



DREAM DRILLS - ALU

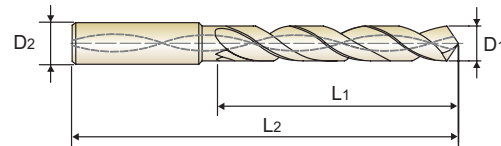
D5432 SERIES

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


**DIN
6537**
CARBIDE
30°
h6
m7
118°
20 bar


P.141

3 × D

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2		D1	D2	L1	L2
D5432030	3.0	6	20	62	D5432052	5.2	6	28	66
D5432031	3.1	6	20	62	D5432053	5.3	6	28	66
D5432032	3.2	6	20	62	D5432054	5.4	6	28	66
D5432033	3.3	6	20	62	D5432055	5.5	6	28	66
D5432034	3.4	6	20	62	D5432056	5.6	6	28	66
D5432035	3.5	6	20	62	D5432057	5.7	6	28	66
D5432036	3.6	6	20	62	D5432058	5.8	6	28	66
D5432037	3.7	6	20	62	D5432059	5.9	6	28	66
D5432038	3.8	6	24	66	D5432060	6.0	6	28	66
D5432039	3.9	6	24	66	D5432061	6.1	8	34	79
D5432040	4.0	6	24	66	D5432062	6.2	8	34	79
D5432041	4.1	6	24	66	D5432063	6.3	8	34	79
D5432042	4.2	6	24	66	D5432064	6.4	8	34	79
D5432043	4.3	6	24	66	D5432065	6.5	8	34	79
D5432044	4.4	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	D5432071	7.1	8	41	79
D5432050	5.0	6	28	66	D5432072	7.2	8	41	79
D5432051	5.1	6	28	66	D5432073	7.3	8	41	79

Unit : mm

- 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	◎	◎	◎	◎																			

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES

SHORT
KURZ
COURTE
CORTA

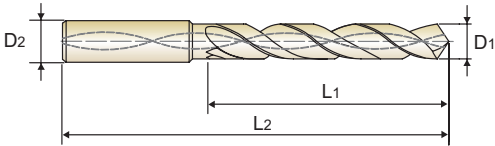
- Optimized thinning for Aluminum & Aluminum Alloys to prevent any clogging from chip welding

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DIN 6537

CARBIDE

30°

h6

m7

118°

20 bar



P.141

3 × D

										Unit : mm				
EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length					
	D1	D2	L1	L2		D1	D2	L1	L2					
D5432074	7.4	8	41	79	D5432096	9.6	10	47	89					
D5432075	7.5	8	41	79	D5432097	9.7	10	47	89					
D5432076	7.6	8	41	79	D5432098	9.8	10	47	89					
D5432077	7.7	8	41	79	D5432099	9.9	10	47	89					
D5432078	7.8	8	41	79	D5432100	10.0	10	47	89					
D5432079	7.9	8	41	79	D5432101	10.1	12	55	102					
D5432080	8.0	8	41	79	D5432102	10.2	12	55	102					
D5432081	8.1	10	47	89	D5432103	10.3	12	55	102					
D5432082	8.2	10	47	89	D5432104	10.4	12	55	102					
D5432083	8.3	10	47	89	D5432105	10.5	12	55	102					
D5432084	8.4	10	47	89	D5432106	10.6	12	55	102					
D5432085	8.5	10	47	89	D5432107	10.7	12	55	102					
D5432086	8.6	10	47	89	D5432108	10.8	12	55	102					
D5432087	8.7	10	47	89	D5432109	10.9	12	55	102					
D5432088	8.8	10	47	89	D5432110	11.0	12	55	102					
D5432089	8.9	10	47	89	D5432111	11.1	12	55	102					
D5432090	9.0	10	47	89	D5432112	11.2	12	55	102					
D5432091	9.1	10	47	89	D5432113	11.3	12	55	102					
D5432092	9.2	10	47	89	D5432114	11.4	12	55	102					
D5432093	9.3	10	47	89	D5432115	11.5	12	55	102					
D5432094	9.4	10	47	89	D5432116	11.6	12	55	102					
D5432095	9.5	10	47	89	D5432117	11.7	12	55	102					

► DLC coating is available on your request.

► Other shank types are available on your request.

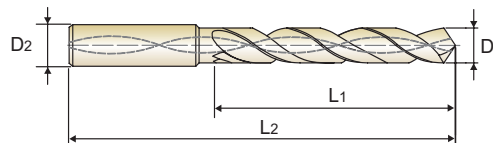
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◎ : Excellent ○ : Good																					
ISO	P										M				K						
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	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	◎	◎	◎	◎																	

CARBIDE, DREAM DRILLS - ALU with COOLANT HOLES**SHORT**
 **VOLLHARTMETALL DREAM SPIRALBOHRER - ALU mit KÜHLKANAL**
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 **PUNTE ELICOIDALI IN MD, DREAM DRILLS - ALU (con fori di refrigerazione)**
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**DIN
6537****CARBIDE****30°****h6****m7****118°****20 bar****P.141****3 × D**

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
D5432118	11.8	12	55	102
D5432119	11.9	12	55	102
D5432120	12.0	12	55	102
D5432125	12.5	14	60	107
D5432130	13.0	14	60	107
D5432135	13.5	14	60	107
D5432140	14.0	14	60	107
D5432145	14.5	16	65	115
D5432150	15.0	16	65	115
D5432155	15.5	16	65	115

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
	D1	D2	L1	L2
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
D5432190	19.0	20	79	131
D5432195	19.5	20	79	131
D5432200	20.0	20	79	131

Unit : mm

- DLC coating is available on your request.
- Other shank types 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	320	400Rm	1050Rm	550	630	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550	
Recommended	◎	◎	◎	◎																		

D5432, D5433, D5434 SERIES

with COOLANT HOLES

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

ISO	VDI 3323	Material Description	Vc (m/min)	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
P	1	Non-alloy steel													
	2														
	3														
	4														
	5														
	6	Low alloy steel													
	7														
	8														
	9	High alloyed steel, and tool steel													
	10														
	11														
M	12	Stainless steel													
	13														
	14														
K	15	Grey cast iron													
	16														
	17	Nodular cast iron													
	18														
	19	Malleable cast iron													
	20														
N	21	Aluminum-wrought alloy	200	RPM	21220	15920	12730	10610	7960	6370	5310	4550	3980	3540	3180
	22		160	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		RPM	16980	12730	10190	8490	6370	5090	4240	3640	3180	2830	2550
	24		150	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
	25			RPM	15920	11940	9550	7960	5970	4770	3980	3410	2980	2650	2390
	26		140	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
	27	Copper and Copper Alloys (Bronze / Brass)		RPM	14850	11140	8910	7430	5570	4460	3710	3180	2790	2480	2230
	28			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
	29	Non Metallic Materials													
	30														
S	31	Heat Resistant Super Alloys													
	32														
	33														
	34														
	35														
	36	Titanium Alloys													
	37														
H	38	Hardened steel													
	39														
	40	Chilled Cast Iron													
	41	Hardened Cast Iron													

SELECTION GUIDE

HOLEMAKING
TOOLS

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

133

136

139

SURFACE TREATMENT

Bright

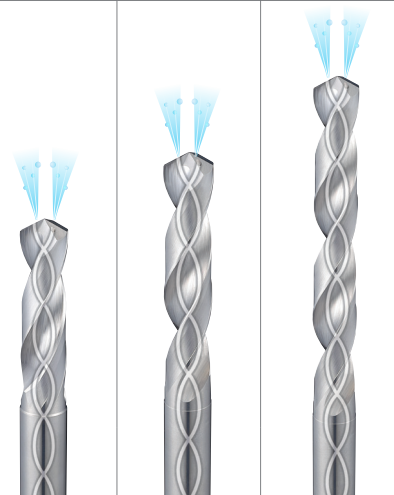
SOLID CARBIDE DREAM DRILLS ALU

For Aluminum and Aluminum Alloys

Please visit
globalyg1.com/mat
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.141



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		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			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			