

CARBIDE

HSS

i-ONE
DRILLS

i-DREAM
DRILLS

DREAM
DRILLS
-PRO

DREAM
DRILLS
-X

DREAM
DRILLS
-GENERAL

DREAM
DRILLS
-HIGH FEED

DREAM
DRILLS
-FLAT BOTTOM

DREAM
DRILLS
-INOX

DREAM
DRILLS
-ALU

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

REAMERS

COUNTER
SINKS

COUNTER
BORES



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

DH451, DH452, DH453 SERIES with COOLANT HOLES

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

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm)		Vc	Parameter	Drill Diameter (mm)			
					1.0	2.0			3.0	4.0	5.0	6.0
P	2	Non-alloy steel	70	RPM	22280	11140	100	RPM	10610	7960	6370	5310
	FEED			0.02-0.04	0.04-0.06	FEED		0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20	
	3		70	RPM	22280	11140	100	RPM	10610	7960	6370	5310
	FEED			0.02-0.04	0.04-0.06	FEED		0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20	
	6	Low alloy steel	70	RPM	22280	11140	100	RPM	10610	7960	6370	5310
	FEED			0.02-0.04	0.04-0.06	FEED		0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20	
	7		50	RPM	15920	7960	70	RPM	7430	5570	4460	3710
				FEED	0.02-0.04	0.04-0.06		FEED	0.04-0.10	0.06-0.12	0.12-0.18	0.14-0.20
M	12	Stainless steel	40	RPM	12730	6370	50	RPM	5310	3980	3180	2650
	FEED			0.02-0.04	0.02-0.04	FEED		0.03-0.05	0.05-0.09	0.07-0.11	0.08-0.12	
	13		25	RPM	7960	3980	40	RPM	4240	3180	2550	2120
				FEED	0.02-0.04	0.02-0.04		FEED	0.03-0.05	0.05-0.09	0.07-0.11	0.08-0.12
	14		45	RPM	14320	7160	60	RPM	6370	4770	3820	3180
				FEED	0.02-0.04	0.02-0.04		FEED	0.04-0.06	0.06-0.10	0.08-0.12	0.09-0.13
N	21	Aluminum-wrought alloy	130	RPM	41380	20690	200	RPM	21220	15920	12730	10610
	FEED			0.04-0.10	0.08-0.14	FEED		0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28	
	22		130	RPM	41380	20690	200	RPM	21220	15920	12730	10610
				FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28
	23	Aluminum-cast, alloyed	110	RPM	35010	17510	180	RPM	19100	14,320	11460	9550
				FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28
	24		110	RPM	35010	17510	180	RPM	19100	14320	11460	9550
				FEED	0.04-0.10	0.08-0.14		FEED	0.14-0.20	0.19-0.25	0.20-0.26	0.22-0.28
	25		90	RPM	28650	14320	150	RPM	15920	11940	9550	7960
				FEED	0.04-0.08	0.06-0.10		FEED	0.12-0.18	0.16-0.22	0.17-0.23	0.19-0.25
S	37	Titanium Alloys	25	RPM	7960	3980	40	RPM	4240	3180	2550	2120
				FEED	0.01-0.03	0.01-0.03		FEED	0.02-0.04	0.04-0.08	0.06-0.10	0.07-0.11

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm)						
					8.0	10.0	12.0	14.0	16.0	18.0	20.0
P	2	Non-alloy steel	100	RPM	3980	3180	2650	2270	1990	1770	1590
				FEED	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.39	0.23-0.31	0.26-0.36	0.28-0.38
	3		100	RPM	3980	3180	2650	2270	1990	1770	1590
				FEED	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.39	0.23-0.31	0.26-0.36	0.28-0.38
	6	Low alloy steel	100	RPM	3980	3180	2650	2270	1990	1770	1590
				FEED	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.39	0.23-0.31	0.26-0.36	0.28-0.38
	7		70	RPM	2790	2230	1860	1590	1390	1240	1110
				FEED	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.39	0.23-0.31	0.26-0.36	0.28-0.38
M	12	Stainless steel	50	RPM	1990	1590	1330	1140	990	880	800
				FEED	0.09-0.13	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20
	13		40	RPM	1590	1270	1060	910	800	710	640
				FEED	0.09-0.13	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20
	14		60	RPM	2390	1910	1590	1360	1190	1060	950
				FEED	0.10-0.14	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19	0.15-0.20	0.16-0.21
N	21	Aluminum-wrought alloy	200	RPM	7960	6370	5310	4550	3980	3540	3180
				FEED	0.24-0.30	0.26-0.32	0.28-0.34	0.30-0.36	0.32-0.38	0.33-0.43	0.35-0.45
	22		200	RPM	7960	6370	5310	4550	3980	3540	3180
				FEED	0.24-0.30	0.26-0.32	0.28-0.34	0.30-0.36	0.32-0.38	0.33-0.43	0.35-0.45
	23	Aluminum-cast, alloyed	180	RPM	7160	5730	4770	4090	3580	3180	2860
				FEED	0.24-0.30	0.26-0.32	0.28-0.34	0.30-0.36	0.32-0.38	0.33-0.43	0.35-0.45
	24		180	RPM	7160	5730	4770	4090	3580	3180	2860
				FEED	0.24-0.30	0.26-0.32	0.28-0.34	0.30-0.36	0.32-0.38	0.33-0.43	0.35-0.45
	25		150	RPM	5970	4770	3980	3410	2980	2650	2390
				FEED	0.21-0.27	0.23-0.29	0.25-0.31	0.27-0.33	0.28-0.34	0.28-0.38	0.30-0.40
S	37	Titanium Alloys	40	RPM	1590	1270	1060	910	800	710	640
				FEED	0.08-0.12	0.09-0.14	0.10-0.15	0.11-0.16	0.12-0.17	0.13-0.18	0.14-0.19

► Recommend to reduce the feed rate as following
Feed 100% : DH451(3xD), DH452(5xD) Feed 85% : DH453(8xD)



SOLID CARBIDE

DREAM DRILLS
-ALU
DREAM DRILLS - ALU

- For Aluminum and Aluminum Alloys
- Für Aluminium und Aluminiumlegierungen

CARBIDE
HSS
i-ONE DRILLS
i-DREAM DRILLS
DREAM DRILLS -PRO
DREAM DRILLS X
DREAM DRILLS -GENERAL
DREAM DRILLS -HIGH FEED
DREAM DRILLS -FLAT BOTTOM
DREAM DRILLS -INOX
DREAM DRILLS -ALU
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
REAMERS
COUNTER SINKS
COUNTER BORES

SELECTION GUIDE



SERIES	D5432	D5433	D5434
DRILLING DEPTH	3XD	5XD	8XD
LENGTH	SHORT	LONG	EXTRA LONG
SIZE MIN	D3.0	D3.0	D3.0
SIZE MAX	D20.0	D20.0	D14.0
PAGE	A148	A151	A153
SURFACE TREATMENT	Bright		

SOLID CARBIDE
DREAM DRILLS
ALU

For Aluminum and Aluminum Alloys



Please visit
globalyg1.com/mat
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : p.A155

ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRc			
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	Nodular cast iron	Pearlitic (Martensitic)		260	26			
	17		Ferritic		160	3			
	18	Malleable cast iron	Pearlitic		250	25			
	19		Ferritic		130				
	20		Pearlitic		230	21			
N	21	Aluminum-wrought alloy	Not Curable		60		◎	◎	◎
	22	Aluminum-cast, alloyed	Curable	Hardened	100		◎	◎	◎
	23		≤ 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	Non Metallic Materials	CuSn, lead-free copper and electrolytic copper		100				
	29		Duroplastic, Fiber Reinforced Plastic						
	30		Rubber, Wood, etc.						
S	31	Heat Resistant Super Alloys	Fe Based	Annealed	200	15			
	32			Cured	280	30			
	33			Annealed	250	25			
	34		Ni or Co Based	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			

PRODUCT FEATURES



Design that optimized flute shape and geometry suitable for **Aluminum, Aluminum alloy.**



Optimized point thinning to prevent any **chip-clogging from chip welding.**

Polished flutes improve **chip control and evacuation.**

The Drilling of High Speed is possible while maintaining **the excellent surface roughness of workpiece.**

► SOLID CARBIDE DREAM DRILLS - ALU with Coolant Holes
Ø6.0 & Ø10.0 TEST, Aluminum(6061)

CUTTING CONDITION	DREAM DRILL-ALU YG		COMPETITOR A	
	Roundness	Straightness	Roundness	Straightness
SIZE Ø 6.0				
Drilling Holes 1,200 Holes				
SIZE Ø10.0				
Drilling Holes 820 Holes				

CARBIDE
HSS
i-ONE DRILLS
i-DREAM DRILLS
DREAM DRILLS -PRO
DREAM DRILLS X
DREAM DRILLS -GENERAL
DREAM DRILLS -HIGH FEED
DREAM DRILLS -FLAT BOTTOM
DREAM DRILLS -INOX
DREAM DRILLS -ALU
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
REAMERS
COUNTER SINKS
COUNTER BORES



D5432 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

SHORT

- VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL
- Forets DREAM DRILLS carbure pour ALU, avec arrosage central, série courte
- PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (con fori di refrigerazione)

KURZ
COURTE
CORTA

- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding
- Wider and deeper flute gullets for maximum chip removal
- Special geometry and smooth coating reduces built up edge and improves finishes

- Optimierte Ausspitzung für Aluminum & Aluminiumlegierungen zur Vermeidung von Verstopfungen durch das Aufschweißen der Späne
- Breitere und tiefere Spannuten für maximale Spanabfuhr
- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



Unit : mm					Unit : mm				
EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5432030	3.0	6	20	62	D5432054	5.4	6	28	66
D5432031	3.1	6	20	62	D5432055	5.5	6	28	66
D5432032	3.2	6	20	62	D5432056	5.6	6	28	66
D5432033	3.3	6	20	62	D5432057	5.7	6	28	66
D5432034	3.4	6	20	62	D5432058	5.8	6	28	66
D5432035	3.5	6	20	62	D5432059	5.9	6	28	66
D5432037	3.7	6	20	62	D5432060	6.0	6	28	66
D5432038	3.8	6	24	66	D5432061	6.1	8	34	79
D5432039	3.9	6	24	66	D5432062	6.2	8	34	79
D5432040	4.0	6	24	66	D5432063	6.3	8	34	79
D5432041	4.1	6	24	66	D5432064	6.4	8	34	79
D5432042	4.2	6	24	66	D5432065	6.5	8	34	79
D5432043	4.3	6	24	66	D5432066	6.6	8	34	79
D5432045	4.5	6	24	66	D5432067	6.7	8	34	79
D5432046	4.6	6	24	66	D5432068	6.8	8	34	79
D5432047	4.7	6	24	66	D5432069	6.9	8	34	79
D5432048	4.8	6	28	66	D5432070	7.0	8	34	79
D5432049	4.9	6	28	66	D5432072	7.2	8	41	79
D5432050	5.0	6	28	66	D5432073	7.3	8	41	79
D5432051	5.1	6	28	66	D5432074	7.4	8	41	79
D5432053	5.3	6	28	66	D5432075	7.5	8	41	79
					D5432076	7.6	8	41	79
					D5432077	7.7	8	41	79

- DLC coating is available on your request.
- Other shank types are available on your request.

► NEXT PAGE

◎ : 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			
HRc											15	30	25	38	34	36	37	55	60	42			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400			
Recommended	◎	◎	◎	◎																			



D5432 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

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- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



Unit : mm					Unit : mm				
EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5432078	7.8	8	41	79	D5432102	10.2	12	55	102
D5432079	7.9	8	41	79	D5432103	10.3	12	55	102
D5432080	8.0	8	41	79	D5432104	10.4	12	55	102
D5432081	8.1	10	47	89	D5432105	10.5	12	55	102
D5432082	8.2	10	47	89	D5432106	10.6	12	55	102
D5432083	8.3	10	47	89	D5432107	10.7	12	55	102
D5432084	8.4	10	47	89	D5432108	10.8	12	55	102
D5432085	8.5	10	47	89	D5432109	10.9	12	55	102
D5432086	8.6	10	47	89	D5432110	11.0	12	55	102
D5432087	8.7	10	47	89	D5432111	11.1	12	55	102
D5432088	8.8	10	47	89	D5432112	11.2	12	55	102
D5432089	8.9	10	47	89	D5432113	11.3	12	55	102
D5432090	9.0	10	47	89	D5432114	11.4	12	55	102
D5432091	9.1	10	47	89	D5432116	11.6	12	55	102
D5432092	9.2	10	47	89	D5432117	11.7	12	55	102
D5432093	9.3	10	47	89	D5432120	12.0	12	55	102
D5432095	9.5	10	47	89	D5432125	12.5	14	60	107
D5432096	9.6	10	47	89	D5432130	13.0	14	60	107
D5432097	9.7	10	47	89	D5432135	13.5	14	60	107
D5432098	9.8	10	47	89	D5432140	14.0	14	60	107
D5432099	9.9	10	47	89	D5432145	14.5	16	65	115
D5432100	10.0	10	47	89					

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► NEXT PAGE

◎ : 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 CopperAlloys (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
HRc											15	30	25	38	34	36	37	55	60	42
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400
Recommended	◎	◎	◎	◎																

DREAM DRILLS
- ALU

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DIN 6537

CARBIDE

30°

h6

m7

118°

20 bar

Bright



p.A155

3 × D

EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5432150	15.0	16	65	115
D5432155	15.5	16	65	115
D5432160	16.0	16	65	115
D5432165	16.5	18	73	123
D5432170	17.0	18	73	123
D5432175	17.5	18	73	123
D5432180	18.0	18	73	123
D5432185	18.5	20	79	131

- DLC coating is available on your request.
- Other shank types are available on your request.

ISO	P											M			K						◎ : Excellent ○ : Good			
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	36	37	55	60	42	55			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550			
Recommended	◎	◎	◎	◎																				

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YG-1 CO., LTD.

DREAM DRILLS
- ALU

D5433 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

LONG

- VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL
- Forets DREAM DRILLS carbure pour ALU, avec arrosage central, série longue
- PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (CON FORI DI REFRIGERAZIONE)

LANG
LONGUE
LUNGA

- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding
- Wider and deeper flute gullets for maximum chip removal
- Special geometry and smooth coating reduces built up edge and improves finishes

- Optimierte Ausspitzung für Aluminum & Aluminiumlegierungen zur Vermeidung von Verstopfungen durch das Aufschweißen der Späne
- Breitere und tiefere Spannuten für maximale Spanabfuhr
- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



DIN 6537

CARBIDE

30°

h6

m7

118°

20 bar

Bright



p.A155

5 × D

EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5433030	3.0	6	28	66
D5433031	3.1	6	28	66
D5433032	3.2	6	28	66
D5433033	3.3	6	28	66
D5433034	3.4	6	28	66
D5433035	3.5	6	28	66
D5433036	3.6	6	28	66
D5433037	3.7	6	28	66
D5433038	3.8	6	36	74
D5433039	3.9	6	36	74
D5433040	4.0	6	36	74
D5433041	4.1	6	36	74
D5433042	4.2	6	36	74
D5433043	4.3	6	36	74
D5433044	4.4	6	36	74
D5433045	4.5	6	36	74
D5433046	4.6	6	36	74
D5433047	4.7	6	36	74
D5433048	4.8	6	44	82
D5433049	4.9	6	44	82
D5433050	5.0	6	44	82
D5433051	5.1	6	44	82
D5433052	5.2	6	44	82
D5433053	5.3	6	44	82

- DLC coating is available on your request.
- Other shank types are available on your request.

ISO	P											M			K						◎ : Excellent ○ : Good	
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	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎																		

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A151

DREAM DRILLS
- ALU

D5433 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

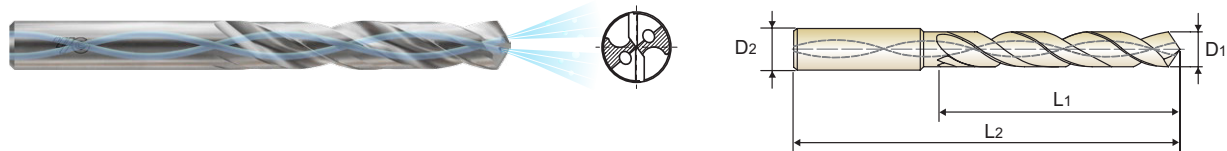
LONG

- VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL
- Forets DREAM DRILLS carbure pour ALU, avec arrosage central, série longue
- PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (CON FORI DI REFRIGERAZIONE)

LANG
LONGUE
LUNGA

- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding
- Wider and deeper flute gullets for maximum chip removal
- Special geometry and smooth coating reduces built up edge and improves finishes

- Optimierte Ausspitzung für Aluminum & Aluminiumlegierungen zur Vermeidung von Verstopfungen durch das Aufschweißen der Späne
- Breitere und tiefere Spannuten für maximale Spanabfuhr
- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



DIN 6537

CARBIDE

30°

h6

m7

118°

20 bar

Bright

p.A155

5 × D

Unit : mm					Unit : mm				
EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5433079	7.9	8	53	91	D5433106	10.6	12	71	118
D5433080	8.0	8	53	91	D5433107	10.7	12	71	118
D5433081	8.1	10	61	103	D5433108	10.8	12	71	118
D5433082	8.2	10	61	103	D5433110	11.0	12	71	118
D5433083	8.3	10	61	103	D5433111	11.1	12	71	118
D5433084	8.4	10	61	103	D5433112	11.2	12	71	118
D5433085	8.5	10	61	103	D5433114	11.4	12	71	118
D5433086	8.6	10	61	103	D5433115	11.5	12	71	118
D5433087	8.7	10	61	103	D5433116	11.6	12	71	118
D5433088	8.8	10	61	103	D5433117	11.7	12	71	118
D5433089	8.9	10	61	103	D5433118	11.8	12	71	118
D5433090	9.0	10	61	103	D5433119	11.9	12	71	118
D5433091	9.1	10	61	103	D5433120	12.0	12	71	118
D5433092	9.2	10	61	103	D5433125	12.5	14	77	124
D5433093	9.3	10	61	103	D5433130	13.0	14	77	124
D5433095	9.5	10	61	103	D5433135	13.5	14	77	124
D5433096	9.6	10	61	103	D5433140	14.0	14	77	124
D5433097	9.7	10	61	103	D5433145	14.5	16	83	133
D5433098	9.8	10	61	103	D5433150	15.0	16	83	133
D5433099	9.9	10	61	103	D5433155	15.5	16	83	133
D5433100	10.0	10	61	103	D5433160	16.0	16	83	133
D5433101	10.1	12	71	118	D5433165	16.5	18	93	143
D5433102	10.2	12	71	118	D5433180	18.0	18	93	143
D5433103	10.3	12	71	118	D5433190	19.0	20	101	153
D5433104	10.4	12	71	118	D5433195	19.5	20	101	153
D5433105	10.5	12	71	118	D5433200	20.0	20	101	153

- DLC coating is available on your request.
- Other shank types are available on your request.

► NEXT PAGE

◎ : 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			
HRc											15	30	25	38	34	36	37	55	60	42			
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400			
Recommended	◎	◎	◎	◎																			

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DREAM DRILLS
- ALU

D5434 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

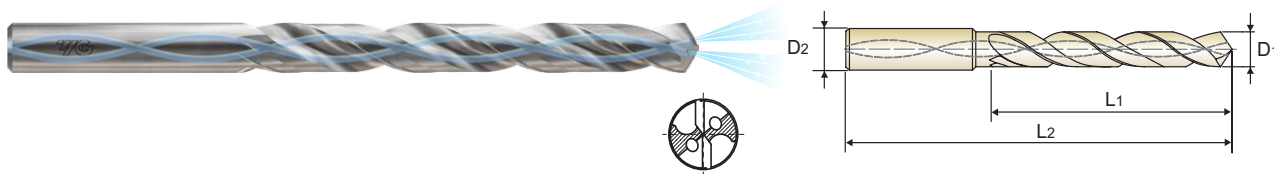
EXTRA LONG

- VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL
- Forets DREAM DRILLS carbure pour ALU, avec arrosage central, série extra-longue
- PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (con fori di refrigerazione)

ÜBERLANG
EXTRA-LONGUE
EXTRA LUNGA

- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding
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- Breitere und tiefere Spannuten für maximale Spanabfuhr
- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



DIN 6537

CARBIDE

30°

h6

m7

118°

20 bar

Bright

p.A155

8 × D

Unit : mm					Unit : mm				
EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2	EDP No.	Drill Diameter D1	Shank Diameter D2	Flute Length L1	Overall Length L2
D5434030	3.0	6	34	72	D5434060	6.0	6	57	95
D5434031	3.1	6	34	72	D5434061	6.1	8	76	114
D5434032	3.2	6	34	72	D5434062	6.2	8	76	114
D5434033	3.3	6	34	72	D5434064	6.4	8	76	114
D5434034	3.4	6	34	72	D5434065	6.5	8	76	114
D5434035	3.5	6	34	72	D5434066	6.6	8	76	114
D5434036	3.6	6	34	72	D5434068	6.8	8	76	114
D5434037	3.7	6	34	72	D5434069	6.9	8	76	114
D5434038	3.8	6	43	81	D5434070	7.0	8	76	114
D5434040	4.0	6	43	81	D5434071	7.1	8	76	114
D5434042	4.2	6	43	81	D5434072	7.2	8	76	114
D5434043	4.3	6	43	81	D5434073	7.3	8	76	114
D5434045	4.5	6	43	81	D5434074	7.4	8	76	114
D5434047	4.7	6	43	81	D5434076	7.6	8	76	114
D5434048	4.8	6	57	95	D5434078	7.8	8	76	114
D5434050	5.0	6	57	95	D5434079	7.9	8	76	114
D5434051	5.1	6	57	95	D5434080	8.0	8	76	114
D5434052	5.2	6	57	95	D5434081	8.1	10	95	142
D5434053	5.3	6	57	95	D5434082	8.2	10	95	142
D5434054	5.4	6	57	95	D5434083	8.3	10	95	142
D5434055	5.5	6	57	95	D5434084	8.4	10	95	142
D5434056	5.6	6	57	95	D5434085	8.5	10	95	142
D5434057	5.7	6	57	95	D5434086	8.6	10	95	142
D5434058	5.8	6	57	95	D5434087	8.7	10	95	142
D5434059	5.9	6	57	95	D5434088	8.8	10	95	142

- DLC coating is available on your request.
- Other shank types are available on your request.

► NEXT PAGE

◎ : 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	400Rm	1050Rm	550	630	400	550		
Recommended	◎	◎	◎	◎																			

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DREAM DRILLS
- ALU

D5434 SERIES

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

 **VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL**
 **Forets DREAM DRILLS carbure pour ALU, avec arrosage central, série extra-longue**
 **PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (con fori di refrigerazione)**

EXTRA LONG

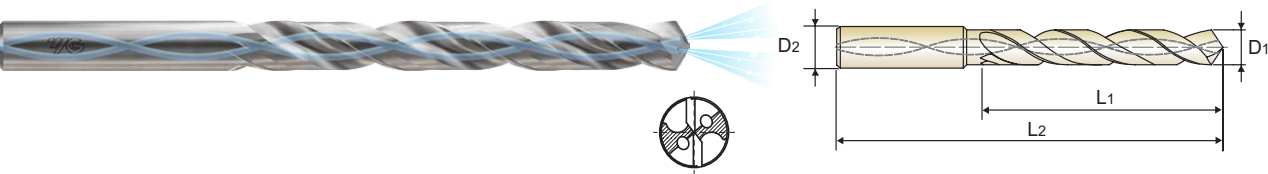
ÜBERLANG

EXTRA-LONGUE

EXTRA LUNGA

- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding
- Wider and deeper flute gullets for maximum chip removal
- Special geometry and smooth coating reduces built up edge and improves finishes

- Optimierte Ausspitzung für Aluminum & Aluminiumlegierungen zur Vermeidung von Verstopfungen durch das Aufschweißen der Späne
- Breitere und tiefere Spannuten für maximale Spanabfuhr
- Spezielle Geometrie und glatte Beschichtung reduzieren Aufbauschneidenbildung und verbessern die Oberflächen



DIN 6537

CARBIDE

 30°

 h6

 m7

 118°

 20 bar

Bright

 p.A155

8 × D

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
D5434089	8.9	10	95	142
D5434090	9.0	10	95	142
D5434092	9.2	10	95	142
D5434093	9.3	10	95	142
D5434094	9.4	10	95	142
D5434095	9.5	10	95	142
D5434096	9.6	10	95	142
D5434099	9.9	10	95	142
D5434100	10.0	10	95	142
D5434101	10.1	12	114	162
D5434102	10.2	12	114	162
D5434103	10.3	12	114	162
D5434104	10.4	12	114	162
D5434105	10.5	12	114	162
D5434106	10.6	12	114	162
D5434107	10.7	12	114	162
D5434108	10.8	12	114	162
D5434109	10.9	12	114	162
D5434110	11.0	12	114	162
D5434111	11.1	12	114	162
D5434112	11.2	12	114	162
D5434113	11.3	12	114	162
D5434114	11.4	12	114	162
D5434115	11.5	12	114	162
D5434116	11.6	12	114	162

- DLC coating is available on your request.
- Other shank types are available on your request.

ISO	P										M				K						◎ : Excellent ○ : Good	
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	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎																		

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YG-1 CO., LTD.



DREAM DRILLS
- ALU

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

D5432, D5433, D5434 SERIES with COOLANT HOLES

Vc = m/min,
RPM = rev./min.
FEED = mm/rev.

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm)													
					3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0			
N	21	Aluminum-wrought alloy	200	RPM	21220	15920	12730	10610	7960	6370	5310	4550	3980	3540	3180			
				FEED	0.12-0.18	0.14-0.22	0.15-0.23	0.17-0.25	0.21-0.28	0.24-0.30	0.24-0.30	0.25-0.35	0.25-0.35	0.28-0.38	0.30-0.40			
	22	Aluminum-wrought alloy	160	RPM	16980	12730	10190	8490	6370	5090	4240	3640	3180	2830	2550			
				FEED	0.12-0.18	0.14-0.22	0.15-0.23	0.17-0.25	0.21-0.28	0.24-0.30	0.24-0.30	0.25-0.35	0.25-0.35	0.28-0.38	0.30-0.40			
	23	Aluminum-cast, alloyed	150	RPM	15920	11940	9550	7960	5970	4770	3980	3410	2980	2650	2390			
				FEED	0.15-0.21	0.17-0.25	0.19-0.27	0.21-0.28	0.24-0.31	0.29-0.45	0.33-0.55	0.35-0.60	0.35-0.60	0.39-0.73	0.39-0.85			
	24	Aluminum-cast, alloyed	140	RPM	14850	11140	8910	7430	5570	4460	3710	3180	2790	2480	2230			
				FEED	0.15-0.21	0.17-0.25	0.19-0.27	0.21-0.28	0.24-0.31	0.29-0.45	0.33-0.55	0.35-0.60	0.35-0.60	0.39-0.73	0.39-0.85			

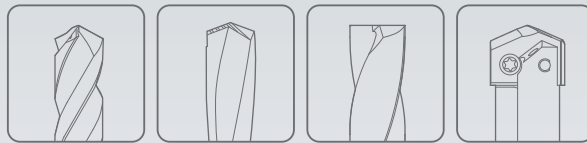
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A155



Global Cutting Tool Leader **YG-1**



HOLEMAKING