CARBIDE

Being the best through innovation

NC-SPOTTING DRILLS

NC-ANBOHRER

- CENTERING and CHAMFERING
- Zentrier & Abfasen

SELECTION GUIDE

SOLID CARBIDE NC-SPOTTING DRILLS

For General materials, Cast steels, Cast iron, Non-ferrous materials

ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
D5306 D5307		CARBIDE, NC-SPOTTING DRILLS 90°, 120° VOLLHARTMETALL NC-ANBOHRER 90°, 120°	D6.0	D20.0	124
D5320		CARBIDE, NC-SPOTTING DRILLS 142° VOLLHARTMETALL NC-ANBOHRER 142°	D3.0	D20.0	125
		RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN			126

◎ : Excellent
○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	◎			○	○	○	○	○			
◎	◎	◎			○	○	○	○	○			

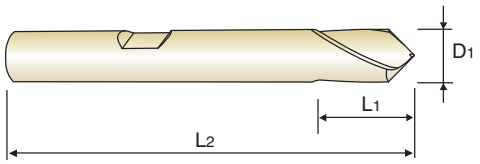
NC-SPOTTING DRILLS

D5306 SERIES
D5307 SERIES

CARBIDE, NC-SPOTTING DRILLS
VOLLHARTMETALL NC-ANBOHRER

▶ **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.



MG | DIN 6535HB | h6 | 90° | 120° P.126

NC-Spotting drills 90°
NC-Anbohrer 90°

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length 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 D1	Flute Length L1	Overall Length 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

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	◎			○	○	○	○	○			

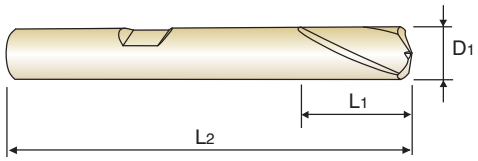
NC-SPOTTING DRILLS

D5320 SERIES

CARBIDE, NC-SPOTTING DRILLS
VOLLHARTMETALL NC-ANBOHRER

▶ **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.



MG | DIN 6535HB | h6 | 142° P.126

NC-Spotting drills 142°
NC-Anbohrer 142°

Unit : mm

EDP No.	Drill Diameter D1	Flute Length L1	Overall Length 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

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze	CFRP
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~								
◎	◎	◎			○	○	○	○	○			

NC-SPOTTING DRILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

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	NON-ALLOY STEELS		ALLOY STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON		STAINLESS STEELS		Al-Si ALLOYS, Si<10%		Al-Si ALLOYS, Si>10%		Ti, Ni ALLOY STEELS	
STRENGTH	< 700 N/mm²		< 1000 N/mm²		< HB240, GG25		< HB300, GG40									
DRILLING SPEED	65 ~ 75 m/min		45 ~ 55 m/min		90 ~ 100 m/min		65 ~ 75 m/min		35 ~ 40 m/min		145 ~ 165 m/min		115 ~ 135 m/min		35 ~ 40 m/min	
DIAMETER	N	S	N	S	N	S	N	S	N	S	N	S	N	S	N	S
6.0	3900	0.08	2850	0.08	5200	0.09	3800	0.09	2000	0.07	8800	0.11	7100	0.11	1950	0.07
8.0	2900	0.10	2150	0.10	3900	0.12	2850	0.12	1500	0.09	6600	0.15	5350	0.15	1450	0.09
10.0	2350	0.12	1700	0.12	3100	0.16	2300	0.16	1200	0.11	5300	0.19	4250	0.19	1200	0.11
12.0	1950	0.14	1450	0.14	2600	0.20	1900	0.20	1000	0.13	4450	0.23	3550	0.23	980	0.13
16.0	1450	0.17	1100	0.17	1950	0.24	1450	0.24	755	0.17	3300	0.27	2650	0.27	735	0.17
20.0	1150	0.19	850	0.19	1550	0.28	1150	0.28	590	0.20	2650	0.31	2150	0.31	590	0.20

N = R.P.M
S = Feed per Revolution (mm/rev.)