

CARBIDE



Being the best through innovation



JET-POWER

JET-POWER FRÄSER

- Exotic materials like Stainless Steels, Nickel alloys and Titanium
- Für zähe Werkstoffe, wie rostfreier Stahl, Titan und Nickellegierungen

SELECTION GUIDE

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
EH911 EH912		CARBIDE, 2 FLUTE 35° HELIX SHORT LENGTH VOLLHARTMETALL, 2 SCHNEIDEN 35° RECHTSSPIRALE KURZ	D1.0	D25.0	682
EH913 EH914		CARBIDE, 4 FLUTE 35° HELIX SHORT LENGTH VOLLHARTMETALL, 4 SCHNEIDEN 35° RECHTSSPIRALE KURZ	D2.0	D25.0	683
EH830 EH840		CARBIDE, 3&4 FLUTE 50° HELIX LONG LENGTH VOLLHARTMETALL, 3&4 SCHNEIDEN 50° RECHTSSPIRALE LANG	D6.0	D25.0	684
EH915 EH916		CARBIDE, 6&8 FLUTE 45° HELIX LONG LENGTH (Positive Rake Angle) VOLLHARTMETALL, 6&8 SCHNEIDEN 45° RECHTSSPIRALE LANG	D6.0	D25.0	685
EE515		PREMIUM HSS-PM, 4&6 FLUTE SHORT LENGTH PREMIUM HSS-PM, 4&6 SCHNEIDEN KURZ	D3.0	D25.0	686
EH852 EH862		CARBIDE, MULTI FLUTE SHORT LENGTH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN KURZ SCHRUPPFRÄSER - FEIN	D6.0	D25.0	687
EH831 EH841		CARBIDE, MULTI FLUTE LONG LENGTH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - FEIN	D6.0	D25.0	688
EH917 EH918		CARBIDE, MULTI FLUTE 45° HELIX SHORT LENGTH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE KURZ SCHRUPPFRÄSER - FEIN	D6.0	D20.0	689
EH919 EH920		CARBIDE, MULTI FLUTE 45° HELIX LONG LENGTH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE LANG SCHRUPPFRÄSER - FEIN	D4.0	D25.0	690
EH921 EH942		CARBIDE, MULTI FLUTE 45° HELIX LONG REACH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE GROSSE REICHWEITE SCHRUPPFRÄSER - FEIN	D6.0	D20.0	691
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN					692

JET-POWER END MILLS

◎ : Excellent, ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
			HRc40~45	HRc45~55								
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎							◎	◎	
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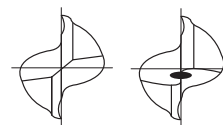
PLAIN SHANK
GLATTER ZYLINDERSCHAFT

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

CARBIDE, 2 FLUTE 35° HELIX SHORT LENGTH VOLLHARTMETALL, 2 SCHNEIDEN 35° RECHTSSPIRALE KURZ

- ▶ Ultra micro grain carbide
- ▶ Reduces chipping of corner edges
- ▶ Suitable for low hardness materials (under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

- ▶ Ultra Feinstkorn - Vollhartmetall.
- ▶ Verstärkte Schneidkante.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRc, rostfreien Stählen, Titan und Nickellegierungen.



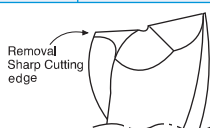
up to Ø3mm over Ø3mm



Unit : mm

EDP No.	Mill Diameter	Shank Diameter	Length of Cut	Overall Length
EH911010	1.0	4	2.5	40
EH911901	1.0	6	2.5	40
EH911015	1.5	4	4	40
EH911902	1.5	6	4	40
EH911020	2.0	4	6	40
EH911903	2.0	6	6	40
EH911025	2.5	4	8	40
EH911904	2.5	6	8	40
EH911030	3.0	6	8	45
EH911035	3.5	6	10	45
EH911040	4.0	6	11	45
EH911045	4.5	6	11	45
EH911050	5.0	6	13	50
EH911055	5.5	6	13	50
EH911060	6.0	6	13	50
EH911065	6.5	8	16	60
EH911070	7.0	8	16	60
EH911075	7.5	8	16	60
EH911080	8.0	8	19	60
EH911085	8.5	10	19	70
EH911090	9.0	10	19	70
EH911095	9.5	10	19	70
EH911100	10.0	10	22	70
EH911110	11.0	12	22	75
EH911120	12.0	12	26	75
EH911140	14.0	16	26	85
EH911160	16.0	16	32	100
EH911180	18.0	16	32	100
EH911200	20.0	20	38	105
EH911220	22.0	20	38	105
EH911250	25.0	25	45	120

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6



◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎							◎	◎	

CARBIDE, 4 FLUTE 35° HELIX SHORT LENGTH
VOLLHARTMETALL, 4 SCHNEIDEN 35° RECHTSSPIRALE KURZ

- ▶ Ultra micro grain carbide
- ▶ Reduces chipping of corner edges
- ▶ Suitable for low hardness materials (under HRc45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

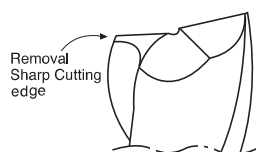
- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Verstärkte Schneidkante.
- ▶ Für die Bearbeitung von: Werkstoffen bis 45 HRc, rostfreien Stählen, Titan und Nickellegierungen.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length
PLAIN	FLAT				
EH913020	-	2.0	4	6	40
EH913901	EH914901	2.0	6	6	40
EH913025	-	2.5	4	8	40
EH913902	EH914902	2.5	6	8	40
EH913030	EH914030	3.0	6	8	45
EH913035	EH914035	3.5	6	10	45
EH913040	EH914040	4.0	6	11	45
EH913045	EH914045	4.5	6	11	45
EH913050	EH914050	5.0	6	13	50
EH913055	EH914055	5.5	6	13	50
EH913060	EH914060	6.0	6	13	50
EH913065	EH914065	6.5	8	16	60
EH913070	EH914070	7.0	8	16	60
EH913075	EH914075	7.5	8	16	60
EH913080	EH914080	8.0	8	19	60
EH913085	EH914085	8.5	10	19	70
EH913090	EH914090	9.0	10	19	70
EH913095	EH914095	9.5	10	19	70
EH913100	EH914100	10.0	10	22	70
EH913110	EH914110	11.0	12	22	75
EH913120	EH914120	12.0	12	26	75
EH913140	EH914140	14.0	16	26	85
EH913160	EH914160	16.0	16	32	100
EH913180	EH914180	18.0	16	32	100
EH913200	EH914200	20.0	20	38	105
EH913220	EH914220	22.0	20	38	105
EH913250	EH914250	25.0	25	45	120

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6



◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎							◎	◎	



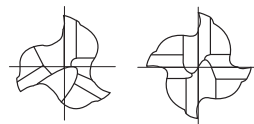
PLAIN SHANK
GLATTER ZYLINDERSCHAFT

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

CARBIDE, 3&4 FLUTE 50° HELIX LONG LENGTH VOLLHARTMETALL, 3&4 SCHNEIDEN 50° RECHTSSPIRALE LANG

- ▶ Ultra micro grain carbide
- ▶ Reduces chipping of corner edges
- ▶ Suitable for low hardness materials (under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

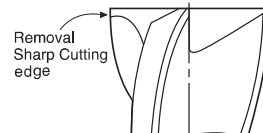
- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Verstärkte Schneidkante.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRc, rostfreien Stählen, Titan und Nickellegierungen.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT					
EH830060	EH840060	6.0	6	13	50	3
EH830080	EH840080	8.0	8	19	60	3
EH830100	EH840100	10.0	10	22	70	3
EH830120	EH840120	12.0	12	25	75	3
EH830160	EH840160	16.0	16	32	90	3
EH830180	EH840180	18.0	18	32	90	3
EH830200	EH840200	20.0	20	38	100	4
EH830250	EH840250	25.0	25	45	120	4

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6



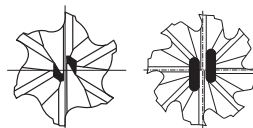
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎							◎	◎	○

◎ : Excellent ○ : Good

CARBIDE, 6&8 FLUTE 45° HELIX LONG LENGTH (Positive Rake Angle)
VOLLHARTMETALL, 6&8 SCHNEIDEN 45° RECHTSSPIRALE LANG

- ▶ Ultra micro grain carbide
- ▶ Reduces chipping of corner edges
- ▶ Suitable for low hardness materials(under HRc45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

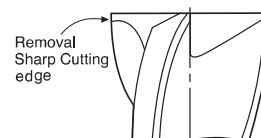
- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Verstärkte Schneidkante.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRc, rostfreien Stählen, Titan und Nickellegierungen.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT					
EH915060	EH916060	6.0	6	13	57	6
EH915070	EH916070	7.0	8	16	63	6
EH915080	EH916080	8.0	8	19	63	6
EH915090	EH916090	9.0	10	19	72	6
EH915100	EH916100	10.0	10	22	72	6
EH915120	EH916120	12.0	12	26	83	6
EH915140	EH916140	14.0	14	26	83	6
EH915160	EH916160	16.0	16	32	92	6
EH915180	EH916180	18.0	18	32	92	8
EH915200	EH916200	20.0	20	38	104	8
EH915250	EH916250	25.0	25	44	104	8

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6



◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	◎	◎	◎							◎	◎	○



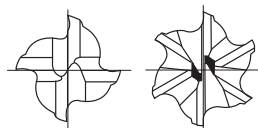
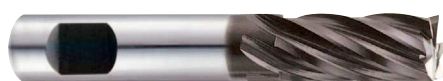
EE515 SERIES

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

PREMIUM HSS-PM, 4&6 FLUTE SHORT LENGTH
PREMIUM HSS-PM, 4&6 SCHNEIDEN KURZ

- ▶ Excellent performance on Low hardness materials (under HRc45), alloy steels, tool steels, carbon steels, prehardened steels, Stainless Steel, Titanium, Inconel.
- ▶ High chemical stability prevents built-up edge, micro cracks and crater wear.
- ▶ Superior workpiece finish.

- ▶ Ausgezeichnete Eignung zur Bearbeitung von weichen Materialien (bis HRc45), Legierten Stählen, kraterbildung, vorgehärtetem Stahl, rostfreiem Stahl, Titanium und Inconel.
- ▶ Hohe chemische Stabilität verhindert Kantenbildung, Mikrorisse und Krateraufzug.
- ▶ Höhere Oberflächengüte.



Unit : mm

EDP No. FLAT	Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
EE515030	3.0	6	8	52	4
EE515040	4.0	6	11	55	4
EE515050	5.0	6	13	57	4
EE515060	6.0	6	13	57	4
EE515080	8.0	10	19	69	4
EE515100	10.0	10	22	72	4
EE515120	12.0	12	26	83	4
EE515140	14.0	12	26	83	4
EE515160	16.0	16	32	92	6
EE515180	18.0	16	32	92	6
EE515200	20.0	20	38	104	6
EE515250	25.0	25	45	121	6

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~+0.03	h6

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	○	○	○							○	○	○

◎ : Excellent ○ : Good

CARBIDE, MULTI FLUTE SHORT LENGTH ROUGHING - FINE

VOLLHARTMETALL, MULTI SCHNEIDEN KURZ SCHRUPPFÄRÄSER - FEIN

- ▶ Suitable for low hardness materials(under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc
- ▶ High velocity milling operation.
- ▶ Fast chip ejection.

- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRC, rostfreien Stählen, Titan und Nickellegierungen..
- ▶ Hochgeschwindigkeitsfräsen.
- ▶ Schnelle Spanausfuhr.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT	h10	h6			
EH852060	EH862060	6.0	6	7	54	3
EH852070	EH862070	7.0	8	8	58	3
EH852080	EH862080	8.0	8	9	58	3
EH852090	EH862090	9.0	10	13	66	4
EH852100	EH862100	10.0	10	14	66	4
EH852120	EH862120	12.0	12	16	73	4
EH852140	EH862140	14.0	14	18	75	4
EH852160	EH862160	16.0	16	22	82	4
EH852180	EH862180	18.0	18	24	84	4
EH852200	EH862200	20.0	20	26	92	4
EH852250	EH862250	25.0	25	25	110	5

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30
h10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRc40~45	HRc45~55	HRc55~70							
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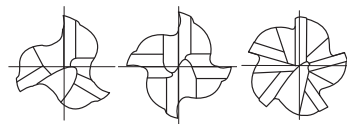


PLAIN SHANK
GLATTER ZYLINDERSCHAFT

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

CARBIDE, MULTI FLUTE LONG LENGTH ROUGHING - FINE VOLLHARTMETALL, MULTI SCHNEIDEN LANG SCHRUPPFRÄSER - FEIN

- ▶ Longer flute length than EH852, EH862.
 - ▶ Suitable for low hardness materials (under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc.
 - ▶ High velocity milling operation.
 - ▶ Fast chip ejection.
- ▶ Längere Schneiden als bei EH852 und EH862.
 - ▶ zur Bearbeitung von: Werkstoffen bis 45 HRC, rostfreien Stählen, Titan und Nickellegierungen..
 - ▶ Hochgeschwindigkeitsfräsen.
 - ▶ Schnelle Spanausfuhr.



Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT	h10	h6			
EH831060	EH841060	6.0	6	16	57	3
EH831070	EH841070	7.0	8	16	63	3
EH831080	EH841080	8.0	8	16	63	3
EH831090	EH841090	9.0	10	19	72	4
EH831100	EH841100	10.0	10	22	72	4
EH831120	EH841120	12.0	12	26	83	4
EH831140	EH841140	14.0	14	26	83	4
EH831160	EH841160	16.0	16	32	92	4
EH831180	EH841180	18.0	18	32	92	4
EH831200	EH841200	20.0	20	38	104	4
EH831250	EH841250	25.0	25	45	121	5

Tolerances according to DIN 7160 & 7161 Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30
h10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13

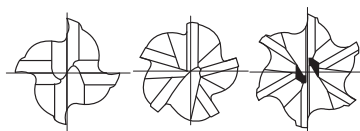
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
○	○	○	○							○	○	○

◎ : Excellent ○ : Good

CARBIDE, MULTI FLUTE 45° HELIX SHORT LENGTH ROUGHING - FINE
VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE KURZ SCHRUPPFRÄSER - FEIN

- ▶ Ultra micro grain carbide
- ▶ High chip removal and minimizing breakages of cutting edges.
- ▶ Suitable for low hardness materials (under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Schnelle Spanausfuhr und Minimierung von Abbrechen von Schneidkanten.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRC, rostfreien Stählen, Titan und Nickellegierungen..

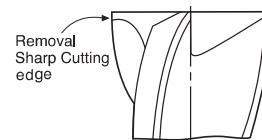


Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT	h10	h6			
EH917060	EH918060	6.0	6	7	54	4
EH917080	EH918080	8.0	8	9	58	4
EH917100	EH918100	10.0	10	14	66	4
EH917120	EH918120	12.0	12	16	73	4
EH917160	EH918160	16.0	16	22	82	5
EH917200	EH918200	20.0	20	26	92	6

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30
h10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13



Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
○	○	○	○							○	○	○

◎ : Excellent ○ : Good



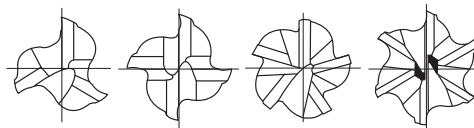
PLAIN SHANK
GLATTER ZYLINDERSCHAFT

FLAT SHANK
SEITLICHE MITNAHMEFLÄCHEN

CARBIDE, MULTI FLUTE 45° HELIX LONG LENGTH ROUGHING - FINE
VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE LANG SCHRUPPFRÄSER - FEIN

- ▶ Ultra micro grain carbide
- ▶ High chip removal and minimizing breakages of cutting edges.
- ▶ Suitable for low hardness materials (under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Schnelle Spanausfuhr und Minimierung von Abbrechen von Schneidkanten.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRc, rostfreien Stählen, Titan und Nickellegierungen..

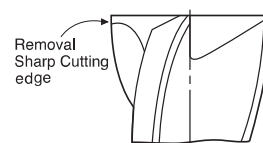


Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Overall Length	No. of Flute
PLAIN	FLAT	h10	h6			
EH919040	EH920040	4.0	6	11	57	3
EH919050	EH920050	5.0	6	13	57	4
EH919060	EH920060	6.0	6	16	57	4
EH919070	EH920070	7.0	8	16	63	4
EH919080	EH920080	8.0	8	16	63	4
EH919090	EH920090	9.0	10	19	72	4
EH919100	EH920100	10.0	10	22	72	4
EH919120	EH920120	12.0	12	26	83	4
EH919140	EH920140	14.0	14	26	83	5
EH919160	EH920160	16.0	16	32	92	5
EH919200	EH920200	20.0	20	38	104	6
EH919250	EH920250	25.0	25	45	121	6

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 1 bis 3	over 3 to 6 3 bis 6	over 6 to 10 6 bis 10	over 10 to 18 10 bis 18	over 18 to 30 18 bis 30
h10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13



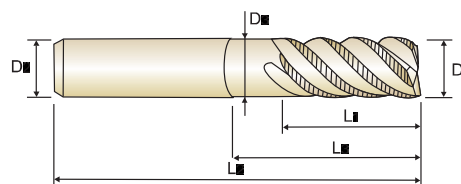
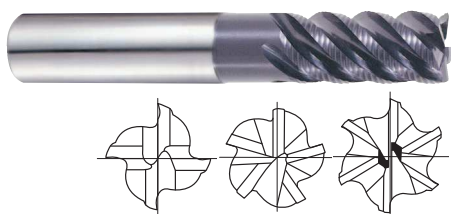
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
○	○	○	○	○						○	○	○

◎ : Excellent ○ : Good

CARBIDE, MULTI FLUTE 45° HELIX LONG REACH ROUGHING - FINE
VOLLHARTMETALL, MULTI SCHNEIDEN 45° RECHTSSPIRALE GROÙE REICHWEITE SCHRUPPFÄSER - FEIN

- ▶ Ultra micro grain carbide
- ▶ High chip removal and minimizing breakages of cutting edges.
- ▶ Suitable for low hardness materials(under HRC45), alloy steels, tool steels, carbon steels, prehardened steels, stainless steels, etc

- ▶ Ultra Feinstkorn - Vollhartmetall
- ▶ Schnelle Spanausfuhr und Minimierung von Abbrechen von Schneidkanten.
- ▶ zur Bearbeitung von: Werkstoffen bis 45 HRC, rostfreien Stählen, Titan und Nickellegierungen..

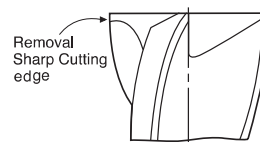


Unit : mm

EDP No.		Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter	No. of Flute
PLAIN	FLAT	D1(h10)	D2(h6)	L1	L3	L2	D3	
EH921060	EH942060	6.0	6	16	20	57	5.5	4
EH921080	EH942080	8.0	8	16	26	63	7.5	4
EH921100	EH942100	10.0	10	22	31	72	9.5	4
EH921120	EH942120	12.0	12	26	37	83	11.5	4
EH921160	EH942160	16.0	16	32	51	100	15.5	5
EH921200	EH942200	20.0	20	38	59	110	19.2	6

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

Tolerance range in μm / Toleranzwerte in μm					
Nominal-Diameter in mm / Nennmaßbereich in mm					
	from 1 to 3 von 1 bis 3	over 3 to 6 über 3 bis 6	over 6 to 10 über 6 bis 10	over 10 to 18 über 10 bis 18	over 18 to 30 über 18 bis 30
h10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13



◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
○	◎	◎	◎							◎	◎	○

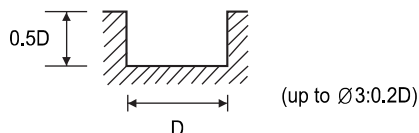


RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

CARBIDE, 2 FLUTE SHORT - SLOTTING
VOLLHARTMETALL, 2 SCHNEIDEN KURZ - NUTENFRÄSEN

EH911, EH912 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY	
HARDNESS	~ HRc30		HRc30 ~ HRc45			
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²			
DIAMETER	RPM	FEED	RPM	FEED		
2.0	11560	190	7560	120	6300	90
3.0	8920	210	5560	140	4620	120
4.0	7560	300	4620	180	3880	150
5.0	6300	320	3780	190	3160	160
6.0	5560	350	3360	220	2840	180
8.0	4200	380	2520	200	2100	180
10.0	3260	330	2000	160	1680	160
12.0	2740	280	1680	130	1360	130
16.0	2200	220	1360	110	1060	110
20.0	1680	170	1060	80	840	80
25.0	1360	130	840	70	680	60

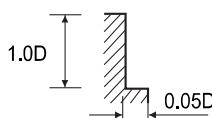


RPM = rev./min.
FEED = mm/min.

CARBIDE, 4 FLUTE SHORT - SIDE CUTTING
VOLLHARTMETALL, 4 SCHNEIDEN KURZ - SEITENFRÄSEN

EH913, EH914 SERIES

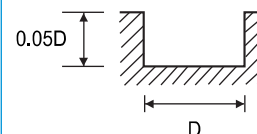
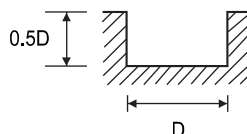
MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY	
HARDNESS	~ HRc30		HRc30 ~ HRc45			
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²			
DIAMETER	RPM	FEED	RPM	FEED		
2.0	11560	280	7560	170	6300	140
3.0	8920	320	5560	200	4620	170
4.0	7560	570	4620	350	3880	280
5.0	6300	600	3780	360	3160	300
6.0	5560	660	3360	410	2840	330
8.0	4200	710	2520	380	2100	350
10.0	3260	610	2000	300	1680	300
12.0	2740	520	1680	250	1360	240
16.0	2200	410	1360	200	1060	200
20.0	1680	320	1060	160	840	150
25.0	1360	250	840	130	680	120



RPM = rev./min.
FEED = mm/min.

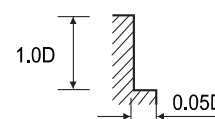
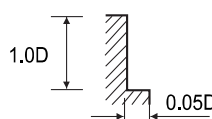
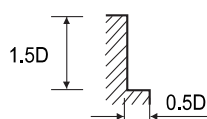
CARBIDE, 3&4 FLUTE 50° HELIX LONG - SLOTTING
VOLLHARTMETALL, 3&4 SCHNEIDEN 50° RECHTSSPIRALE LANG - NUTENFRÄSEN
EH830, EH840 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL	
HARDNESS	~ HRc30		HRc30 ~ HRc45					
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²					
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	5560	310	3360	200	2840	160	1160	40
8.0	4200	340	2520	180	2100	160	840	40
10.0	3260	300	2000	140	1680	140	670	40
12.0	2740	250	1680	120	1370	120	560	30
16.0	2200	200	1360	100	1050	100	420	25
18.0	1940	175	1210	85	950	85	370	20
20.0	1680	150	1060	70	840	70	320	20
25.0	1360	115	840	60	670	60	270	15


RPM = rev./min.
FEED = mm/min.

CARBIDE, 3&4 FLUTE 50° HELIX - SIDE CUTTING
VOLLHARTMETALL, 3&4 SCHNEIDEN 50° RECHTSSPIRALE - SEITENFRÄSEN
EH830, EH840 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL	
HARDNESS	~ HRc30		HRc30 ~ HRc45					
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²					
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	5560	400	3360	250	2840	250	1050	55
8.0	4200	420	2520	230	2100	265	840	50
10.0	3260	370	2000	180	1680	230	680	50
12.0	2740	310	1680	150	1370	180	560	45
16.0	2200	250	1360	120	1050	150	420	35
18.0	1940	220	1210	110	950	130	370	30
20.0	1680	190	1060	95	840	115	340	30
25.0	1360	150	840	75	670	90	270	25

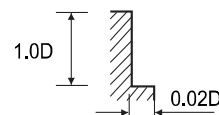
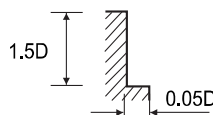
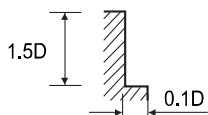

RPM = rev./min.
FEED = mm/min.

CARBIDE, 6&8 FLUTE 45° HELIX LONG - SIDE CUTTING
VOLLHARTMETALL, 6&8 SCHNEIDEN 45° RECHTSSPIRALE LANG - SEITENFRÄSEN

EH915, EH916 SERIES

■ **NORMAL SPEED**

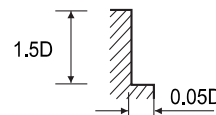
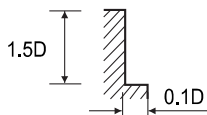
MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL	
	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
HARDNESS	~ HRc30		HRc30 ~ HRc45					
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²					
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	5560	2000	3880	1370	3370	1100	1350	280
8.0	4200	2000	2940	1370	2490	1100	1000	280
10.0	3360	2000	2320	1370	1920	1100	440	280
12.0	2840	1680	2000	1160	1610	1000	400	250
16.0	2100	1260	1480	880	1160	770	310	190
20.0	1680	1010	1160	690	900	620	250	155
25.0	1500	900	1100	600	850	540	220	135



RPM = rev./min.
FEED = mm/min.

■ **HIGH SPEED**

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS	
	RPM	FEED	RPM	FEED
HARDNESS	~ HRc30		HRc30 ~ HRc45	
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²	
DIAMETER	RPM	FEED	RPM	FEED
6.0	22200	8000	16800	6090
8.0	16800	8000	12600	6090
10.0	13400	8000	9980	5990
12.0	11350	6720	8400	5040
16.0	8400	5040	6300	3780
20.0	6700	4040	5040	3050
25.0	6000	3600	4500	2700



RPM = rev./min.
FEED = mm/min.

PREMIUM HSS-PM, 4&6 FLUTE SHORT- SIDE CUTTING
PREMIUM HSS-PM, 4&6 SCHNEIDEN KURZ - SEITENFRÄSEN
CARBIDE
HSS

 CBN
END MILLS

 i-Xmill
END MILLS

 X5070
END MILLS

 X-POWER
END MILLS

**JET-POWER
END MILLS**

 V7 INOX
END MILLS

 V7 STEEL
END MILLS

 ALU-POWER
END MILLS

 D-POWER
END MILLS

 K-2
END MILLS

 GENERAL
CARBIDE
END MILLS

 TANK-POWER
END MILLS

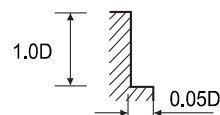
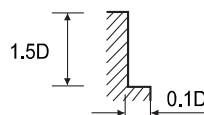
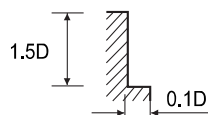
 GENERAL
HSS
END MILLS

 MILLING
CUTTERS

 TECHNICAL
DATA

EE515 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL		
	~ HRc30		HRc30 ~ HRc45		RPM	FEED	RPM	FEED	
HARDNESS	RPM	FEED	RPM	FEED					RPM
DIAMETER									
3.0	4400	185	1100	23	2200	110	880	28	
4.0	3600	210	900	31	1800	125	720	37	
5.0	3000	225	750	30	1500	135	600	36	
6.0	2600	235	600	29	1300	140	480	35	
8.0	2000	250	500	28	1000	150	400	34	
10.0	1600	285	410	30	800	170	330	36	
12.0	1320	250	340	29	660	150	270	35	
14.0	1160	235	290	27	580	140	230	32	
16.0	1000	225	250	26	500	135	200	31	
18.0	900	210	225	23	450	125	180	28	
20.0	800	200	200	17	400	120	160	21	
25.0	640	165	165	15	320	100	130	18	


 RPM = rev./min.
 FEED = mm/min.

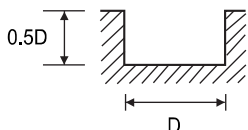


RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

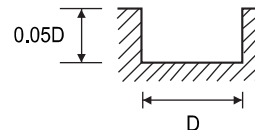
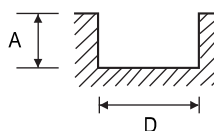
CARBIDE, MULTI FLUTE ROUGHING - SLOTTING
VOLLHARTMETALL, MULTI SCHNEIDEN SCHRUPPFRÄSER

EH917, EH918, EH919, EH920, EH921, EH942, EH852, EH862, EH831, EH841 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL	
HARDNESS	~ HRC30		HRC30 ~ HRC45					
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²					
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
4.0	23400	2320	18600	840	12600	570	3600	190
6.0	15600	2320	12400	840	8400	570	2400	190
8.0	11600	2320	9200	840	6300	570	1800	180
10.0	9200	2320	7600	840	5100	570	1300	190
12.0	8000	2400	6000	800	4200	570	1200	190
14.0	6800	2400	5200	840	3600	570	900	130
16.0	6000	2400	4800	760	3300	510	800	110
18.0	5200	2320	4400	720	2700	420	700	100
20.0	4800	2160	3600	560	2400	360	660	100
25.0	4300	2150	3200	620	2160	410	600	110



A: $\varnothing 4\text{-}\varnothing 10:0.25 \times D$
 $\varnothing 12\text{-}\varnothing 16:0.15 \times D$
 $\varnothing 18\text{-}\varnothing 25:0.10 \times D$

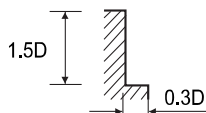


RPM = rev./min.
FEED = mm/min.

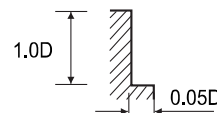
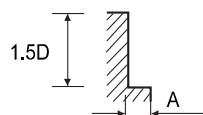
CARBIDE, MULTI FLUTE ROUGHING - SIDE CUTTING
VOLLHARTMETALL, MULTI SCHNEIDEN SCHRUPPFRÄSER

EH917, EH918, EH919, EH920, EH921, EH942, EH852, EH862, EH831, EH841 SERIES

MATERIAL	CARBON STEELS ALLOY STEELS TOOL STEELS		CARBON STEELS ALLOY STEELS TOOL STEELS		STAINLESS STEELS TITANIUM ALLOY		INCONEL	
HARDNESS	~ HRC30		HRC30 ~ HRC45					
STRENGTH	1000N/mm ²		1000 ~ 1500N/mm ²					
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
4.0	23400	2320	18600	840	12600	570	3600	190
6.0	15600	2320	12400	840	8400	570	2400	190
8.0	11600	2320	9200	840	6300	570	1800	180
10.0	9200	2320	7600	840	5100	570	1300	190
12.0	8000	2400	6000	800	4200	570	1200	190
14.0	6800	2400	5200	840	3600	570	900	130
16.0	6000	2400	4800	760	3300	510	800	110
18.0	5200	2320	4400	720	2700	420	700	100
20.0	4800	2160	3600	560	2400	360	660	100
25.0	4300	2150	3200	620	2160	410	600	110



A: $\varnothing 4\text{-}\varnothing 10:0.15 \times D$
 $\varnothing 12\text{-}\varnothing 16:0.10 \times D$
 $\varnothing 18\text{-}\varnothing 25:0.05 \times D$



RPM = rev./min.
FEED = mm/min.