums - see POLINOX grinding drums	4	116-117
Non-woven grinding wheels - see POLINOX grinding wheels	4	112-114
Non-woven material	4	97-125
Non-woven points - see POLINOX mounted points	4	108-109
Non-woven roll - see non-woven shop roll	4	59
Non-woven shop roll	4	59
Non-woven tools	4	16-17, 39-41, 97-125
Non-woven wheels - see COMBICLICK non-woven discs - see COMBIDISC non-woven discs	4 4	16-17 39-41
Nozzle brushes - see shank-mounted tube brushes	8	50-51
O		
Oil mist device	9	66-67
On/off foot switch	9	70
Overdrive	9	102-103, 115
Overdrive for flexible shaft drives	9	102-103, 115
Overlap slotted disc	4	93
P		
Paint peeler	1	24
Paper sheets - see abrasive sheets	4	55-56
Paper-backed abrasive sheets	4	56
Pencil brushes - see end brushes - see miniature brushes, end brushes, crimped	8 8	32-35 45
Perfect files - see files in POS packaging	1	8-15, 18-19, 28-31 ,32, 35-36, 39-40
Personal protective equipment	9	123-124
Pipe belt grinder	9	88
Pipe brushes - see threaded tube brushes - see tube brushes	8 8	48 48-52
Pipeline brushes - see wheel brushes, knotted, PIPE	8	20-21
Pipeline wheel brushes	8	20-21
PLAST, FVK and FVKS cut for GRP/CRP	2	66-67
Plastic file handles	1	56
PLUS-Files	1	12
PM motors - see air grinders for rigid extensions	9	63
PNER discs	4	102
POLICAP abrasive spiral bands	4	72-80
POLICAP rubber drum holder	4	74-75, 77-78, 80
POLICLEAN	4	38, 123-125
POLICLEAN arbor	4	124
POLICLEAN discs	4	125
POLICLEAN discs, COMBIDISC	4	38
POLICLEAN mounted tools	4	125
POLICLEAN tools	4	123-125
POLICLEAN wheels	4	124
POLICO abrasive cones	4	70
POLIFAN flap discs	6	30-41
POLIFAN-CURVE	6	32, 40
POLIFAN-POWER	6	32, 35
POLIFAN-STRONG	6	32, 38-39
POLIFAN-STRONG-FREEZE	6	37, 39
POLIFLAP abrasive flaps	4	91
POLIFLAP grinding wheels	4	91
POLIFLAP set	4	92
POLIFLAP tools	4	91-92
Poliflex	4	126-142
Poliflex block set	4	132
Poliflex blocks	4	132
Poliflex discs	4	131
Poliflex fine grinding discs	4	131, 137, 142
Poliflex fine grinding lenses	4	137
Poliflex fine grinding points	4	130, 135-136, 138-141

Index
Keywords and synonyms

Term	Cat. section	Page
Poliflex fine grinding wheels	4	130, 135-136, 138-141
Poliflex marbling tool holder	4	132
Poliflex marbling tools	4	132
Poliflex mounted texturing points	4	133
Poliflex texturing rollers	4	134
Poliflex texturing tools	4	133-134
Poliflex tools	4	126-142
POLINOX	4	57, 99-120
POLINOX convolute wheels PNK	4	104-106
POLINOX cross buffs	4	110
POLINOX discs	4	118-119
POLINOX discs for marbling tool holder	4	120
POLINOX foamed ring wheels PNER - see POLINOX unitized wheels PNER	4	99-103
POLINOX foamed ring wheels PNK - see POLINOX convolute wheels PNK	4	104-106
POLINOX grinding discs	4	102, 115
POLINOX grinding drums	4	116-117
POLINOX grinding wheels	4	112-114
POLINOX hand pads	4	57
POLINOX marbling tool holder	4	120
POLINOX marbling tools	4	120
POLINOX mounted grinding wheels	4	108-109
POLINOX mounted points - see POLINOX mounted grinding wheels	4	108-109
POLINOX non-woven shop roll	4	59
POLINOX sets	4	88, 90, 92
POLINOX unitized wheels PNER	4	99-103
POLINOX unitized/convolute discs	4	102
POLINOX unitized/convolute wheels	4	101-106
POLINOX unitized/convolute wheels, set	4	103
POLINOX unmounted grinding wheels	4	111-114
POLIROLL cartridge rolls	4	70
POLIROLL set	4	71
POLIROLL, POLICO	4	69-71
POLISCRATCH	8	17
Polisher - see drum grinders - see tool drives	9 9	86, 114 1-124
Polishing brushes - see miniature brushes	8	45-47
Polishing discs - see cloth rings	4	150-151
Polishing grinding points - see felt points - see Poliflex tools	4 4	145-148 127-142
Polishing paste bar	4	153
Polishing pastes	4	153-154
Polishing points - see felt points	4	145-148
Polishing tools	4	144-152
Polishing wheels - see cloth rings	4	150-151
POLISTAR	4	94-96
POLISTAR-TUBE	4	95
POLIVLIES discs	4	122
POLIVLIES flap discs	4	121
POLIVLIES grinding discs	4	121
POLIVLIES self-adhesive discs	4	122
POS brushes - see brushes in POS packaging	8	11-19, 24, 32, 35-36, 38-40, 42
POS files - see files in POS packaging	1	8-15, 18-19, 28-31, 32, 35-36, 39-40
POWER - see POLIFAN-POWER	6	32, 35
Precision files	1	44-55
Presentation wall - see TOOL-CENTER		
Pressed grinding discs - see POLINOX unitized/convolute wheels	4	99-103
Protection equipment - see personal protection equipment	9	
Protective cap - see protective cover - see spindle sleeve	9 9	57-59, 87 12, 14, 17
Protective cover	9	57-59, 87
Protective equipment - see personal protective equipment	9	123-124
Protective gloves	9	124
PUR bond	4	130-132
Push button valve - see valve couplings	9	66-67
PU-STRUC bond	4	133-134
Quick-change disc - see COMBICLICK - see COMBIDISC	4 4	11-19 28-44
Quick-change grinding discs - see COMBICLICK - see COMBIDISC	4 4	11-19 28-44
Quick-change handle	8	49
Quick-mounting handles	1	57
Quick-mounting system for hole saws, adapter sets	2	116

R

Radial brushes - see wheel brushes	8	17-18, 38-40, 42, 44
Radius burrs	2	85
RAIL	7	14
RAIL cut-off wheels - see RAIL stationary cut-off wheels	7	14
Rail cut-off wheels for petrol cutting machines with clamping fixture - see RAIL stationary cut-off wheels	7	14
RAIL stationary cut-off wheels	7	14
RAILCUT - see RAIL stationary cut-off wheels	7	14
Ranges - see sets		
Record Universal Motors	9	98-99
Reducing collets	9	118
Reducing flanges for POLINOX grinding wheels FR	4	113
Reducing flanges for unmounted flap wheels	4	88
Reducing rings	7	18
Reinforced abrasive wheels - see grinding wheels	6	51-61
Reinforced grinding wheels - see grinding wheels	6	51-61
Reinforced grinding wheels for foundries - see grinding wheels for foundries	6	60
Reinforced grinding wheels for pipeline construction - see grinding wheels, width 4.1 mm and 5.2 mm	6	53-54, 59, 61
Reinforced grinding wheels for straight grinders - see snagging wheels	6	63
Reinforced grinding wheels WHISPER - see WHISPER grinding wheels	6	57
Repair set for hole saw arbors	2	117
Replacement rollers for belt sanders	9	114
Replacement TC engraving needles for marking pens	9	64
Revolving nozzle	9	53
Riffler file holder	1	57
Riffler file set - see diamond riffler file set	1 5	54 18
Riffler files - see diamond riffler files	1 5	51-54 18
Riffler rasp set	1	55
Riffler rasps	1	55
Rigid extensions	9	62, 90
Roller - see flap drums - see POLINOX grinding drums	4 4	90 116-117
Rollers, set	4	90
Rotary burr - see burrs	2	6-99
Rotary file, HSS - see HSS rotary cutters	2	88-99
Rotary file, TC - see TC burrs	2	6-86
Rotary wire brushes - see wheel brushes	8	17-28, 38-40, 42, 44
Rotating file - see burrs	2	6-99
Rotating file, HSS - see HSS rotary cutters	2	88-99
Rotating file, tungsten carbide - see TC burrs	2	6-86
Rough-cleaning wheels - see POLICLEAN	4	38, 123-125
Roughening stone - see sharpening block	5	52
Round grinding tools - see grinding/mounted points - see Poliflex fine grinding points, shape KU	3 4	9-40 136, 139, 141
Round wire brushes - see wheel brushes, crimped, stationary	8	21, 23
Rubber body - see rubber drum holder	4	68, 80
Rubber drum holder	4	68, 80
Rubber flaps for POLIFLAP grinding wheels	4	92
RUBBER mounted points	3	40

S

Safety glasses	9	123
Sales wall - see TOOL-CENTER		
Saw files	1	28-30
Saws - see HSS hole saws	2	112-113
SC belts - see short belts, non-woven type	4	50
Scoring stone - see dressing stone	3	46
Scotch Brite - see COMBIDISC non-woven discs	4	39-41
Scratch brushes	8	53
Scratch brushes for files	1 8	58 54
Scratch brushes for fillet welds	8	53

Term	Cat. section	Page
Scratch brushes for precision mechanics	8	54
Scratch brushes for spark plugs	8	54
Scratch brushes for the foodstuff industry - see scratch brushes with plastic body	8	54
Scratch brushes with a handle - see scratch brushes, block brushes with a handle	8	54
Scratch brushes with plastic body	8	54
Scratch brushes, curved	8	53
Scratch brushes, general purpose	8	53
Scratch brushes, long handle	8	53
Scratch brushes, plastic body	8	54
Scratch brushes, universal	8	53
Sculptor's file rasp	1	42
Segmented diamond cut-off wheels for fast cutting	5	50
Self-adhesive abrasive discs	4	27
Self-adhesive disc holder	4	6
Self-adhesive discs	4	25-26
Self-service files - see files in POS packaging	1	8-15, 18-19, 28-31, 32, 35-36, 39-40
SENSOHANDLE anti-vibration handle	9	122
Series A CAST EDGE mounted points - CAST mounted points - INOX EDGE mounted points - INOX mounted points - STEEL EDGE mounted points - STEEL mounted points	3 3 3 3 3 3	35 33 30 27 19 12
Series B STEEL EDGE mounted points	3	20
Sets	1 2 3 4 5 8	13, 20, 43, 49-50, 54-55 23-24, 43, 49, 56, 73, 79, 95, 99 12, 21, 25 19, 44, 74, 76, 77, 79, 88, 90 16-19, 28 40
Shaft - see flexible shaft	9	96-97
Shank brushes - see shank-mounted bevel brushes - see shank-mounted cup brushes - see shank-mounted end brushes - see miniature brushes - see shank-mounted wheel brushes	8 8 8 8 8	30-40, 43-47 34, 44 36 31-35, 43 45-47 38-40
Shank brushes, wavy - see shank-mounted brushes, crimped - see shank-mounted bevel brushes, crimped - see shank-mounted cup brushes, crimped - see shank-mounted end brushes, crimped - see miniature brushes - see shank-mounted wheel brushes, crimped	8 8 8 8 8 8	32-34, 36-39, 43-47 37, 44 36 32-34, 43 45-47 38-39, 44
Shank cup brushes - see shank-mounted cup brushes	8	36
Shank extensions - see drive spindle extensions - see drive spindle extensions	2 3	25 8
- see drive spindle extensions	9	50, 56, 81, 119-120
Shank grinder - see grinding/mounted points - see mounted flap wheel	3 4	9-40 83-85
Shank wheel brushes, knotted - see shank-mounted wheel brushes, knotted	8	40, 44
Shank wheel brushes, wavy wire - see shank-mounted wheel brushes, crimped	8	38-39, 44
Shank-mounted bevel brushes	8	37, 44
Shank-mounted bevel disc brushes - see shank-mounted bevel brushes	8	37, 44
Shank-mounted cloth rings	4	150
Shank-mounted cup brushes	8	36, 46
Shank-mounted end brushes - crimped - encapsulated - knotted	8 8 8 8	31-35, 43 31-34, 43 33 34-35
Shank-mounted tube brushes	8	50
Shank-mounted wheel brushes - crimped - encapsulated - knotted	8 8 8 8	38-40, 44 38-39 39 40, 44
Shank-mounted wheel brushes, plastic-bonded - see shank-mounted wheel brushes, crimped, encapsulated	8	39
Sharpening block	5	52
Sharpening block for diamond and CBN tools	5	43
Sharpening files	1	28-37
Sharpening stone - see dressing stones - see sharpening block	3 5	46 52
Shop roll holder	4	59
Shop rolls	4	58-59
Short abrasive belts, non-woven type	4	50
Short belts	4	48-50
Short belts, non-woven type	4	50
Silencer - see drives with frequency damper - see frequency damper	9 9	16, 20, 23, 26-28, 30-34, 36-38, 40, 43-44, 46-48, 51, 58, 63 67
Single row bushes - see wheel brushes, crimped, slim	8	22-23
Single disc brushes - see wheel brushes, crimped, slim	8	22-23
Single section brushes - see wheel brushes, crimped, slim	8	22-23
Single segment wheel brushes - see wheel brushes, crimped, slim	8	22-23
Single wheel brushes - see wheel brushes, crimped, slim, stationary	8	23
Single wheel brushes, single row - see wheel brushes, crimped, slim	8	22-23
SINGLETWIST	8	34
Sleeve brushes - see threaded tube brushes	8	48
Slicing discs - see cut-off wheels	6	9-29
Slim brushes - see wheel brushes, crimped, slim	8	22-23
Small brushes - see miniature brushes	8	45-47
Small cut-off wheels - see cut-off wheels for straight grinders	6	26
Small flap discs - see COMBIDISC Mini-POLIFAN	4	30
Small grinding discs - see COMBIDISC	4	28-44
Small wheel brushes with wavy wire - see miniature shank-mounted wheel brushes, crimped	8	47
Smoke tube brushes - see tube brushes	8	48-52
Soft metal files - see files for aluminium	1	16
SOLID - see CC-GRIND-SOLID - see CC-GRIND-SOLID-DIAMOND	6 5	43-46 38
Spark plug brushes - see scratch brushes for spark plugs	8	54
Special diluent for diamond polishing pastes	4	155
Special drives for filing machines	9	61
Special drives for marking pens	9	64
Special drives for motors for rigid extensions	9	63, 91
Special files	1	14-17
Special flexible shafts for inner grinding of pipes	9	112
Special rasps	1	42
Spid scratch brushes - see scratch brushes, curved	8	53
Spindle cap - see spindle sleeve	9	12, 14, 17
Spindle cover - see spindle sleeve	9	12, 14, 17
Spindle extension - see drive spindle extensions	2 3 9	25 8 50, 56, 81, 119-120
Spindle sleeve	9	12, 14, 17
Stair constructor's file rasp	1	42
Stair constructor's rasp	1	42
Stationary cut-off wheels - see cut-off wheels for stationary applications	7	1-20
Stationary rail cut-off wheel - see RAIL stationary cut-off wheels	7	14
Stationary wheel brushes	8	21, 23
Stationary/chop saw wheels - see CHOPSAW stationary cut-off wheels	7	10-13
STEEL cut for steel and cast steel	2	33-43
STEEL EDGE mounted points	3	13-18
STEEL EDGE mounted points set	3	21
STEEL mounted points	3	9-12
STEEL mounted points set	3	12
Step countersink - see HSS step drill	2	110
Step drill - see HSS step drill	2	110
Straight grinder - air-powered - electric	9 9	12-40 74-80
Stringer bead brushes - see pipline brushes	8	20-21
Strip-it - see POLICLEAN	4	123-125
STRONG - see CC-GRIND-STRONG - see POLIFAN-STRONG	6 6	47 38-39
Support	9	20, 39, 75
Surface cleaning brushes - see cup brushes	8	12-14, 36
Surface cleaning brushes, wavy - see shank-mounted cup brushes, crimped	8	36

Index
Keywords and synonyms

Term	Cat. section	Page
Surface conditioning		
- see COMBICLICK non-woven discs	4	39-41
- see short abrasive belts, non-woven type	4	50
- see POLIVLIES self-adhesive discs	4	122
- see short belts, non-woven type	4	50
T		
Tang files	1	45
TC burr sets for universal applications	2	23-24
TC burrs	2	6-86
- for fine and coarse stock removal	2	12-24
- for flexible and defined work on edges	2	80-86
- for high-performance applications	2	26-86
- for universal applications	2	12-24
TC hole cutter and accessories	2	118-120
TC rotary burr		
- see TC burrs	2	6-86
TC rotary cutters		
- see TC burrs	2	6-86
Textile polishing wheels		
- see cloth rings	4	150-151
Texturing brushes		
- see wheel brushes for burnishing machines, crimped	8	41
Texturing tools		
- see Poliflex texturing tools	4	133-134
Thin cut-off wheels	6	12
Threaded bevel brushes	8	15-16
- crimped	8	16
- knotted	8	15-16
Threaded bevel disc brushes		
- see threaded bevel brushes	8	15-16
Threaded cup brushes	8	12-14
- crimped	8	12
- knotted	8	13-14
Threaded POLINOX grinding wheels	4	114
Threaded tube brushes	8	48
Three square saw files	1	28-30
TITANIUM cut for titanium	2	62-65
Tool assortments		
- see sets		
Tool drives	9	1-124
Tool ranges		
- see sets	4	19, 44, 74, 76, 77, 79, 88, 90
Tool sets		
- see sets		
Tool wheel brushes		
- see shank-mounted wheel brushes	8	38-40
Tool wheel brushes, wavy wire		
- see shank-mounted wheel brushes, crimped	8	38-39
Tool wheel brushes, wavy wire, plastic-bonded		
- see shank-mounted wheel brushes, crimped, encapsulated	8	39
TOOL-CENTER / sales aids	1	4
	2	3
	3	3
	4	5
	5	4
	6	3
	8	11
Top roll		
- see guide roll	9	114
TOUGH and TOUGH-S cut for tough applications	2	68-73
TOUGH mounted points	3	22-24
Trolley	9	100, 102-105
Tube brushes	8	48-52
- threaded tube brushes	8	48
- with eyelet	8	52
- without thread	8	50-52
Tungsten carbide burrs		
- see TC burrs	2	6-86
Tungsten carbide files	1	27
Tungsten carbide hole cutter		
- see TC burrs	2	6-86
- see TC hole cutters	2	119-120
Tungsten carbide rotary burr		
- see TC burrs	2	6-86
Tungsten carbide rotary cutters		
- see TC burrs	2	6-86
Tungsten point file	1	21
Turbine angle grinder		
- see air-powered angle grinder	9	41-56
Twisted-in brushes		
- see tube brushes	8	48-52
TX bond	4	140-142
TX discs	4	42
U		
Unitized wheels		
- see POLINOX unitized wheels PNER	4	100-103
UNIVERSAL bench grinding wheels	3	42
Universal brushes		
- see scratch brushes, curved	8	53
Universal chamfer file	1	24
Universal cleaner	4	156
Universal files		
- see PLUS files	1	12
UNIVERSAL grinding and polishing stones	3	45
Universal sharpening file	1	15
Unmounted flap wheel set	4	88
Unmounted flap wheels	4	86-89
Unmounted flap wheels for angle grinders	4	89
US shape	3	9-10, 14-15, 19-20, 23, 26-27, 29-36, 38
V		
V2A brushes		
- see INOX-TOTAL	8	42-44
V4A brushes		
- see INOX-TOTAL	8	42-44
VA brushes		
- see INOX-TOTAL	8	42-44
Valtitan files		
- see CORINOX files	1	46
Valve couplings	9	66-67
Vario foot switch	9	70-71
Velcro		
- see POLIVLIES discs	4	122
Velcro disc		
- see self-adhesive discs	4	25-26
Velcro-backed abrasive discs	4	61-62
Velcro-backed grinding discs		
- see POLIVLIES discs	4	122
- see velcro-backed abrasive discs	4	61-62
VICTOGRAIN	4	12, 15, 20, 23, 157-159
	6	48-50
W		
Warding files and sets		
- see key files and sets	1	18-20
Weld seam brushes		
- see wheel brushes, knotted, PIPE	8	20-21
Welder's brushes		
- see scratch brushes	8	53
Wheel brushes	8	17-28, 38-40, 42, 44
Wheel brushes for angle grinders	8	17
Wheel brushes for burnishing machines	8	41
Wheel brushes, concave		
- see bevel brushes	8	15-16, 37, 44
Wheel brushes, crimped, narrow face		
- see wheel brushes, crimped, slim	8	22,23
Wheel brushes, crimped, slim	8	22-23
Wheel brushes, crimped, stationary	8	23
Wheel brushes, crimped, wide face, general prupose	8	24
Wheel brushes, crimped, wide face, industrial use	8	25
Wheel brushes, depressed-centre	8	15-16, 37, 43
- see bevel brushes		
Wheel brushes, industrial use	8	25
Wheel brushes, INOX-TOTAL	8	42, 44
Wheel brushes, knotted	8	18-21, 40, 42
- INOX-TOTAL	8	42, 44
- PIPE	8	20-21
- stationary	8	21
Wheel brushes, narrow face		
- see wheel brushes, crimped, slim	8	22-23
Wheel brushes, shank-mounted with wavy wire		
- see shank-mounted wheel brushes, crimped	8	38-39
Wheel brushes, shank-mounted, knotted		
- see shank-mounted wheel brushes, knotted	8	40
Wheels for chop saws		
- see CHOPSAW stationary cut-off wheels	7	10-13
Wheels for rail cutting		
- see RAIL stationary cut-off wheels	7	14
Wheels for stationary machines		
- see cut-off wheels for stationary applications	7	1-20
WHISPER grinding wheel	6	57
WHISPER reinforced grinding wheels		
- see WHISPER grinding wheel	6	57
Wire scratch brushes		
- see scratch brushes	8	53-54
Wire stem for tube brushes	8	49
Wood files	1	38
Wood rasps	1	39
Wooden handles for chain saw files	1	34
Workshop files		
- see files for the workshop	1	8-21
- see diamond files for the workshop	5	20
Wound sleeves		
- see abrasive spiral bands	4	64-68
X		
X-SLIM		
- see cut-off wheels with width 0.8 mm	6	14, 19, 22, 26

This overview shows recommendations for replacement articles for discontinued products.

Discontinued product		>>	Replacement article			
Description	**EAN 4007220**	>>	**Description**	**EAN no. 4007220**	**Cat. section**	**Page**
Catalogue section 1						
855 100 H 3	280546	>>	855 100 H 2	280539	1	45
860 150 H 3	280706	>>	860 150 H 2	280690	1	45
412 200x4,0 SMOOTH CUT	629079	>>	412 200 x 4,0 PREMIUM	021897	1	32
412 200x4,5 SMOOTH CUT	629086	>>	412 200 x 4,5 PREMIUM	021910	1	32
412 200x4,8 SMOOTH CUT	629093	>>	412 200 x 4,8 PREMIUM	021927	1	32
412 200x5,16 SMOOTH CUT	629109	>>	412 200 x 5,16 PREMIUM	021934	1	32
412 200x5,5 SMOOTH CUT	629116	>>	412 200 x 5,5 PREMIUM	021941	1	32
795 P 180 H 0	014936	>>	795P 180 H 2	014943	1	53
900 P 150 H 2	346075	>>	-	-	-	-
901 P 150 H 4	014967	>>	901P 150 H 2	014950	1	51
918 P 150 H 4	015087	>>	918P 150 H 2	015070	1	51
930 P 150 H 4	015100	>>	930P 150 H 2	015094	1	51
963 P 150 H 4	015186	>>	963P 150 H 2	015179	1	52
965 P 150 H 4	015209	>>	965P 150 H 2	015193	1	52
972 P 150 H 4	015223	>>	972P 150 H 2	015216	1	52
984 P 150 H 4	346242	>>	984P 150 H 2	346235	1	52
986 P 150 H 4	346266	>>	986P 150 H 2	346259	1	52
Catalogue section 2						
ZYA 1225/8 Z4	045749	>>	ZYA 1225/8 Z3 PLUS	045701	2	14
SPG 1225/8 Z4	048191	>>	SPG 1225/8 Z3 PLUS	048153	2	19
SPG 0820/6 Z4	955536	>>	SPG 0820/6 Z3 PLUS	955512	2	19
KEL 0820/6 Z3	955598	>>	KEL 0820/6 Z3 PLUS	955581	2	20
SPG 0820/6 Z3	955529	>>	SPG 0820/6 Z3 PLUS	955512	2	19
TRE 1220/8 Z4	049013	>>	TRE 1220/6 Z3 PLUS	048962	2	22
KUD 0605/6 CAST	952498	>>	KUD 0605/6 Z3 PLUS	046821	2	16
ZYA 0825/8 FVKS ZBS	869086	>>	ZYA 0625/6 FVKS ZBS	869055	2	67
ZYA 0825/8 FVK ZBS	869079	>>	ZYA 0625/6 FVK ZBS	869048	2	67
ZYA 0825/8 PLAST ZBS	900475	>>	ZYA 0625/6 PLAST ZBS	900451	2	67
WRC 1225/8 TOUGH-S	770153	>>	WRC 1225/6 TOUGH-S	770139	2	70
KUD 1009/6 TOUGH	953037	>>	-	-	-	-
TRE 1220/8 TOUGH	770368	>>	TRE 1220/6 TOUGH	770351	2	73
A 0616ST/6 Z5	058633	>>	-	-	-	-
A 1225ST/6 Z5	058732	>>	-	-	-	-
G 0618/6 Z1	059197	>>	-	-	-	-
F 0403/6 Z1	058978	>>	-	-	-	-
K 0618/6 Z1	059371	>>	-	-	-	-
K 0618/6 Z5	059401	>>	-	-	-	-
985	058565	>>	-	-	-	-
LOS HM 5108	063262	>>	-	-	-	-
KUD 0302/3 Z4 HC-HT	533574	>>	-	-	-	-
RBF 0613/3 Z4 HC-HT	533581	>>	-	-	-	-
Catalogue section 3						
ZY 1650 6 ADW 60 M 5V	659939	>>	ZY 1650 6 ADW 30 M5V STEEL	659922	3	10
ZY 4010 6 ADW 60 M 5V	660072	>>	ZY 4010 6 AR 60 O5V STEEL EDGE	099902	3	15
ZY 5013 6 ADW 60 M 5V	660089	>>	ZY 5013 6 ADW 30 M5V STEEL	100189	3	10
WR 1320 6 ADW 80 M 5V	660102	>>	WR 1320 6 AR 80 O5V STEEL EDGE	100912	3	16
SP 1320 6 ADW 80 M 5V	660249	>>	SP 1320 6 AR 80 O5V STEEL EDGE	102169	3	17
KE 3250 8 ADW 24 M 5V	660355	>>	KE 3250 8 AR 24 O5V STEEL EDGE	103098	3	18

Discontinued product		>>	Replacement article			
Description	**EAN 4007220**	>>	**Description**	**EAN no. 4007220**	**Cat. section**	**Page**
TO 2016 6 ADW 60 M 5V	660942	>>	TO 2016 6 AR 60 O5V STEEL EDGE	103135	3	18
TO 4032 6 ADW 24 M 5V	660959	>>	TO 3225 6 AR 24 O5V STEEL EDGE	103173	3	18
A 31 6 ADW 30 M 5V	117347	>>	TO 3225 6 AR 24 O5V STEEL EDGE	103173	3	18
ZY 0406 3 AR 100 O 5V	118153	>>	ZY 0408 3 AR 100 O5V STEEL EDGE	094686	3	14
ZY 0506 3 AR 100 O 5V	118191	>>	ZY 0510 3 AR 100 O5V STEEL EDGE	094884	3	14
ZY 0513 3 AR 60 O 5V	118245	>>	ZY 0515 3 AR 60 O5V STEEL EDGE	534670	3	14
ZY 1003 3 AR 100 O 5V	118412	>>	ZY 1002 3 AR 100 O5V STEEL EDGE	098660	3	14
ZY 1603 3 AR 100 O 5V	118573	>>	ZY 1603 3 AR 60 O5V STEEL EDGE	118580	3	14
ZY 2013 6 AR 30 O 5V	099261	>>	ZY 2010 6 AR 30 O5V STEEL EDGE	099216	3	15
ZY 3216 6 AR 24 O 5V	099674	>>	ZY 3220 6 AR 24 O5V STEEL EDGE	099780	3	15
ZY 3216 6 AR 46 O 5V	099681	>>	ZY 3220 6 AR 46 O5V STEEL EDGE	099797	3	15
ZY 2525 6,3 AR 30 O 5V	117019	>>	ZY 2525 6 AR 30 O5V STEEL EDGE	097342	3	15
WR 0306 6 AR 100 O 5V	100714	>>	ZY 0306 3 AR 100 O5V STEEL EDGE	094525	3	14
A 21 6,3 AR 30 O 5V	114766	>>	A 21 6 AR 30 O5V STEEL EDGE	117279	3	19
B 104 3 AR 80 O 5V	117873	>>	B 105 3 AR 100 O5V STEEL EDGE	117880	3	20
B 111 3 AR 80 O 5V	117910	>>	B 114 3 AR 100 O5V STEEL EDGE	117958	3	20
ZY 1303 3 AWCO 46 J 5V	898567	>>	ZY 1303 3 AWCO 60 J5V TOUGH	898574	3	23
SP 0408 3 AWCO 60 J 5V	898741	>>	SP 0408 3 AWCO 80 J5V TOUGH	898758	3	24
702 6 AR 100 MOV	098370	>>	ZY 0306 6 AR 100 O5V STEEL EDGE	094464	3	14
703 6 AR 100 MOV	098387	>>	ZY 0306 6 AR 100 O5V STEEL EDGE	094464	3	14
704 6 AR 100 MOV	098394	>>	ZY 0408 6 AR 100 O5V STEEL EDGE	094587	3	14
705 6 AR 80 MOV	098400	>>	ZY 0510 6 AR 100 O5V STEEL EDGE	094761	3	14
706 6 AR 80 MOV	098417	>>	ZY 0613 6 AR 100 O5V STEEL EDGE	095041	3	14
707 6 AR 80 MOV	098424	>>	ZY 0810 6 AR 80 O5V STEEL EDGE	095287	3	14
708 6 AR 80 MOV	098431	>>	ZY 0810 6 AR 80 O5V STEEL EDGE	095287	3	14
709 6 AR 80 MOV	098448	>>	ZY 1013 6 AR 80 O5V STEEL EDGE	095645	3	14
710 6 AR 80 MV	098455	>>	ZY 1013 6 AR 80 O5V STEEL EDGE	095645	3	14
712 6 AR 80 MV	098479	>>	ZY 1313 6 AR 80 O5V STEEL EDGE	096116	3	14
Catalogue section 4						
CC-FS 180 A 24	722091	>>	CC-FS 180 CO-COOL 24	722534	4	14
CC-FS 180 A 36	722107	>>	CC-FS 180 CO-COOL 36	722558	4	14
CC-FS 180 A 50	722121	>>	CC-FS 180 CO-COOL 50	722565	4	14
CC-FS 180 A 60	722138	>>	CC-FS 180 CO-COOL 60	722589	4	14
CC-FS 180 A 80	722145	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 A 120	722152	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 Z 24	722701	>>	CC-FS 180 CO-COOL 24	722534	4	14
CC-FS 180 Z 36	722718	>>	CC-FS 180 CO-COOL 36	722558	4	14
CC-FS 180 Z 50	722725	>>	CC-FS 180 CO-COOL 50	722565	4	14
CC-FS 180 Z 60	722732	>>	CC-FS 180 CO-COOL 60	722589	4	14
CC-FS 180 Z 80	722749	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 Z 120	722756	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 CO 24	722282	>>	CC-FS 180 CO-COOL 24	722534	4	14
CC-FS 180 CO 36	722305	>>	CC-FS 180 CO-COOL 36	722558	4	14
CC-FS 180 CO 50	722336	>>	CC-FS 180 CO-COOL 50	722565	4	14
CC-FS 180 CO 60	722350	>>	CC-FS 180 CO-COOL 60	722589	4	14
CC-FS 180 CO 80	722374	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 CO 120	722428	>>	-	-	-	-
CC-FS 180 A-COOL 120	722459	>>	-	-	-	-
CC-FS 180 A-COOL 150	722466	>>	-	-	-	-
CC-FS 180 A-COOL 180	722527	>>	-	-	-	-
CC-FS 180 A-COOL 220	722541	>>	-	-	-	-
CC-FS 180 A-COOL 50	722398	>>	-	-	-	-
CC-FS 180 A-COOL 60	722411	>>	-	-	-	-

Discontinued product		>>	Replacement article			
Description	**EAN 4007220**	>>	**Description**	**EAN no. 4007220**	**Cat. section**	**Page**
CC-FS 180 A-COOL 80	722435	>>	-	-	-	-
CC-FS 125 Z-COOL 36	722763	>>	CC-FS 125 CO-COOL 36	722473	4	14
CC-FS 125 Z-COOL 50	722770	>>	CC-FS 125 CO-COOL 50	722480	4	14
CC-FS 125 Z-COOL 60	722787	>>	CC-FS 125 CO-COOL 60	722497	4	14
CC-FS 125 Z-COOL 80	722015	>>	CC-FS 125 CO-COOL 80	722503	4	14
CC-FS 180 Z-COOL 36	722022	>>	CC-FS 180 CO-COOL 36	722558	4	14
CC-FS 180 Z-COOL 50	722046	>>	CC-FS 180 CO-COOL 50	722565	4	14
CC-FS 180 Z-COOL 60	722114	>>	CC-FS 180 CO-COOL 60	722589	4	14
CC-FS 180 Z-COOL 80	722053	>>	CC-FS 180 CO-COOL 80	722602	4	14
CC-FS 180 CO-COOL 120	722626	>>	CC-FS 180 CO-COOL 80	722602	4	14
CD-B 50 STAHL 0,35	780077	>>	-	-	-	-
BA 6/ 610 J A 60	585221	>>	BA 12/610 A 60	585337	4	48
BA 6/ 610 J A 80	585238	>>	BA 12/610 A 80	585344	4	48
BA 6/ 610 J A 120	585245	>>	BA 12/610 A 120	585351	4	48
BA 6/ 610 X A 40	585535	>>	BA 12/610 A 40	585580	4	48
FR 15030/25,4 A-COOL 120	469668	>>	FR 15030/25,4 CO-COOL 120	104903	4	87
FR 15030/25,4 A-COOL 40	469576	>>	FR 15030/25,4 CO-COOL 40	104859	4	87
FR 15030/25,4 A-COOL 60	469590	>>	FR 15030/25,4 CO-COOL 60	104873	4	87
FR 15050/25,4 A-COOL 40	469743	>>	FR 15050/25,4 CO-COOL 40	105467	4	87
FR 15050/25,4 A-COOL 60	469774	>>	FR 15050/25,4 CO-COOL 60	105474	4	87
FR 15050/25,4 A-COOL 80	469798	>>	FR 15050/25,4 CO-COOL 80	105481	4	87
FR 16530/25,4 A-COOL 120	470022	>>	FR 16550/25,4 CO-COOL 120	105573	4	87
FR 16530/25,4 A-COOL 40	469989	>>	FR 16550/25,4 CO-COOL 40	105542	4	87
FR 16530/25,4 A-COOL 60	470008	>>	FR 16550/25,4 CO-COOL 60	105559	4	87
FR 16530/25,4 A-COOL 80	470015	>>	FR 16550/25,4 CO-COOL 80	105566	4	87
FR 16550/25,4 A-COOL 120	469910	>>	FR 16530/25,4 CO-COOL 120	105535	4	87
FR 16550/25,4 A-COOL 40	469866	>>	FR 16530/25,4 CO-COOL 40	105504	4	87
FR 16550/25,4 A-COOL 60	469873	>>	FR 16530/25,4 CO-COOL 60	105511	4	87
FR 16550/25,4 A-COOL 80	469903	>>	FR 16530/25,4 CO-COOL 80	105528	4	87
KSB 0410 A 150	148860	>>	GSB 0410 A 150	147610	4	65
KSB 0610 A 150	148884	>>	GSB 0610 A 150	147634	4	65
KSB 0810 A 150	148907	>>	GSB 0810 A 150	147658	4	65
PF ZY 1220 6 ANCN 46 GHR	145364	>>	PF ZY 1530/6 ANCN 46 GHR	145555	4	136
PF ZY 1208 3 AW 120 LR	145906	>>	PF ZY 1212/3 AW 120 LR	145210	4	138
PF ZY 7510 6 CU 16 PU-STRUC	752050	>>	PF ZY 10030/8 CU 16 PU-STRUC	752074	4	133
PF ZY 7530 6 CU 16 PU-STRUC	752067	>>	PF ZY 10030/8 CU 16 PU-STRUC	752074	4	133
PF SC 10010 20 CU 16 PU-STRUC	752135	>>	PF ZY 10030/8 CU 16 PU-STRUC	752074	4	133
PF SC 10030 20 CU 16 PU-STRUC	752142	>>	PF ZY 10030/8 CU 16 PU-STRUC	752074	4	133
STS 6 TRACKSCHLEIFER	265895	>>	PF ZY 192,5 6 AN 80 TX	067857	4	140
12/330 T A 60	620229	>>	BA 10/330 A 60	620151	4	48
16/480 X A 40	585597	>>	BA 16/480 A 60	585368	4	48
20/480 T Z 60	586235	>>	BA 20/480 CO-COOL 60	799758	4	49
20/480 T Z 80	586242	>>	BA 20/480 CO-COOL 80	799772	4	49
20/480 X Z 40	586297	>>	BA 20/480 CO-COOL 40	799741	4	49

Catalogue section 5

DF 4102 D 181 BARETT	016657	>>	DF 4102 D 126 BARETT	016640	5	17
DF 4182 D 181 SCHWERT	016923	>>	DF 4182 D 126 SCHWERT	016916	5	17
DF 4192 D 181 VOGELZUNGE	016954	>>	DF 4192 D 126 VOGELZUNGE	016947	5	17
DF 5320 D 126 FLACHSTUMPF	257111	>>	DF 5316 D 126 FLACHSTUMPF	257050	5	22
DF 5324 D 126 FLACHSTUMPF	257142	>>	DF 5316 D 126 FLACHSTUMPF	257050	5	22
DF 5393 D 126 VIERKANT	257388	>>	DF 5392 D 126 VIERKANT	257357	5	22
DZY-N 7,0-8/6 D 181	260951	>>	DZY-N 7,0-8/6 D 126	119266	5	24
BZY-N 11,0-10/6 B 126	258439	>>	BZY-N 10,0-8/6 B 126	119419	5	30

Discontinued product		>>	Replacement article			
Description	EAN 4007220	>>	Description	EAN no. 4007220	Cat. section	Page
1A1W 3-5-0,75/3-50 D 126 PHNT C100	665817	>>	-	-	-	-
1A1W 4-5-1,0/3-50 D 126 PHNT C100	665763	>>	-	-	-	-
1A1W 5-5-1,5/3-50 D 126 PHNT C100	665770	>>	-	-	-	-
1A1W 6-6-1,5/6-50 D 126 PHNT C100	665787	>>	-	-	-	-
1A1W 8-8-2,0/6-50 D 126 PHNT C100	665794	>>	-	-	-	-
1A1W 10-8-2,0/6-50 D 126 PHNT C100	665824	>>	-	-	-	-
1A1W 3-5-0,75/3-50 B 126 PHNT C100	665695	>>	-	-	-	-
1A1W 4-5-1,0/3-50 B 126 PHNT C100	665701	>>	-	-	-	-
1A1W 5-5-1,5/3-50 B 126 PHNT C100	665718	>>	-	-	-	-
1A1W 6-6-1,5/6-50 B 126 PHNT C100	665725	>>	-	-	-	-
1A1W 8-8-2,0/6-50 B 126 PHNT C100	665732	>>	-	-	-	-
1A1W 10-8-2,0/6-50 B 126 PHNT C100	665749	>>	-	-	-	-
11V9 100-2-10-20 B 181 PHST C75	168684	>>	-	-	-	-

Catalogue section 6

E 178-7 A 30 K PSF	477724	>>	E 180-7 PSF STEEL	470527	6	53
E 100-6 A 30 M PSF-INOX 16,0	471128	>>	E 100-6 PSF STEELOX/16,0	643273	6	53
E 115-7 A 30 M PSF-INOX	470565	>>	E 115-7 PSF STEELOX	640852	6	53
E 125-7 A 30 M PSF-INOX	471159	>>	E 125-7 PSF STEELOX	640883	6	53
E 150-7 A 30 M PSF-INOX	471166	>>	E 150-7 PSF STEELOX	641002	6	53
E 178-7 A 30 M PSF-INOX	470572	>>	E 180-7 PSF STEELOX	640999	6	53
E 230-7 A 30 M PSF-INOX	470596	>>	E 230-7 PSF STEELOX	640951	6	53
E 115-1,9 A 46 P PSF DUO	952771	>>	E 115-1,9 PSF DUO STEELOX	835081	6	15
E 115-2,8 A 46 P PSF DUO	952788	>>	E 115-2,8 PSF DUO STEELOX	754498	6	15
E 125-1,9 A 46 P PSF DUO	952795	>>	E 125-1,9 PSF DUO STEELOX	835098	6	15
E 125-2,8 A 46 P PSF DUO	952801	>>	E 125-2,8 PSF DUO STEELOX	754504	6	15
E 150-3,5 A 46 P PSF DUO	952818	>>	E 150-3,5 PSF DUO STEELOX	952740	6	15
E 115-4 A 24 R SG	457634	>>	E 115-4,1 SG STEEL	640845	6	54
E 178-4,1 A 24 R SG PIPE	640746	>>	E 180-4,1 SG STEEL	478752	6	54
E 178-4,1 ZA 30 S SG PIPE	640777	>>	E 180-4,1 CERAMIC SGP STEELOX	094143	6	59
E 178-4,6 ZA 30 S SG PIPE	807804	>>	E 180-4,1 CERAMIC SGP STEELOX	094143	6	59
E 230-4,6 ZA 30 S SG PIPE	807811	>>	E 230-4,1 CERAMIC SGP STEELOX	094150	6	59
E 115-5 A 46 H SGP-WHISPER	952849	>>	E 115-7 SGP WHISPER STEELOX	827505	6	57
E 125-5 A 46 H SGP-WHISPER	952856	>>	E 125-7 SGP WHISPER STEELOX	827512	6	57
E 115-7 A 46 H SGP-WHISPER-ALU	853443	>>	E 115-7 SG ALU	475393	6	55
E 125-7 A 46 H SGP-WHISPER-ALU	853450	>>	E 125-7 SG ALU	475409	6	55
CC-GRIND 115 STEEL	835876	>>	CC-FS 115 CO-COOL 36	763315	4	14
CC-GRIND 125 STEEL	835883	>>	CC-FS 125 CO-COOL 36	722473	4	14
CC-GRIND 115 INOX	835890	>>	CC-FS 115 CO-COOL 36	763315	4	14
CC-GRIND 125 INOX	835906	>>	CC-FS 125 CO-COOL 36	722473	4	14
CC GRIND-STEEL 115/125 M14	835852	>>	CC-GT 115-125 M14	725764	4	19
SFS CC-GRIND-SOLID 100 3/8“	932216	>>	-	-	-	-
PFC 115 A 24 SG	614969	>>	PFF 115 A 40 SG STEELOX	167496	6	34
PFC 125 A 24 SG	614976	>>	PFF 125 A 40 SG STEELOX	167502	6	34
PFC 180 A 24 SG	167793	>>	PFF 180 A 40 SG STEELOX	167519	6	34
PFC 180 Z 80 SG	934289	>>	PFC 180 A 80 SG STEELOX	167885	6	34
PFC 180 Z 120 SG	934296	>>	PFC 180 A 120 SG STEELOX	167915	6	34
PFC 115 Z 40 SG COMPACT	614785	>>	PFC 115 Z 40 SG POWER STEELOX	167922	6	35
PFC 115 Z 60 SG COMPACT	614846	>>	PFC 115 Z 60 SG POWER STEELOX	167953	6	35
PFC 125 Z 40 SG COMPACT	614808	>>	PFC 125 Z 40 SG POWER STEELOX	167939	6	35
PFC 125 Z 60 SG COMPACT	614860	>>	PFC 125 Z 60 SG POWER STEELOX	167960	6	35
PFC 150 Z 40 SG COMPACT	953310	>>	PFC 150 Z 40 SG POWER STEELOX	030363	6	35
PFC 150 Z 60 SG COMPACT	953327	>>	PFC 150 Z 60 SG POWER STEELOX	030394	6	35
PFC 180 Z 40 SG COMPACT	614822	>>	PFC 180 Z 40 SG POWER STEELOX	167946	6	35

Discontinued product		>>	Replacement article			
Description	**EAN 4007220**	>>	**Description**	**EAN no. 4007220**	**Cat. section**	**Page**
PFC 180 Z 60 SG COMPACT	614891	>>	PFC 180 Z 60 SG POWER STEELOX	167977	6	35
PFF 115 ZA 40 SG	800300	>>	PFF 115 CO-FREEZE 36 SG INOX	104040	6	37
PFF 115 ZA 60 SG	800317	>>	PFF 115 CO-FREEZE 50 SG INOX	104057	6	37
PFF 115 ZA 80 SG	800324	>>	PFF 115 CO-FREEZE 80 SG INOX	104064	6	37
PFF 125 ZA 40 SG	800331	>>	PFF 125 CO-FREEZE 36 SG INOX	104071	6	37
PFF 125 ZA 60 SG	800348	>>	PFF 125 CO-FREEZE 50 SG INOX	104088	6	37
PFF 125 ZA 80 SG	800355	>>	PFF 125 CO-FREEZE 80 SG INOX	104095	6	37
PFC 115 ZA 40 SG	800409	>>	PFC 115 CO-FREEZE 36 SG INOX	104101	6	37
PFC 115 ZA 60 SG	800416	>>	PFC 115 CO-FREEZE 50 SG INOX	104118	6	37
PFC 115 ZA 80 SG	800423	>>	PFC 115 CO-FREEZE 80 SG INOX	104125	6	37
PFC 125 ZA 40 SG	800430	>>	PFC 125 CO-FREEZE 36 SG INOX	104132	6	37
PFC 125 ZA 60 SG	800447	>>	PFC 125 CO-FREEZE 50 SG INOX	104149	6	37
PFC 125 ZA 80 SG	800454	>>	PFC 125 CO-FREEZE 80 SG INOX	104156	6	37
PFC 180 ZA 40 SG	800478	>>	PFC 180 CO-FREEZE 50 SG INOX	104163	6	37
PFC 180 ZA 60 SG	800485	>>	PFC 180 CO-FREEZE 50 SG INOX	104170	6	37
PFF 100 A 120 SG-COOL	934678	>>	PFF 100 A-COOL 80 SG INOX+ALU/16,0	262788	6	34
PFF 115 A 120 SG-COOL	934685	>>	PFF 115 A-COOL 80 SG INOX+ALU	222751	6	34
PFF 125 A 120 SG-COOL	934692	>>	PFF 125 A-COOL 80 SG INOX+ALU	232958	6	34
PFF 180 A 120 SG-COOL	934708	>>	PFF 180 A-COOL 80 SG INOX+ALU	233009	6	34
PFC 115 A 120 SG-COOL	934647	>>	PFC 115 A-COOL 80 SG INOX+ALU	232903	6	34
PFC 125 A 120 SG-COOL	934654	>>	PFC 125 A-COOL 80 SG INOX+ALU	232965	6	34
PFC 180 A 120 SG-COOL	934661	>>	PFC 180 A-COOL 80 SG INOX+ALU	233016	6	34
PFC 115 Z 40 SGP-POWER	618578	>>	PFC 115 Z 40 SG POWER STEELOX	167922	6	35
PFC 115 Z 60 SGP-POWER	758717	>>	PFC 115 Z 60 SG POWER STEELOX	167953	6	35
PFC 125 Z 40 SGP-POWER	614631	>>	PFC 125 Z 40 SG POWER STEELOX	167939	6	35
PFC 125 Z 60 SGP-POWER	758724	>>	PFC 125 Z 60 SG POWER STEELOX	167960	6	35
PFC 180 Z 40 SGP-POWER	618585	>>	PFC 180 Z 40 SG POWER STEELOX	167946	6	35
PFF 115 Z 40 SGP-COOL	611838	>>	PFF 115 CO-FREEZE 36 SG INOX	104040	6	37
PFF 115 Z 60 SGP-COOL	611845	>>	PFF 115 CO-FREEZE 50 SG INOX	104057	6	37
PFF 115 Z 80 SGP-COOL	611852	>>	PFF 115 CO-FREEZE 80 SG INOX	104064	6	37
PFF 125 Z 40 SGP-COOL	611869	>>	PFF 125 CO-FREEZE 36 SG INOX	104071	6	37
PFF 125 Z 60 SGP-COOL	611876	>>	PFF 125 CO-FREEZE 50 SG INOX	104088	6	37
PFF 125 Z 80 SGP-COOL	611883	>>	PFF 125 CO-FREEZE 80 SG INOX	104095	6	37
PFC 115 Z 40 SGP-COOL	611777	>>	PFC 115 CO-FREEZE 36 SG INOX	104101	6	37
PFC 115 Z 60 SGP-COOL	611784	>>	PFC 115 CO-FREEZE 50 SG INOX	104118	6	37
PFC 115 Z 80 SGP-COOL	611791	>>	PFC 115 CO-FREEZE 80 SG INOX	104125	6	37
PFC 125 Z 40 SGP-COOL	611807	>>	PFC 125 CO-FREEZE 36 SG INOX	104132	6	37
PFC 125 Z 60 SGP-COOL	611814	>>	PFC 125 CO-FREEZE 50 SG INOX	104149	6	37
PFC 125 Z 80 SGP-COOL	611821	>>	PFC 125 CO-FREEZE 80 SG INOX	104156	6	37
ABRACLEAN RG 30050	165225	>>	-	-	-	-
PFC 125 CO 40 SGP-STRONG	957134	>>	PFC 125 Z 36 SGP STRONG STEEL	777886	6	38
PFC 180 CO 40 SGP-STRONG	953334	>>	PFC 180 Z 36 SGP STRONG STEEL	827468	6	38
PFC 180 CO 36 SGP-STRONG-FREEZE	835333	>>	PFC 180 CO-FREEZE 36 SG INOX	104163	6	37
PFC 180 CO 50 SGP-STRONG-FREEZE	835340	>>	PFC 180 CO-FREEZE 50 SG INOX	104170	6	37
PFC 125 Z 40 SGP-CORNER	614648	>>	PFR 125-L Z 40 SGP CURVE STEELOX	790175	6	40
EH 100-3,2 A 46 P PSF	522981	>>	EH 100-2,4 PSF STEEL/16,0	163511	6	13
EHT 100-1,0 A 60 R SG-INOX	511787	>>	EHT 105-1,0 SG STEELOX/16,0	039755	6	18
EHT 115-2,0 A 46 R SG-INOX	953402	>>	EHT 115-1,6 SG STEELOX	355442	6	18
EHT 100-2,4 C 46 R SG	163016	>>	EH 100-2,4 PSF ALU+STONE/16,0	523124	6	16
EHT 150-3,0 C 24 R SG	163047	>>	EH 150-3,0 PSF ALU+STONE	523131	6	16
EHT 178-3,2 C 24 R SG	163092	>>	EHT 180-3,2 PSF ALU+STONE	163641	6	16
EHT 230-3,2 C 24 R SG	163146	>>	EHT 230-3,2 PSF ALU+STONE	163658	6	16
EH 115-2,4 C 30 R SG	163252	>>	EH 115-2,4 PSF ALU+STONE	163665	6	16
EH 125-2,4 C 30 R SG	162996	>>	EH 125-2,4 PSF ALU+STONE	163597	6	16
EH 230-3,2 C 24 R SG	163078	>>	EH 230-3,2 PSF ALU+STONE	163627	6	16

Index
Replacement article list

Discontinued product		>>	Replacement article			
Description	EAN 4007220	>>	Description	EAN no. 4007220	Cat. section	Page
EHT 105-1,0 A 60 T SGP	953440	>>	EHT 100-1,3 CERAMIC SGP STEEL/16,0	103883	6	21
EHT 115-1,0 A 60 T SGP	538043	>>	EHT 115-1,0 CERAMIC SGP STEEL	103890	6	21
EHT 115-2,4 A 30 T SGP	248133	>>	EHT 115-2,0 CERAMIC SGP STEEL	103913	6	21
EHT 125-1,0 A 60 T SGP	538050	>>	EHT 125-1,0 CERAMIC SGP STEEL	103920	6	21
EHT 125-2,4 A 30 T SGP	248140	>>	EHT 125-2,0 CERAMIC SGP STEEL	103944	6	21
EHT 150-1,6 A 46 T SGP	953457	>>	EHT 150-1,6 CERAMIC SGP STEEL	103951	6	21
EHT 178-2,5 A 24 T SGP	522707	>>	EHT 180-2,5 CERAMIC SGP STEEL	103975	6	21
EHT 178-2,8 A 24 T SGP	162392	>>	EHT 180-2,5 CERAMIC SGP STEEL	103975	6	21
EHT 230-2,5 A 24 T SGP	522721	>>	EHT 230-2,5 CERAMIC SGP STEEL	103999	6	21
EHT 230-2,8 A 24 T SGP	162453	>>	EHT 230-2,5 CERAMIC SGP STEEL	103999	6	21
EH 115-2,4 A 30 T SGP	248126	>>	EH 115-2,4 SG STEEL	162606	6	17
EH 125-2,4 A 30 T SGP	248157	>>	EH 125-2,4 SG STEEL	162217	6	17
EH 178-2,5 A 24 T SGP	522714	>>	EH 180-2,5 SG STEELOX	162279	6	18
EH 178-2,8 A 24 T SGP	162293	>>	EH 180-2,9 SG STEEL	522653	6	17
EH 230-2,8 A 24 T SGP	162330	>>	EH 230-2,9 SG STEEL	522684	6	17
EHT 100-0,8 A 60 S SGP-INOX X-SLIM	845103	>>	EHT 105-0,8 SGP STEELOX/16,0	953464	6	22
EHT 100-1,0 A 60 S SGP-INOX	538067	>>	EHT 105-1,0 SGP STEELOX/16,0	953471	6	22
EHT 178-2,3 A 24 S SGP-INOX	522752	>>	EHT 180-2,5 SG STEELOX	162378	6	18
EHT 178-2,8 A 24 S SGP-INOX	281994	>>	EHT 180-2,5 SG STEELOX	162378	6	18
EH 115-2,2 A 46 S SGP-INOX	281963	>>	EH 115-2,4 SG STEELOX	162613	6	18
EH 125-2,2 A 46 S SGP-INOX	281987	>>	EH 125-2,4 SG STEELOX	162651	6	18
EH 178-2,8 A 24 S SGP-INOX	282007	>>	EH 180-2,5 SG STEELOX	162279	6	18
EH 230-2,3 A 24 S SGP-INOX	522790	>>	EH 230-2,5 SG STEELOX	162316	6	18
EH 230-2,8 A 24 S SGP-INOX	282021	>>	EH 230-2,5 SG STEELOX	162316	6	18
EHT 230-3,4 ZA 24 Q SGP	522837	>>	EHT 230-3,2 ZIRKON SG CAST	094983	6	24
EH 230-3,4 ZA 24 Q SGP	522844	>>	EH 230-3,2 ZIRKON SG CAST	340875	6	24
Catalogue section 7						
80 T 300-3,0 C 36 L SG-CHOP-HD 25,4	540268	>>	80 EHT 300-4,0 SG STONE/25,4	163191	6	29
Catalogue section 8						
RBU 12520/14 ST 0,30	806852	>>	POS RBU 12520/14,0 ST 0,30	956250	8	24
RBU 12528/14 ST 0,30	806869	>>	POS RBU 12528/14,0 ST 0,30	956274	8	24
RBU 12520/14 INOX 0,30	806876	>>	POS RBU 12520/14,0 INOX 0,30	956410	8	24
RBU 12528/14 INOX 0,30	806883	>>	POS RBU 12528/14,0 INOX 0,30	956434	8	24
RBG 10006/M14 Pipe ST	750872	>>	-	-	-	-
RBG 10006/M14 Pipe INOX	751237	>>	-	-	-	-
RBG 17806/22,2 Pipe CT ST 56Z	751138	>>	RBG 17806/22,2 PIPE CT ST 0,50 72Z	751190	8	21
RBG 17806/M14 Pipe CT ST 56Z	751169	>>	RBG 17806/M14 PIPE CT ST 0,50 72Z	751206	8	21
RBU 25080/50,8 ST 0,50	807088	>>	RBU 25080/50,8 ST 0,35	807071	8	26
RBU 25080/50,8 INOX 0,35	807163	>>	RBU 25060/50,8 INOX 0,35	807149	8	26
RBU 25080/50,8 INOX 0,50	807170	>>	RBU 25060/50,8 INOX 0,50	807156	8	26
RBU 25080/50,8 LIT INOX 0,35	807217	>>	RBU 25060/50,8 LIT INOX 0,35	807200	8	26
POS PBG 1919/6 INOX 0,60	894460	>>	PBG 1919/6 INOX 0,60	531082	8	35
POS PBG 3030/6 INOX 0,60	894484	>>	PBG 3026/6 INOX 0,60	531105	8	35
POS RBG 7006/6 INOX 0,50	894576	>>	RBG 7006/6 INOX 0,50	530603	8	40
POS TBU 100/M14 SiC 180 0,90	530870	>>	POS TBU 100/M14 SiC 120 1,00	530856	8	12
HBB 50 ST Violin 0,35	572504	>>	HBU 50 ST 0,35	153741	8	53
HBB 50 MES Violin 0,30	573020	>>	HBU 50 MES 0,30	572559	8	53
BO 8/12-22,2 5-18	751923	>>	BO 12/22,2 150-180 BO 8/12-14 100-125	107850 107843	8	55
BO 12/22,2 10-30	561317	>>	BO 8/12-14 100-125 BO 12/22,2 150-180	107843 107850	8	55

Discontinued product		>>	Replacement article			
Description	**EAN 4007220**	>>	**Description**	**EAN no. 4007220**	**Cat. section**	**Page**
Catalogue section 9						
PGZA 3/440 SU	348437	>>	PGZA 3/440 SU-D26	176580 208410	9	20
PGAS 12/120 V-HV	177396	>>	-	-	-	-
PGAS 12/70 V-HV	177419	>>	-	-	-	-
BSG 3.10.40	183014	>>	-	-	-	-
SB-5	808665	>>	SB TB-5	101919	9	123
SB V-5	808672	>>	SB TB-5	101919	9	123
ATR BSG 3/10/40	183021	>>	-	-	-	-
ULR BSG 3/10/40	183038	>>	-	-	-	-

Index
Reference list for catalogues 6 and 7

We have restructured catalogue sections 6 and 7 to make it easier for you to select the correct tool. The product descriptions now include the material for which the tool is suitable. We have also introduced a star system representing the three PFERD quality lines PSF ★★☆☆, SG ★★★☆ and SGP ★★★★. All EAN numbers have been retained. A comparison of the previous and new ranges is provided below.

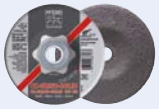
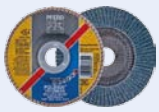
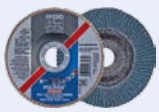
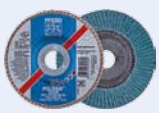


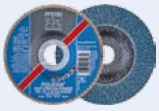
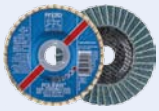
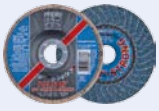


Tool Manual 22			Tool Manual 23		
Picture	**Previous description**	>>	**Picture**	**New description**	**Page**
Catalogue section 6					
Grinding wheels					
	A 30 K PSF	>>		PSF STEEL	53
	A 30 P PSF				
	A 30 M PSF-INOX	>>		PSF STEELOX	53
	A 24 L PSF				
	A 24 R SG	>>		SG STEEL	54
	A 30 N SG-INOX	>>		SG INOX	55
	A 24 N SG-ALU	>>		SG ALU	55
	ZA 24 R SGP	>>		ZIRKON SGP STEEL	58
	CO 24 Q SG	>>		CERAMIC SGP STEELOX	59
	A 46 H SGP-WHISPER	>>		SGP WHISPER STEELOX	57
	A 46 H SGP-WHISPER-ALU	>>		Discontinued product, replaced by SG ALU	55

Tool Manual 22			Tool Manual 23		
Picture	**Previous description**	**>>**	**Picture**	**New description**	**Page**
PIPELINE grinding wheels					
In the interests of clarity, all grinding wheels are shown together.					
The PIPELINE grinding wheels have been incorporated into the regular grinding wheels.					
	A 24/30/46 M PSF-INOX-PIPE	>>		PSF STEELOX	53
	A 24 R SG-PIPE	>>		SG STEEL	54
	A 30 N SG-INOX-PIPE	>>		SG INOX	55
	ZA 30 S SG-PIPE	>>		SG STEEL	54
Foundry grinding wheels					
	AC 30 S SG	>>		SG CAST+ALU	60
	C 24 Q SG	>>		SG CAST+STONE	60
	ZA 30 S SG	>>		ZIRKON SG CAST+STEEL	61
	ZA 30 T SGP	>>		ZIKRON SG CAST	61
DUODISC combination wheels for cutting and face grinding					
The DUODISC combination wheels for cutting and face grinding have been incorporated into the cut-off wheels section.					
	P PSF-DUO-INOX	>>		PSF DUO STEELOX	15
	P PSF-DUO	>>			
CC-GRIND grinding discs					
	CC-GRIND SG-STEEL	>>		Discontinued product, replaced by COMBICLICK CO-COOL, catalogue section 4	14
	CC-GRIND SG-INOX	>>			

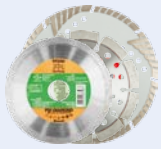
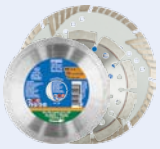
Index
Reference list for catalogues 6 and 7

Tool Manual 22			Tool Manual 23		
Picture	Previous description	>>	Picture	New description	Page
	CC-GRIND-SOLID SG-STEEL	>>		CC-GRIND-SOLID SG STEEL	45
	CC-GRIND-SOLID SG-INOX	>>		CC-GRIND-SOLID SG INOX	45
	CC-GRIND-FLEX SG-STEEL	>>		CC-GRIND-FLEX SG STEEL	46
Cup wheels					
	A 16/24/36/80 Q SG	>>		SG STEELOX	62
	C 16/24/30/60/80 Q SG	>>		SG CAST+STONE	62
Snagging wheels					
	A 24 M SG	>>		SG STEEL+INOX+CAST	63
POLIFAN flap discs					
	A PSF / Type PSF A	>>		A PSF STEELOX	33
	Z PSF / Type PSF Z	>>		Z PSF STEELOX	33
	A SG / Type SG A	>>		A SG STEELOX	34
	Z SG / Z SG-POWER / Type SG ZIRKON	>>		Z SG POWER STEELOX	35
	Z SG-COMPACT / Type SG ZIRKON-COMPACT	>>		Discontinued product, replaced by Z SG POWER STEELOX	35
	ZA SG / Type SG ZA	>>		Discontinued product, replaced by CO-FREEZE SG INOX	37
	A SG-COOL / Type SG A-COOL	>>		A-COOL SG INOX+ALU	34

Tool Manual 22			Tool Manual 23		
Picture	**Previous description**	>>	**Picture**	**New description**	**Page**
	Z SGP-POWER / Type SGP ZIRKON-POWER	>>		Discontinued product, replaced by Z SG POWER STEELOX	35
	Z SGP-COOL / Type SGP ZIRKON-COOL	>>		Discontinued product, replaced by CO-FREEZE SG INOX	37
	CO SGP-COOL / Type SGP CO-COOL	>>		CO-COOL SG STEELOX	36
	Z SGP-STRONG / Type SGP ZIRKON-STRONG	>>		Z SGP STRONG STEEL	38
	CO SGP-STRONG / Type SGP CO-STRONG	>>		Discontinued product, replaced by Z SGP STRONG STEEL	38
	CO SGP-STRONG-FREEZE / Type SGP CO-STRONG-FREEZE	>>		Discontinued product, replaced by CO-FREEZE SGP STRONG INOX	39
	Z SGP-CURVE / Type SGP ZIRKON-CURVE	>>		Z SGP CURVE STEELOX	40
	CO SGP-CURVE / Type SGP CO-CURVE	>>		CO SGP CURVE STEELOX	41
	A SGP CURVE-ALU / Type SGP CURVE-ALU	>>		A SGP CURVE ALU	41
	Z SGP-CORNER / Type SGP ZIRKON-CORNER	>>		Discontinued product, replaced by Z SGP CURVE STEELOX	40
Cut-off wheels					
	A 24/46/60 P PSF	>>		PSF STEEL	13
	A 24/46/60 P PSF-INOX	>>		PSF STEELOX	14
	A 46/60 L PSF-INOX	>>		PSF CLASSIC STEELOX (now only in the price list)	-

Index
Reference list for catalogues 6 and 7

Tool Manual 22			Tool Manual 23		
Picture	**Previous description**		**Picture**	**New description**	**Page**
	C 24/30/46/60 P PSF	>>		PSF ALU+STONE	16
	A 24/30/46/60 S SG	>>		SG STEEL	17
	A 24/30/46/60 R SG-INOX	>>		SG STEELOX	18
	A 46/60 Q SG-INOX	>>		SG CLASSIC STEELOX (now only in the price list)	-
	A 24/30/46/60 N SG-ALU	>>		SG ALU	20
	C 24/30/46 R SG	>>		Discontinued product, replaced by PSF ALU+STONE	16
	A 24/30/46/60 T SGP	>>		Discontinued product, replaced by CERAMIC SGP STEEL	21
	A 24/46/60 S SGP-INOX	>>		SGP STEELOX	22
Foundry cut-off wheels					
	A 24 P SG	>>		SG CAST+STEEL	23
	A 24 Q SG-INOX-GUSS	>>		SG CAST+INOX	23
	AC 24 Q SG	>>		SG CAST+ALU	24
	ZA 24 Q SGP	>>		Discontinued product, replaced by ZIRKON SG CAST	24
Cut-off wheels for straight grinders					
	A 46/60 P SG	>>		SG STEELOX	26

Tool Manual 22			Tool Manual 23		
Picture	**Previous description**	>>	**Picture**	**New description**	**Page**
Cut-off wheels for petrol cutters and cut-off grinders					
	A 24 S SG	>>		SG STEEL	28
	C 24 R SG	>>		SG STONE	29
	AC 24 Q SG	>>		SG CAST+STONE	29
Diamond cut-off wheels					
	all	>>		See catalogue section 5	48-52

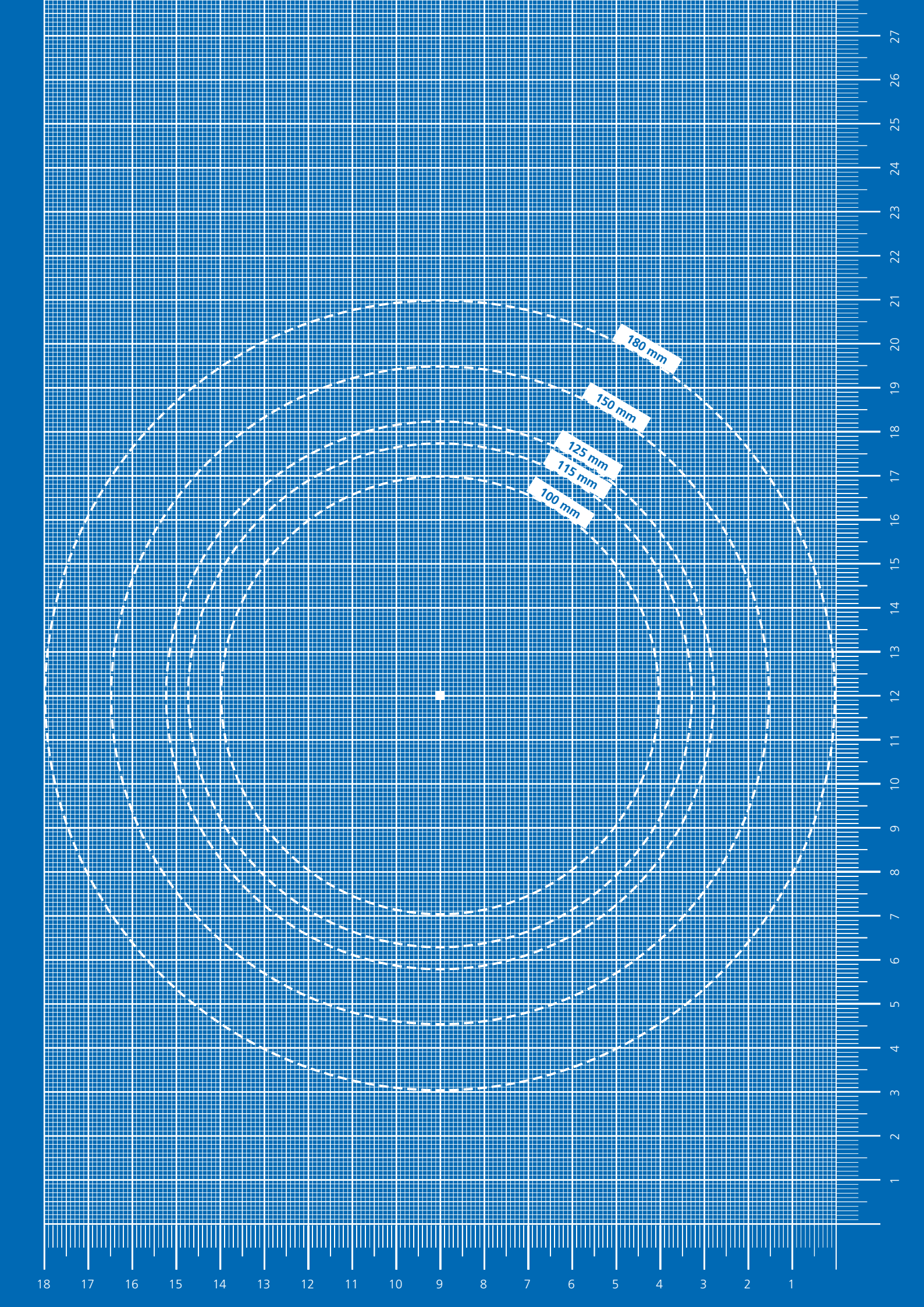
Catalogue section 7

Cut-off wheels for stationary applications

	A 36 K PSF-CHOP	>>		K PSF CHOP STEEL	10
	A 36 K PSF-CHOP-INOX	>>		K PSF CHOP STEELOX	10
	A 36 K SG-CHOP	>>		K SG CHOP STEEL	11
	A 36 K SG-CHOP-INOX	>>		K SG CHOP STEELOX	11
	A 30 L SG-CHOP-HD	>>		L SG CHOP HD STEEL	12
	A 30 O SG-CHOP-HD	>>		O SG CHOP HD STEEL	12
	A 30 L SG-CHOP-HD-INOX	>>		L SG CHOP HD STEELOX	12
	C 36 L SG-CHOP-HD	>>		L SG CHOP HD CAST+STONE	13

Index
Reference list for catalogues 6 and 7

Tool Manual 22			Tool Manual 23		
Picture	**Previous description**		**Picture**	**New description**	**Page**
	A 24 Q SG-RAIL	>>		Q SG RAIL STEEL	14
	A 60 H SG-LAB-INOX	>>		H SG LAB HD STEELOX	15
	A 46 H SG-LAB	>>		H SG LAB STEEL	15
	ZA 24 T SG-HD	>>		ZIRKON T SGP-HD CAST+STEEL	17
	ZA 24 P SG-HD	>>		ZIRKON P SGP-HD CAST+STEEL	17
	ZA 24 R SG-HD	>>		ZIRKON R SGP-HD CAST+STEEL	17
	A 24 Q SG-HD	>>		Q SGP HD STEEL (Q becomes N for diameters of 500 x 5,8 mm)	16
	A 24 N SG-HD	>>		N SGP HD STEEL (N becomes Q for diameters of 500 x 5,8 mm)	16
	A 24 S SG-HD	>>		S SGP HD STEEL	16
	A 24 L SG-HD	>>		L SGP HD STEEL	16


180 mm
150 mm
125 mm
115 mm
100 mm
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

CONFÍA EN EL AZUL VERTROUW BLAUW

ZAUFAJ NIEBIESKIM **VERTRAU BLAU**

FAITES CONFIANCE AU CHEVAL BLEU

MAVİYE GÜVEN CONFIE NO AZUL

FIDATI DEL BLU **TRUST BLUE** LITA PÅ BLÅTT

© August Rüggeberg GmbH & Co. KG

Printed in Germany. 04/2019 Subject to technical modifications. 831 010

PFERD

www.pferd.com

4 007220 814680