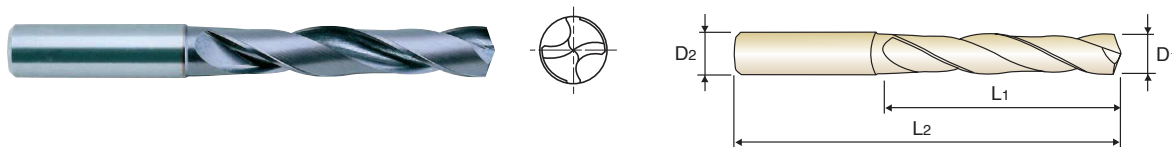




**CARBIDE, DREAM DRILLS  
VOLLHARTMETALL DREAM SPIRALBOHRER**

**SHORT  
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
DH423030	3.0	6	20	62	DH423059	5.9	6	28	66
DH423031	3.1	6	20	62	DH423060	6.0	6	28	66
DH423032	3.2	6	20	62	DH423061	6.1	8	34	79
DH423033	3.3	6	20	62	DH423062	6.2	8	34	79
DH423034	3.4	6	20	62	DH423063	6.3	8	34	79
DH423035	3.5	6	20	62	DH423064	6.4	8	34	79
DH423036	3.6	6	20	62	DH423065	6.5	8	34	79
DH423037	3.7	6	20	62	DH423066	6.6	8	34	79
DH423038	3.8	6	24	66	DH423067	6.7	8	34	79
DH423039	3.9	6	24	66	DH423068	6.8	8	34	79
DH423040	4.0	6	24	66	DH423069	6.9	8	34	79
DH423041	4.1	6	24	66	DH423070	7.0	8	34	79
DH423042	4.2	6	24	66	DH423071	7.1	8	41	79
DH423043	4.3	6	24	66	DH423072	7.2	8	41	79
DH423044	4.4	6	24	66	DH423073	7.3	8	41	79
DH423045	4.5	6	24	66	DH423074	7.4	8	41	79
DH423046	4.6	6	24	66	DH423075	7.5	8	41	79
DH423047	4.7	6	24	66	DH423076	7.6	8	41	79
DH423048	4.8	6	28	66	DH423077	7.7	8	41	79
DH423049	4.9	6	28	66	DH423078	7.8	8	41	79
DH423050	5.0	6	28	66	DH423079	7.9	8	41	79
DH423051	5.1	6	28	66	DH423080	8.0	8	41	79
DH423052	5.2	6	28	66	DH423081	8.1	10	47	89
DH423053	5.3	6	28	66	DH423082	8.2	10	47	89
DH423054	5.4	6	28	66	DH423083	8.3	10	47	89
DH423055	5.5	6	28	66	DH423084	8.4	10	47	89
DH423056	5.6	6	28	66	DH423085	8.5	10	47	89
DH423057	5.7	6	28	66	DH423086	8.6	10	47	89
DH423058	5.8	6	28	66	DH423087	8.7	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~								
○	◎	◎			○		○					

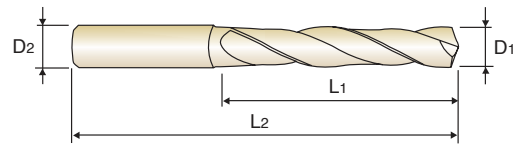


**DREAM DRILLS  
-GENERAL**

**DH423 SERIES**

**CARBIDE, DREAM DRILLS  
VOLLHARTMETALL DREAM SPIRALBOHRER**

**SHORT  
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
DH423088	8.8	10	47	89	DH423117	11.7	12	55	102
DH423089	8.9	10	47	89	DH423118	11.8	12	55	102
DH423090	9.0	10	47	89	DH423119	11.9	12	55	102
DH423091	9.1	10	47	89	DH423120	12.0	12	55	102
DH423092	9.2	10	47	89	DH423123	12.3	14	60	107
DH423093	9.3	10	47	89	DH423125	12.5	14	60	107
DH423094	9.4	10	47	89	DH423128	12.8	14	60	107
DH423095	9.5	10	47	89	DH423130	13.0	14	60	107
DH423096	9.6	10	47	89	DH423135	13.5	14	60	107
DH423097	9.7	10	47	89	DH423138	13.8	14	60	107
DH423098	9.8	10	47	89	DH423140	14.0	14	60	107
DH423099	9.9	10	47	89	DH423145	14.5	16	65	115
DH423100	10.0	10	47	89	DH423148	14.8	16	65	115
DH423101	10.1	12	55	102	DH423150	15.0	16	65	115
DH423102	10.2	12	55	102	DH423155	15.5	16	65	115
DH423103	10.3	12	55	102	DH423158	15.8	16	65	115
DH423104	10.4	12	55	102	DH423160	16.0	16	65	115
DH423105	10.5	12	55	102	DH423165	16.5	18	73	123
DH423106	10.6	12	55	102	DH423168	16.8	18	73	123
DH423107	10.7	12	55	102	DH423170	17.0	18	73	123
DH423108	10.8	12	55	102	DH423175	17.5	18	73	123
DH423109	10.9	12	55	102	DH423178	17.8	18	73	123
DH423110	11.0	12	55	102	DH423180	18.0	18	73	123
DH423111	11.1	12	55	102	DH423185	18.5	20	79	131
DH423112	11.2	12	55	102	DH423190	19.0	20	79	131
DH423113	11.3	12	55	102	DH423195	19.5	20	79	131
DH423114	11.4	12	55	102	DH423198	19.8	20	79	131
DH423115	11.5	12	55	102	DH423200	20.0	20	79	131
DH423116	11.6	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~								
○	◎	◎			○		○					

**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.)