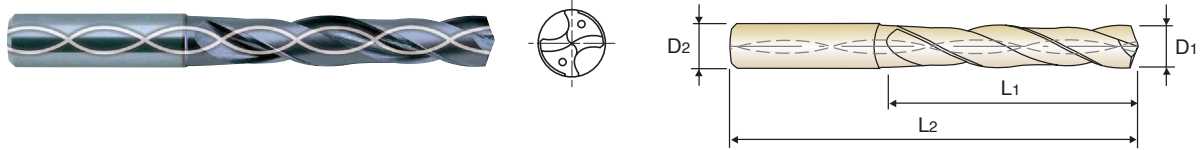




**DREAM DRILLS  
-GENERAL**

**DH406 SERIES**

**CARBIDE, DREAM DRILLS with COOLANT HOLES** **SHORT**  
**VOLLHARTMETALL DREAM SPIRALBOHRER mit KÜHLKANAL** **KURZ**



3 × D

Unit : mm

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
TiAlN	D1	D2	L1	L2	TiAlN	D1	D2	L1	L2
DH406030	3.0	6	20	62	DH406057	5.7	6	28	66
DH406031	3.1	6	20	62	DH406058	5.8	6	28	66
DH406032	3.2	6	20	62	DH406059	5.9	6	28	66
DH406033	3.3	6	20	62	DH406060	6.0	6	28	66
DH406034	3.4	6	20	62	DH406061	6.1	8	34	79
DH406035	3.5	6	20	62	DH406062	6.2	8	34	79
DH406036	3.6	6	20	62	DH406063	6.3	8	34	79
DH406037	3.7	6	20	62	DH406064	6.4	8	34	79
DH406038	3.8	6	24	66	DH406065	6.5	8	34	79
DH406039	3.9	6	24	66	DH406066	6.6	8	34	79
DH406040	4.0	6	24	66	DH406067	6.7	8	34	79
DH406041	4.1	6	24	66	DH406068	6.8	8	34	79
DH406042	4.2	6	24	66	DH406069	6.9	8	34	79
DH406043	4.3	6	24	66	DH406070	7.0	8	34	79
DH406044	4.4	6	24	66	DH406071	7.1	8	41	79
DH406045	4.5	6	24	66	DH406072	7.2	8	41	79
DH406046	4.6	6	24	66	DH406073	7.3	8	41	79
DH406047	4.7	6	24	66	DH406074	7.4	8	41	79
DH406048	4.8	6	28	66	DH406075	7.5	8	41	79
DH406049	4.9	6	28	66	DH406076	7.6	8	41	79
DH406050	5.0	6	28	66	DH406077	7.7	8	41	79
DH406051	5.1	6	28	66	DH406078	7.8	8	41	79
DH406052	5.2	6	28	66	DH406079	7.9	8	41	79
DH406053	5.3	6	28	66	DH406080	8.0	8	41	79
DH406054	5.4	6	28	66	DH406081	8.1	10	47	89
DH406055	5.5	6	28	66	DH406082	8.2	10	47	89
DH406056	5.6	6	28	66	DH406083	8.3	10	47	89

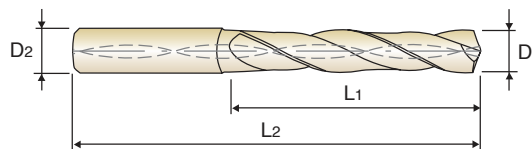
▶ Other shank types are available on your request.

◎ : 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~								
○	◎	◎			○		○					



**CARBIDE, DREAM DRILLS with COOLANT HOLES** **SHORT**  
**VOLLHARTMETALL DREAM SPIRALBOHRER mit KÜHLKANAL** **KURZ**



DIN 6537
MG
h6
m7
140°

3 × D

Unit : mm

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
DH406084	8.4	10	47	89	DH406111	11.1	12	55	102
DH406085	8.5	10	47	89	DH406112	11.2	12	55	102
DH406086	8.6	10	47	89	DH406113	11.3	12	55	102
DH406087	8.7	10	47	89	DH406114	11.4	12	55	102
DH406088	8.8	10	47	89	DH406115	11.5	12	55	102
DH406089	8.9	10	47	89	DH406116	11.6	12	55	102
DH406090	9.0	10	47	89	DH406117	11.7	12	55	102
DH406091	9.1	10	47	89	DH406118	11.8	12	55	102
DH406092	9.2	10	47	89	DH406119	11.9	12	55	102
DH406093	9.3	10	47	89	DH406120	12.0	12	55	102
DH406094	9.4	10	47	89	DH406125	12.5	14	60	107
DH406095	9.5	10	47	89	DH406130	13.0	14	60	107
DH406096	9.6	10	47	89	DH406135	13.5	14	60	107
DH406097	9.7	10	47	89	DH406140	14.0	14	60	107
DH406098	9.8	10	47	89	DH406145	14.5	16	65	115
DH406099	9.9	10	47	89	DH406150	15.0	16	65	115
DH406100	10.0	10	47	89	DH406155	15.5	16	65	115
DH406101	10.1	12	55	102	DH406160	16.0	16	65	115
DH406102	10.2	12	55	102	DH406165	16.5	18	73	123
DH406103	10.3	12	55	102	DH406170	17.0	18	73	123
DH406104	10.4	12	55	102	DH406175	17.5	18	73	123
DH406105	10.5	12	55	102	DH406180	18.0	18	73	123
DH406106	10.6	12	55	102	DH406185	18.5	20	79	131
DH406107	10.7	12	55	102	DH406190	19.0	20	79	131
DH406108	10.8	12	55	102	DH406195	19.5	20	79	131
DH406109	10.9	12	55	102	DH406200	20.0	20	79	131
DH406110	11.0	12	55	102					

► Other shank types 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~								
○	◎	◎			○		○					



**DREAM DRILLS -GENERAL**

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE, DREAM DRILLS, TiAIN COATED  
VOLLHARTMETALL DREAM BOHRER, TiAIN-BESCHICHTET**

**DH404, DH423, DH424 SERIES**

WORK MATERIAL	NON-ALLOY STEELS		ALLOY STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON	
STRENGTH	< 700 N/mm <sup>2</sup>		< 1000 N/mm <sup>2</sup>		< HB240, GG25		< HB300, GG40	
DRILLING SPEED	Ø1.0 ~ Ø2.9 : 40 ~ 80 m/min Ø3.0 ~ : 100 ~ 120 m/min		Ø1.0 ~ Ø2.9 : 35 ~ 70 m/min Ø3.0 ~ : 85 ~ 105 m/min		Ø1.0 ~ Ø2.9 : 60 ~ 130 m/min Ø3.0 ~ : 180 ~ 200 m/min		Ø1.0 ~ Ø2.9 : 40 ~ 90 m/min Ø3.0 ~ : 110 ~ 130 m/min	
DIAMETER	N	S	N	S	N	S	N	S
1.0	13000	0.04	11250	0.04	21300	0.04	14200	0.04
2.0	13000	0.06	11250	0.06	21300	0.06	14200	0.06
3.0	13000	0.13	11000	0.13	21000	0.13	14000	0.13
4.0	9500	0.14	8400	0.14	16000	0.14	10500	0.14
5.0	7600	0.15	6700	0.15	13000	0.15	8300	0.15
6.0	6400	0.17	5600	0.17	11000	0.17	6900	0.17
7.0	5500	0.19	4800	0.19	9100	0.19	5900	0.19
8.0	4800	0.21	4200	0.21	8000	0.21	5200	0.21
9.0	4200	0.23	3700	0.23	7100	0.23	4600	0.23
10.0	3800	0.25	3350	0.25	6400	0.25	4150	0.25
12.0	3200	0.27	2800	0.27	5300	0.27	3450	0.27
14.0	2750	0.29	2400	0.29	4550	0.29	3000	0.29
16.0	2400	0.31	2100	0.31	4000	0.31	2600	0.31
18.0	2100	0.33	1850	0.33	3550	0.33	2300	0.33
20.0	1900	0.35	1650	0.35	3200	0.35	2100	0.35

► Recommend to reduce the feed rate as following

**Feed 100%** : DH404(3×D), DH423(3×D)  
**Feed 85%** : DH424(5×D)

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

**CARBIDE, DREAM DRILLS with COOLANT HOLES DIN6537, TiAIN COATED  
VOLLHARTMETALL DREAM BOHRER mit KÜHLKANAL DIN6537, TiAIN-BESCHICHTET**

**DH406, DH408, DH421 SERIES**

WORK MATERIAL	NON-ALLOY STEELS		ALLOY STEELS		SOFT GREY CAST IRON		HARD GREY CAST IRON	
STRENGTH	< 700 N/mm <sup>2</sup>		< 1000 N/mm <sup>2</sup>		< HB240, GG25		< HB300, GG40	
DRILLING SPEED	Ø1.0 ~ Ø2.9 : 50 ~ 100 m/min Ø3.0 ~ : 130 ~ 150 m/min		Ø1.0 ~ Ø2.9 : 40 ~ 90 m/min Ø3.0 ~ : 115 ~ 135 m/min		Ø1.0 ~ Ø2.9 : 80 ~ 160 m/min Ø3.0 ~ : 230 ~ 250 m/min		Ø1.0 ~ Ø2.9 : 50 ~ 100 m/min Ø3.0 ~ : 140 ~ 160 m/min	
DIAMETER	N	S	N	S	N	S	N	S
1.0	16250	0.05	14800	0.05	26600	0.05	17300	0.05
2.0	16250	0.07	14800	0.07	26600	0.07	17300	0.07
3.0	16000	0.16	14500	0.16	26000	0.16	17000	0.16
4.0	12000	0.17	11000	0.17	20000	0.17	13000	0.17
5.0	9550	0.18	8600	0.18	16000	0.18	10000	0.18
6.0	8000	0.20	7200	0.20	13000	0.20	8500	0.20
7.0	6800	0.22	6100	0.22	11500	0.22	7300	0.22
8.0	6000	0.24	5400	0.24	9900	0.24	6400	0.24
9.0	5300	0.27	4800	0.27	8800	0.27	5700	0.27
10.0	4800	0.30	4300	0.30	8000	0.30	5100	0.30
12.0	4000	0.33	3600	0.33	6600	0.33	4250	0.33
14.0	3400	0.36	3050	0.36	5700	0.36	3650	0.36
16.0	3000	0.39	2700	0.39	5000	0.39	3200	0.39
18.0	2650	0.42	2400	0.42	4400	0.42	2850	0.42
20.0	2400	0.45	2150	0.45	4000	0.45	2550	0.45

► Recommend to reduce the feed rate as following

**Feed 100%** : DH406(3×D)  
**Feed 85%** : DH408(5×D)  
**Feed 70%** : DH421(8×D)

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