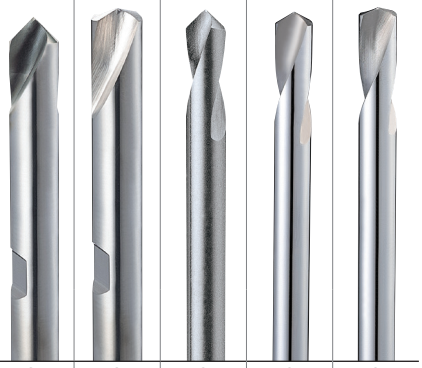
SOLID CARBIDE & HSS Co8
NC-SPOTTING DRILLS

For Centering and Chamfering of Holes

SERIES	D5306 D5307	D5320	D2306 D2321	D2307 D2322	D2320 D2323
POINT ANGLE	90°/120°	142°	90°	120°	142°
SIZE MIN	D6.0	D3.0	D3.0	D3.0/D6.0	D3.0/D6.0
SIZE MAX	D20.0	D20.0	D20.0	D20.0/D12.0	D20.0/D12.0
PAGE	A281	A282	A283	A284	A285
SURFACE TREATMENT	Bright				



Please visit globalyg1.com/mat for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.A286

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc	D5306 D5307	D5320	D2306 D2321	D2307 D2322	D2320 D2323
P	1	Non-alloy steel	About 0.15% C	Annealed	125		◎	◎	◎	◎	◎
	2		About 0.45% C	Annealed	190	13	◎	◎	◎	◎	◎
	3		About 0.45% C	Quenched & Tempered	250	25	◎	◎	◎	◎	◎
	4		About 0.75% C	Annealed	270	28					
	5		About 0.75% C	Quenched & Tempered	300	32					
	6	Low alloy steel		Annealed	180	10	◎	◎	◎	◎	◎
	7			Quenched & Tempered	275	29	○	○	○	○	○
	8			Quenched & Tempered	300	32					
	9			Quenched & Tempered	350	38					
	10	High alloyed steel, and tool steel		Annealed	200	15					
	11			Quenched & Tempered	325	35					
M	12	Stainless steel	Ferritic / Martensitic	Annealed	200	15	○	○	○	○	○
	13		Martensitic	Quenched & Tempered	240	23					
	14		Austenitic		180	10					
K	15	Grey cast iron	Pearlitic / ferritic		180	10	◎	◎	◎	◎	◎
	16		Pearlitic (Martensitic)		260	26	○	○	○	○	○
	17	Nodular cast iron	Ferritic		160	3	○	○	○	○	○
	18		Pearlitic		250	25					
	19	Malleable cast iron	Ferritic		130		○	○	○	○	○
	20		Pearlitic		230	21					
N	21	Aluminum-wrought alloy	Not Curable		60		○	○	○	○	○
	22		Curable	Hardened	100		○	○	○	○	○
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		○	○	○	○	○
	24		≤ 12% Si, Curable	Hardened	90						
	25		> 12% Si, Not Curable		130						
	26	Copper and Copper Alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110						
	27		CuZn, CuSnZn (Brass)		90						
	28		CuSn, lead-free copper and electrolytic copper		100						
	29	Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic								
	30		Rubber, Wood, etc.								
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15					
	32			Cured	280	30					
	33		Ni or Co Based	Annealed	250	25					
	34			Cured	350	38					
	35			Cast	320	34					
	36	Titanium Alloys	Pure Titanium		400 Rm		○	○			
	37		Alpha + Beta Alloys	Hardened	1050 Rm						
H	38	Hardened steel		Hardened	550	55					
	39			Hardened	630	60					
	40	Chilled Cast Iron		Cast	400	42					
	41	Hardened Cast Iron		Hardened	550	55					

NC-SPOTTING DRILLS

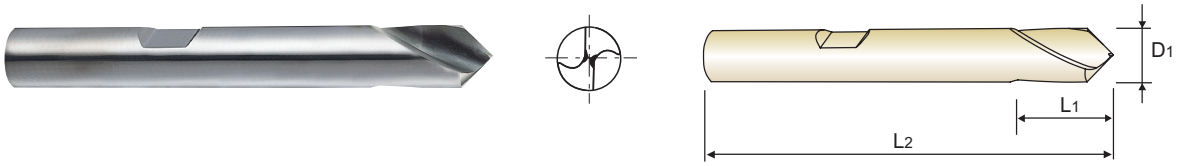
D5306 SERIES
D5307 SERIES

CARBIDE, NC-SPOTTING DRILLS 90°, 120°

VOLLHARTMETALL NC-ANBOHRER 90°, 120°
Forets carbure à pointer NC 90°, 120°
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.



CARBIDE | DIN 6535HB | h6 | 90° | 120° | Bright

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Recommended ToolHolder: Plain Shank — NC DRILL CHUCK & OTHER TOOL HOLDERS; ER COLLET CHUCK

NC-Spotting drills 90°
NC-Anbohrer 90°

Unit : mm

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°

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

ISO	P											M			K					
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	◎	◎	◎			◎	○					○			◎	○	○		○	

ISO	N										S					H				
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400 Rm	1050 Rm	550	630	400	550
Recommended	○	○	○													○					