



Leading Through Innovation

CARBIDE & HSS



NC-SPOTTING DRILLS

NC-ANBOHRER

- Centering and Chamfering of Holes
- Zum Zentrieren und Anfasen

SELECTION GUIDE

NC-SPOTTING DRILLS

Centering and Chamfering of Holes

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
D5306 D5307		CARBIDE, NC-SPOTTING DRILLS 90°, 120° VOLLHARTMETALL NC-ANBOHRER 90°, 120°	D6.0	D20.0	270
D5320		CARBIDE, NC-SPOTTING DRILLS 142° VOLLHARTMETALL NC-ANBOHRER 142°	D3.0	D20.0	271
D2306 D2321		HSSCo8, NC-SPOTTING DRILLS 90° HSSCo8, NC-ANBOHRER 90°	D3.0	D20.0	272
D2307 D2322		HSSCo8, NC-SPOTTING DRILLS 120° HSSCo8, NC-ANBOHRER 120°	D3.0 D6.0	D20.0 D12.0	273
D2320 D2323		HSSCo8, NC-SPOTTING DRILLS 142° HSSCo8, NC-ANBOHRER 142°	D3.0 D6.0	D20.0 D12.0	274
RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN					275

SOLID CARBIDE & HSS NC-SPOTTING DRILLS

◎ : Excellent ○ : Good

P					H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium	
~HB225	HB225~325	HRC30~45	HRC45~55	HRC55~								
◎	◎	◎			○	○	○				○	
◎	◎	◎			○	○	○				○	
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◎	◎				○		○		○			

YG NC-SPOTTING DRILLS

D5306 SERIES
D5307 SERIES

CARBIDE, NC-SPOTTING DRILLS 90°, 120°

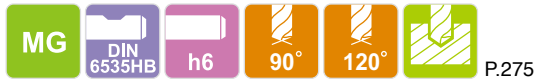
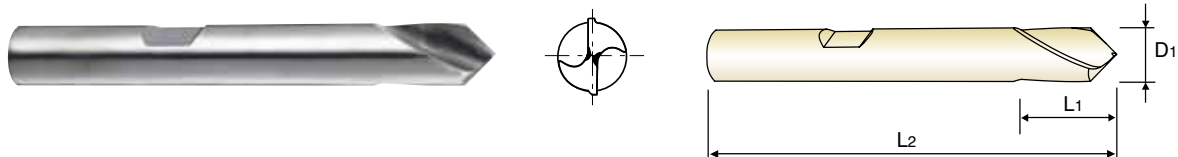
Germany VOLLHARTMETALL NC-ANBOHRER 90°, 120°

France Forets carbure à pointer NC 90°, 120°

Italy PUNTE IN MD A CENTRARE NC 90°, 120°

► **Application** : For more precise centering work on NC/CNC machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Auf NC-Maschinen, Lehrenbohrwerken u.a. kapitalintensiven Bohrwerken, zum Zentrieren und Anfasen von Gewindebohrungen in einem Arbeitsgang. Besonders geeignet zum Anbohren von hochfesten Stählen, Stahlguß, Grauguß, Hartguß, Mangan-Hartstahl, CrNi-Stählen, Bronze, Leicht- und Buntmetallen.



**NC-Spotting drills 90°
NC-Anbohrer 90°**

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D5306060	6.0	13	50
D5306080	8.0	23	60
D5306100	10.0	24	70
D5306120	12.0	24	70
D5306160	16.0	29	75
D5306200	20.0	35	100

**NC-Spotting drills 120°
NC-Anbohrer 120°**

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D5307060	6.0	13	50
D5307080	8.0	23	60
D5307100	10.0	24	70
D5307120	12.0	24	70
D5307160	16.0	29	75
D5307200	20.0	35	100

► TiN(D6306, D6307), TiCN(DG306, DG307) and TiAlN(DH306, DH307) are available on your request.

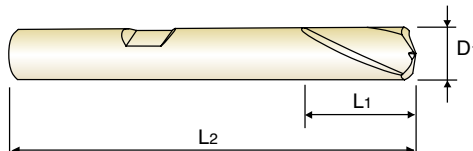
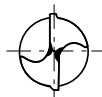
◎ : Excellent ○ : Good

P				H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium	
~HB225	HB225~325	HRc30~45	HRc45~55 HRc55~								
◎	◎	◎			○	○	○			○	

CARBIDE, NC-SPOTTING DRILLS 142°
🇩🇪 VOLLHARTMETALL NC-ANBOHRER 142°
🇫🇷 Forets carbure à pointer NC 142°
🇮🇹 PUNTE IN MD A CENTRARE NC 142°

► **Application** : For more precise centering work on NC/CNC machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Auf NC-Maschinen, Lehrenbohrwerken u.a. kapitalintensiven Bohrwerken, zum Zentrieren und Anfasen von Gewindebohrungen in einem Arbeitsgang. Besonders geeignet zum Anbohren von hochfesten Stählen, Stahlguß, Grauguß, Hartguß, Mangan-Hartstahl, CrNi-Stählen, Bronze, Leicht- und Buntmetallen.


**NC-Spotting drills 142°
NC-Anbohrer 142°**

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
● D5320030	3.0	8	32
● D5320040	4.0	10	40
● D5320050	5.0	13	50
D5320060	6.0	13	50
D5320080	8.0	23	60
D5320100	10.0	24	70
D5320120	12.0	24	70
D5320160	16.0	29	75
D5320200	20.0	35	100

● with plain shank

◎ : Excellent ○ : Good

P				H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎	◎			○	○	○				○

 i-ONE
DRILLS

 i-DREAM
DRILLS

 DREAM
DRILLS
-GENERAL

 DREAM
DRILLS
-HIGH FEED

 DREAM
DRILLS
-FLAT BOTTOM

 DREAM
DRILLS
-INOX

 DREAM
DRILLS
-ALU

 DREAM
DRILLS
-CFRP

 DREAM
DRILLS
-MQL

 DREAM DRILLS
for HIGH
HARDENED
STEELS

 GENERAL
CARBIDE
DRILLS

 MULTI-1
DRILLS

HPD DRILLS

 GOLD-P
DRILLS

 SUPER-GP
DRILLS

 STRAIGHT
SHANK
DRILLS

 TAPER
SHANK
DRILLS

**NC-SPOTTING
DRILLS**

 CENTER
DRILLS

 SPADE
DRILLS

 TECHNICAL
DATA

YG NC-SPOTTING DRILLS

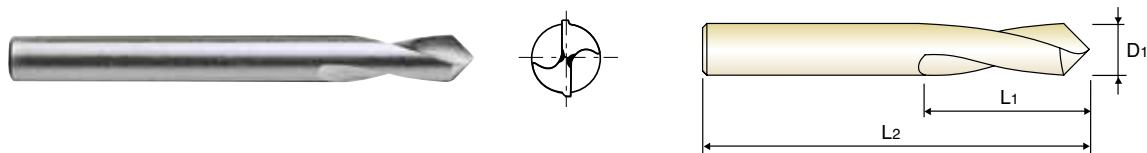
D2306 SERIES
D2321 SERIES

HSSCo8, NC-SPOTTING DRILLS 90°

- 🇩🇪 HSSCo8, NC-ANBOHRER 90°
- 🇫🇷 Forets HSSCo8 à pointer NC 90°
- 🇮🇹 PUNTE A CENTRARE NC 90°, HSSCo8

► **Application** : For more precise centering work on NC/CNC Machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Für positionsgenau und schnelles Anbohren mit NC/CNC-Maschinen und Bearbeitungszentren, die Ausführung mit Spitzenwinkel 90° ermöglicht sowohl ein Zentrieren, als auch das Vorbohren für einen nächstgrößeren Durchmesser.



NC
HSS Co8
h6
h6
90°
P.276

LONG LENGTH

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2		D1	L1	L2
D2306030	3.0	12	46	D2321030	3.0	12	80
D2306040	4.0	12	55	D2321040	4.0	12	100
D2306050	5.0	15	60	D2321050	5.0	15	120
D2306060	6.0	20	66	D2321060	6.0	20	140
D2306080	8.0	25	79	D2321080	8.0	25	140
D2306100	10.0	25	89	D2321100	10.0	25	170
D2306120	12.0	30	102	D2321120	12.0	30	170
D2306160	16.0	35	115	D2321160	16.0	35	200
D2306200	20.0	40	131	D2321200	20.0	40	200

► TIN, TiCN and TiAlN are available on your request.

◎ : Excellent ○ : Good

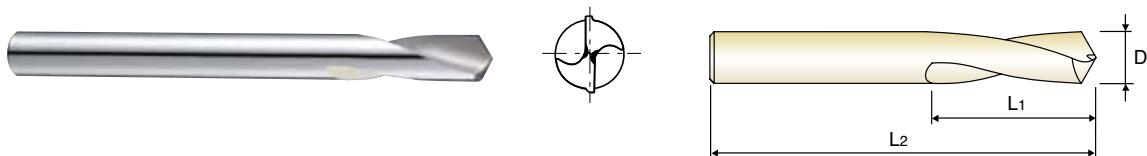
P				H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎				○		○		○		

HSSCo8, NC-SPOTTING DRILLS 120°

- Germany HSSCo8, NC-ANBOHRER 120°
- France Forets HSSCo8 à pointer NC 120°
- Italy PUNTE A CENTRARE NC 120°, HSSCo8

► **Application** : For more precise centering work on NC/CNC Machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Für positionsgenaueres und schnelles Anbohren mit NC/CNC-Maschinen und Bearbeitungszentren, die Ausführung mit Spitzenwinkel 90° ermöglicht sowohl ein Zentrieren, als auch das Vorbohren für einen nächstgrößeren Durchmesser.



NC
HSS Co8
h6
h6
120°
P.276

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
D2307030	3.0	12	46
D2307040	4.0	12	55
D2307050	5.0	15	60
D2307060	6.0	20	66
D2307080	8.0	25	79
D2307100	10.0	25	89
D2307120	12.0	30	102
D2307160	16.0	35	115
D2307200	20.0	40	131

LONG LENGTH

Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length L2
D2322060	6.0	20	140
D2322080	8.0	25	140
D2322100	10.0	25	170
D2322120	12.0	30	170

► TiN, TiCN and TiAlN are available on your request.

P				H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
◎	◎				○		○		○		

◎ : Excellent ○ : Good

YG NC-SPOTTING DRILLS

D2320 SERIES

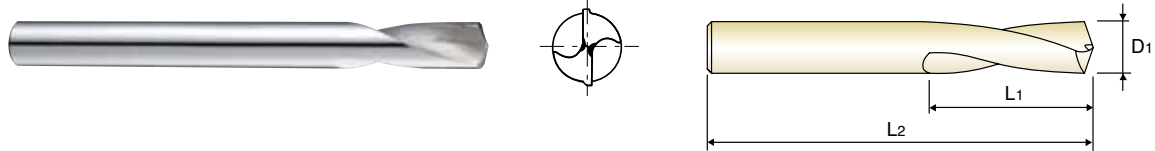
D2323 SERIES

HSSCo8, NC-SPOTTING DRILLS 142°

- 🇩🇪 HSSCo8, NC-ANBOHRER 142°
- 🇫🇷 Forets HSSCo8 à pointer NC 142°
- 🇮🇹 PUNTE A CENTRARE NC 142°, HSSCo8

► **Application** : For more precise centering work on NC/CNC Machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Für positionsgenau und schnelles Anbohren mit NC/CNC-Maschinen und Bearbeitungszentren, die Ausführung mit Spitzenwinkel 90° ermöglicht sowohl ein Zentrieren, als auch das Vorbohren für einen nächstgrößeren Durchmesser.



NC HSS Co8 h6 h6 142° P.276

LONG LENGTH

Unit : mm

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D2320030	3.0	12	46
D2320040	4.0	12	55
D2320050	5.0	15	60
D2320060	6.0	20	66
D2320080	8.0	25	79
D2320100	10.0	25	89
D2320120	12.0	30	102
D2320160	16.0	35	115
D2320200	20.0	40	131

EDP No.	Drill Diameter	Flute Length	Overall Length
	D1	L1	L2
D2323060	6.0	20	140
D2323080	8.0	25	140
D2323100	10.0	25	170
D2323120	12.0	30	170

► TIN, TiCN and TiAlN are available on your request.

◎ : Excellent ○ : Good

P				H	M	K	N				S
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels	Stainless Steels	Cast Iron	Aluminum	Copper	Bronze	CFRP	Titanium	
~HB225	HB225~325	HRc30~45	HRc45~55 HRc55~								
◎	◎			○		○		○			

CARBIDE NC - SPOTTING DRILLS 90°, 120°, 142° with FLATTED SHANK
VOLLHARTMETALL NC-ANBOHRER 90°, 120°, 142° MIT MITNAHME FLÄCHE
D5306, D5307, D5320 SERIES

WORK MATERIAL	P				M		K				N				S	
	NON-ALLOY STEELS		ALLOY STEELS		STAINLESS STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON		AL-SI ALLOYS, SI<10%		AL-SI ALLOYS, SI>10%		TI, NI ALLOY STEELS	
STRENGTH	< 700 N/mm ²		< 1000 N/mm ²				< HB240, GG25		< HB300, GG40							
DRILLING SPEED	65 ~ 75 m/min		45 ~ 55 m/min		35 ~ 40 m/min		90 ~ 100 m/min		65 ~ 75 m/min		145 ~ 165 m/min		115 ~ 135 m/min		35 ~ 40 m/min	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6.0	3900	0.08	2850	0.08	2000	0.07	5200	0.09	3800	0.09	8800	0.11	7100	0.11	1950	0.07
8.0	2900	0.10	2150	0.10	1500	0.09	3900	0.12	2850	0.12	6600	0.15	5350	0.15	1450	0.09
10.0	2350	0.12	1700	0.12	1200	0.11	3100	0.16	2300	0.16	5300	0.19	4250	0.19	1200	0.11
12.0	1950	0.14	1450	0.14	1000	0.13	2600	0.20	1900	0.20	4450	0.23	3550	0.23	980	0.13
16.0	1450	0.17	1100	0.17	755	0.17	1950	0.24	1450	0.24	3300	0.27	2650	0.27	735	0.17
20.0	1150	0.19	850	0.19	590	0.20	1550	0.28	1150	0.28	2650	0.31	2150	0.31	590	0.20

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

**NC-SPOTTING
DRILLS****RECOMMENDED CUTTING CONDITIONS**
EMPFOHLENE SCHNEIDKONDITIONEN**HSSCo8, NC-SPOTTING DRILLS 90°, 120°, 142°**
HSSCo8, NC-ANBOHRER 90°, 120°, 142°**D2306, D2321, D2307, D2322, D2320, D2323** SERIES

WORK MATERIAL	P						M		N	
	CARBON STEELS		ALLOY STEELS		ALLOY STEELS, TOOL STEELS, HARDENED STEELS		STAINLESS STEELS		ALUMINUM, ALUMINUM ALLOYS	
DRILLING SPEED	18 ~ 23 m/min		15 ~ 20 m/min		8 ~ 12 m/min		8 ~ 12 m/min		55 ~ 65 m/min	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
3.0	2460	0.06	2110	0.06	1080	0.06	940	0.06	7040	0.14
4.0	1850	0.07	1580	0.07	800	0.07	700	0.07	5280	0.15
5.0	1510	0.08	1300	0.08	670	0.08	580	0.08	4400	0.17
6.0	1170	0.09	1030	0.09	540	0.09	460	0.09	3520	0.19
8.0	880	0.11	790	0.11	400	0.11	350	0.11	2640	0.22
10.0	700	0.12	630	0.12	320	0.12	290	0.12	2110	0.25
12.0	590	0.14	530	0.14	260	0.14	240	0.14	1760	0.28
16.0	460	0.20	400	0.20	200	0.20	180	0.20	1320	0.33
20.0	350	0.24	320	0.24	150	0.24	140	0.24	1060	0.45

RPM = rev./min.
FEED = mm/rev.i-ONE
DRILLSi-DREAM
DRILLSDREAM
DRILLS
-GENERALDREAM
DRILLS
-HIGH FEEDDREAM
DRILLS
-FLAT BOTTOMDREAM
DRILLS
-INOXDREAM
DRILLS
-ALUDREAM
DRILLS
-CFRPDREAM
DRILLS
-MQLDREAM DRILLS
for HIGH
HARDENED
STEELSGENERAL
CARBIDE
DRILLSMULTI-1
DRILLS

HPD DRILLS

GOLD-P
DRILLSSUPER-GP
DRILLSSTRAIGHT
SHANK
DRILLSTAPER
SHANK
DRILLSNC-SPOTTING
DRILLSCENTER
DRILLSSPADE
DRILLSTECHNICAL
DATA