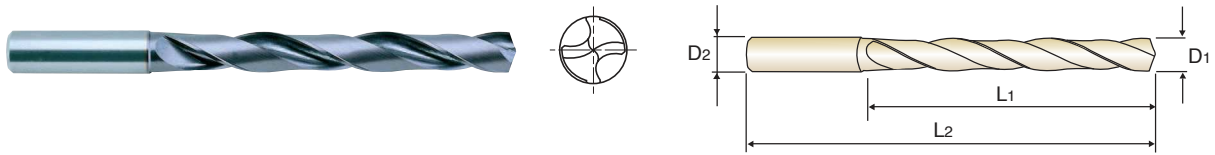




**CARBIDE, DREAM DRILLS
VOLLHARTMETALL DREAM SPIRALBOHRER**

**LONG
LANG**



5 × D

Unit : mm

EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length	EDP No.	Drill Diameter	Shank Diameter	Flute Length	Overall Length
TiAIN	D1	D2	L1	L2	TiAIN	D1	D2	L1	L2
DH424010	1.0	3	8	55	DH424036	3.6	6	28	66
DH424011	1.1	3	12	55	DH424037	3.7	6	28	66
DH424012	1.2	3	12	55	DH424038	3.8	6	36	74
DH424013	1.3	3	12	55	DH424039	3.9	6	36	74
DH424014	1.4	3	12	55	DH424040	4.0	6	36	74
DH424015	1.5	3	16	55	DH424041	4.1	6	36	74
DH424016	1.6	3	16	55	DH424042	4.2	6	36	74
DH424017	1.7	3	16	55	DH424043	4.3	6	36	74
DH424018	1.8	3	16	55	DH424044	4.4	6	36	74
DH424019	1.9	3	16	55	DH424045	4.5	6	36	74
DH424020	2.0	4	21	57	DH424046	4.6	6	36	74
DH424021	2.1	4	21	57	DH424047	4.7	6	36	74
DH424022	2.2	4	21	57	DH424048	4.8	6	44	82
DH424023	2.3	4	21	57	DH424049	4.9	6	44	82
DH424024	2.4	4	21	57	DH424050	5.0	6	44	82
DH424025	2.5	4	21	57	DH424051	5.1	6	44	82
DH424026	2.6	4	21	57	DH424052	5.2	6	44	82
DH424027	2.7	4	21	57	DH424053	5.3	6	44	82
DH424028	2.8	4	21	57	DH424054	5.4	6	44	82
DH424029	2.9	4	21	57	DH424055	5.5	6	44	82
DH424030	3.0	6	28	66	DH424056	5.6	6	44	82
DH424031	3.1	6	28	66	DH424057	5.7	6	44	82
DH424032	3.2	6	28	66	DH424058	5.8	6	44	82
DH424033	3.3	6	28	66	DH424059	5.9	6	44	82
DH424034	3.4	6	28	66	DH424060	6.0	6	44	82
DH424035	3.5	6	28	66	DH424061	6.1	8	53	91

► 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~								
○	◎	◎			○		○					

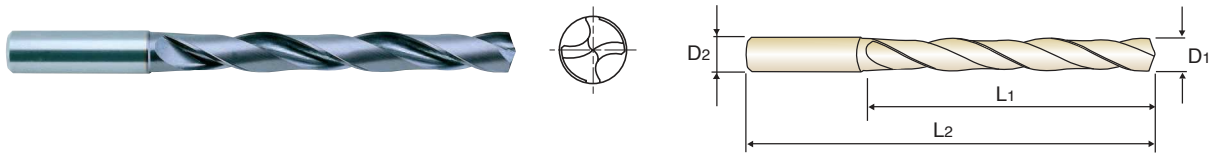


**DREAM DRILLS
-GENERAL**

DH424 SERIES

**CARBIDE, DREAM DRILLS
VOLLHARTMETALL DREAM SPIRALBOHRER**

**LONG
LANG**



5 × 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
DH424062	6.2	8	53	91	DH424088	8.8	10	61	103
DH424063	6.3	8	53	91	DH424089	8.9	10	61	103
DH424064	6.4	8	53	91	DH424090	9.0	10	61	103
DH424065	6.5	8	53	91	DH424091	9.1	10	61	103
DH424066	6.6	8	53	91	DH424092	9.2	10	61	103
DH424067	6.7	8	53	91	DH424093	9.3	10	61	103
DH424068	6.8	8	53	91	DH424094	9.4	10	61	103
DH424069	6.9	8	53	91	DH424095	9.5	10	61	103
DH424070	7.0	8	53	91	DH424096	9.6	10	61	103
DH424071	7.1	8	53	91	DH424097	9.7	10	61	103
DH424072	7.2	8	53	91	DH424098	9.8	10	61	103
DH424073	7.3	8	53	91	DH424099	9.9	10	61	103
DH424074	7.4	8	53	91	DH424100	10.0	10	61	103
DH424075	7.5	8	53	91	DH424101	10.1	12	71	118
DH424076	7.6	8	53	91	DH424102	10.2	12	71	118
DH424077	7.7	8	53	91	DH424103	10.3	12	71	118
DH424078	7.8	8	53	91	DH424104	10.4	12	71	118
DH424079	7.9	8	53	91	DH424105	10.5	12	71	118
DH424080	8.0	8	53	91	DH424106	10.6	12	71	118
DH424081	8.1	10	61	103	DH424107	10.7	12	71	118
DH424082	8.2	10	61	103	DH424108	10.8	12	71	118
DH424083	8.3	10	61	103	DH424109	10.9	12	71	118
DH424084	8.4	10	61	103	DH424110	11.0	12	71	118
DH424085	8.5	10	61	103	DH424111	11.1	12	71	118
DH424086	8.6	10	61	103	DH424112	11.2	12	71	118
DH424087	8.7	10	61	103	DH424113	11.3	12	71	118

▶ Other shank types are available on your request.

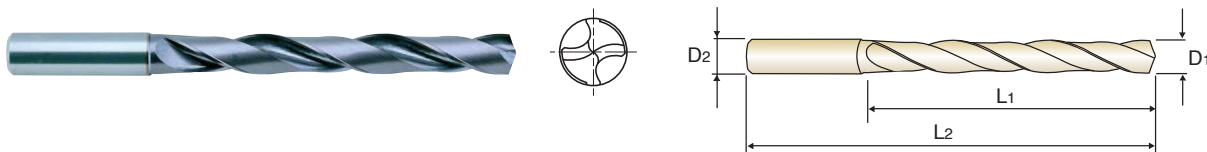
◎ : Excellent ○ : Good

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
VOLLHARTMETALL DREAM SPIRALBOHRER**

**LONG
LANG**



5 × 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
DH424114	11.4	12	71	118	DH424150	15.0	16	83	133
DH424115	11.5	12	71	118	DH424155	15.5	16	83	133
DH424116	11.6	12	71	118	DH424158	15.8	16	83	133
DH424117	11.7	12	71	118	DH424160	16.0	16	83	133
DH424118	11.8	12	71	118	DH424165	16.5	18	93	143
DH424119	11.9	12	71	118	DH424168	16.8	18	93	143
DH424120	12.0	12	71	118	DH424170	17.0	18	93	143
DH424123	12.3	14	77	124	DH424175	17.5	18	93	143
DH424125	12.5	14	77	124	DH424178	17.8	18	93	143
DH424128	12.8	14	77	124	DH424180	18.0	18	93	143
DH424130	13.0	14	77	124	DH424185	18.5	20	101	153
DH424135	13.5	14	77	124	DH424190	19.0	20	101	153
DH424138	13.8	14	77	124	DH424195	19.5	20	101	153
DH424140	14.0	14	77	124	DH424198	19.8	20	101	153
DH424145	14.5	16	83	133	DH424200	20.0	20	101	153
DH424148	14.8	16	83	133					

► 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 ²		< 1000 N/mm ²		< 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 ²		< 1000 N/mm ²		< 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.)