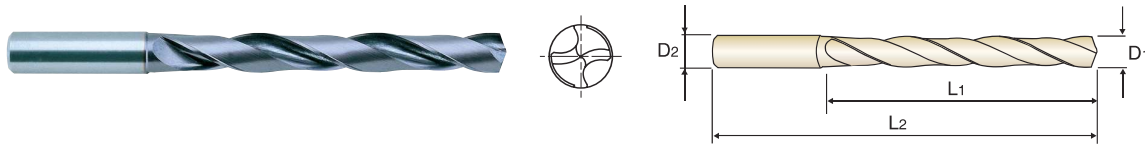




SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

- ▶ Application : Steel, cast steel, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metal, non-ferrous light metal, abrasive plastic
- ▶ Advantage : Self centering - center drilling is not required
 Excellent positioning - bushing is not necessary
 Special Design - reaming is not required
 - good chip removal
 - powerful drilling
- ▶ Tolerance : Dia. Tolerance ØD1: See page 57, Shank Tolerance ØD2: -.0001 -.0005



DREAM DRILLS | 5x D

Unit : Inch

EDP No.	Diameter		Shank Diameter	Flute Length	Overall Length	EDP No.	Diameter		Shank Diameter	Flute Length	Overall Length
	Fractional	Decimal					Fractional	Decimal			
TAIN	D1		D2	L1	L2	TAIN	D1		D2	L1	L2
DH722013	13/64	.2031	1/4	1-3/4	3-15/16	DH722022	11/32	.3438	3/8	2-27/32	5
DH722014	7/32	.2188	1/4	1-57/64	3-15/16	DH722023	23/64	.3594	3/8	3	5-23/64
DH722015	15/64	.2344	1/4	1-57/64	3-15/16	DH722221	U	.3680	3/8	3	5-23/64
DH722016	1/4	.2500	1/4	2-3/64	4-19/64	DH722024	3/8	.3750	3/8	3-5/32	5-23/64
DH722206	F	.2570	5/16	2-13/64	4-19/64	DH722025	25/64	.3906	7/16	3-5/32	5-23/64
DH722017	17/64	.2656	5/16	2-13/64	4-19/64	DH722026	13/32	.4062	7/16	3-5/16	5-7/8
DH722209	I	.2720	5/16	2-13/64	4-19/64	DH722027	27/64	.4219	7/16	3-15/32	5-7/8
DH722018	9/32	.2812	5/16	2-23/64	4-41/64	DH722028	7/16	.4375	7/16	3-5/8	6-7/32
DH722019	19/64	.2969	5/16	2-33/64	4-41/64	DH722029	29/64	.4531	1/2	3-25/32	6-7/32
DH722020	5/16	.3125	5/16	2-33/64	4-41/64	DH722030	15/32	.4688	1/2	3-25/32	6-7/32
DH722021	21/64	.3281	3/8	2-43/64	5	DH722031	31/64	.4844	1/2	3-15/16	6-37/64
DH722217	Q	.3320	3/8	2-43/64	5	DH722032	1/2	.5000	1/2	4-3/32	6-37/64

▶ Other shank types are available on your request

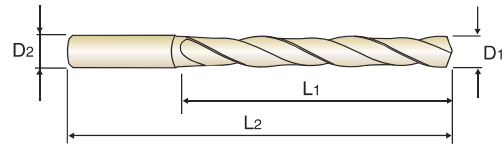
◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
○	◎	◎			○		○				



SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

- ▶ Application : Drilling into general steels, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics
- ▶ Advantage : Self centering - Center drilling is not required
 Excellent positioning - Bush is not necessary
 Special design - Reaming is not required
 - Good chip removal
 - Powerful drilling



DIN 6537

MG

h6

m7

140°



P.26

DREAM DRILLS | 5x D

Unit : mm

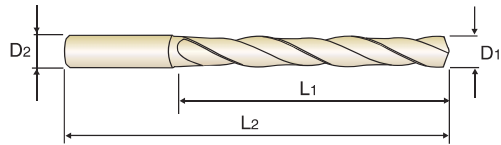
EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length	EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length
	Metric	Fractional	Decimal					Metric	Fractional	Decimal			
TAIN	D1			D2	L1	L2	TAIN	D1			D2	L1	L2
DH424010	1.0		.0394	3	8	55	DH424009F	3.572	9/64	.1406	6	28	66
DH424011	1.1		.0433	3	12	55	DH424036	3.6		.1417	6	28	66
DH424012	1.2		.0472	3	12	55	DH424037	3.7		.1457	6	28	66
DH424013	1.3		.0512	3	12	55	DH424038	3.8		.1496	6	36	74
DH424014	1.4		.0551	3	12	55	DH424039	3.9		.1535	6	36	74
DH424015	1.5		.0591	3	16	55	DH424010F	3.969	5/32	.1563	6	36	74
DH424004F	1.588	1/16	.0625	3	16	55	DH424040	4.0		.1575	6	36	74
DH424016	1.6		.0630	3	16	55	DH424041	4.1		.1614	6	36	74
DH424017	1.7		.0669	3	16	55	DH424042	4.2		.1654	6	36	74
DH424018	1.8		.0709	3	16	55	DH424043	4.3		.1693	6	36	74
DH424019	1.9		.0748	3	16	55	DH424011F	4.366	11/64	.1719	6	36	74
DH424005F	1.984	5/64	.0781	3	16	55	DH424044	4.4		.1732	6	36	74
DH424020	2.0		.0787	4	21	57	DH424045	4.5		.1772	6	36	74
DH424021	2.1		.0827	4	21	57	DH424046	4.6		.1811	6	36	74
DH424022	2.2		.0866	4	21	57	DH424047	4.7		.1850	6	36	74
DH424023	2.3		.0906	4	21	57	DH424012F	4.763	3/16	.1875	6	36	74
DH424006F	2.381	3/32	.0938	4	21	57	DH424048	4.8		.1890	6	44	82
DH424024	2.4		.0945	4	21	57	DH424049	4.9		.1929	6	44	82
DH424025	2.5		.0984	4	21	57	DH424050	5.0		.1969	6	44	82
DH424026	2.6		.1024	4	21	57	DH424051	5.1		.2008	6	44	82
DH424027	2.7		.1063	4	21	57	DH424013F	5.159	13/64	.2031	6	44	82
DH424007F	2.778	7/64	.1094	4	21	57	DH424052	5.2		.2047	6	44	82
DH424028	2.8		.1102	4	21	57	DH424053	5.3		.2087	6	44	82
DH424029	2.9		.1142	4	21	57	DH424054	5.4		.2126	6	44	82
DH424030	3.0		.1181	6	28	66	DH424055	5.5		.2165	6	44	82
DH424031	3.1		.1220	6	28	66	DH424014F	5.556	7/32	.2188	6	44	82
DH424008F	3.175	1/8	.1250	6	28	66	DH424056	5.6		.2205	6	44	82
DH424032	3.2		.1260	6	28	66	DH424057	5.7		.2244	6	44	82
DH424033	3.3		.1299	6	28	66	DH424058	5.8		.2283	6	44	82
DH424034	3.4		.1339	6	28	66	DH424059	5.9		.2323	6	44	82
DH424035	3.5		.1378	6	28	66	DH424015F	5.953	15/64	.2344	6	44	82

▶ NEXT PAGE



SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

- ▶ Application : Drilling into general steels, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics
- ▶ Advantage : Self centering - Center drilling is not required
 Excellent positioning - Bush is not necessary
 Special design - Reaming is not required
 - Good chip removal
 - Powerful drilling



DIN 6537

MG

h6

m7

140°



P.26

DREAM DRILLS | 5×D

Unit : mm

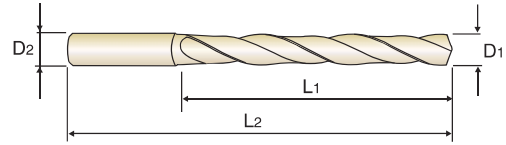
EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length	EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length
	Metric	Fractional	Decimal					Metric	Fractional	Decimal			
TAIN	D1			D2	L1	L2	TAIN	D1			D2	L1	L2
DH424060	6.0		.2362	6	44	82	DH424085	8.5		.3346	10	61	103
DH424061	6.1		.2402	8	53	91	DH424086	8.6		.3386	10	61	103
DH424062	6.2		.2441	8	53	91	DH424087	8.7		.3425	10	61	103
DH424063	6.3		.2480	8	53	91	DH424022F	8.731	11/32	.3438	10	61	103
DH424016F	6.35	1/4	.2500	8	53	91	DH424088	8.8		.3465	10	61	103
DH424064	6.4		.2520	8	53	91	DH424089	8.9		.3504	10	61	103
DH424065	6.5		.2559	8	53	91	DH424090	9.0		.3543	10	61	103
DH424066	6.6		.2598	8	53	91	DH424091	9.1		.3583	10	61	103
DH424067	6.7		.2638	8	53	91	DH424023F	9.128	23/64	.3594	10	61	103
DH424017F	6.747	17/64	.2656	8	53	91	DH424092	9.2		.3622	10	61	103
DH424068	6.8		.2677	8	53	91	DH424093	9.3		.3661	10	61	103
DH424069	6.9		.2717	8	53	91	DH424094	9.4		.3701	10	61	103
DH424070	7.0		.2756	8	53	91	DH424095	9.5		.3740	10	61	103
DH424071	7.1		.2795	8	53	91	DH424024F	9.525	3/8	.3750	10	61	103
DH424018F	7.144	9/32	.2812	8	53	91	DH424096	9.6		.3780	10	61	103
DH424072	7.2		.2835	8	53	91	DH424097	9.7		.3819	10	61	103
DH424073	7.3		.2874	8	53	91	DH424098	9.8		.3858	10	61	103
DH424074	7.4		.2913	8	53	91	DH424099	9.9		.3898	10	61	103
DH424075	7.5		.2953	8	53	91	DH424025F	9.922	25/64	.3906	10	61	103
DH424019F	7.541	19/64	.2969	8	53	91	DH424100	10.0		.3937	10	61	103
DH424076	7.6		.2992	8	53	91	DH424101	10.1		.3976	12	71	118
DH424077	7.7		.3031	8	53	91	DH424102	10.2		.4016	12	71	118
DH424078	7.8		.3071	8	53	91	DH424103	10.3		.4055	12	71	118
DH424079	7.9		.3110	8	53	91	DH424026F	10.319	13/32	.4062	12	71	118
DH424020F	7.938	5/16	.3125	8	53	91	DH424104	10.4		.4094	12	71	118
DH424080	8.0		.3150	8	53	91	DH424105	10.5		.4134	12	71	118
DH424081	8.1		.3189	10	61	103	DH424106	10.6		.4173	12	71	118
DH424082	8.2		.3228	10	61	103	DH424107	10.7		.4213	12	71	118
DH424083	8.3		.3268	10	61	103	DH424027F	10.716	27/64	.4219	12	71	118
DH424021F	8.334	21/64	.3281	10	61	103	DH424108	10.8		.4252	12	71	118
DH424084	8.4		.3307	10	61	103	DH424109	10.9		.4291	12	71	118

▶ NEXT PAGE



SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

- ▶ Application : Drilling into general steels, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics
- ▶ Advantage : Self centering - Center drilling is not required
 Excellent positioning - Bush is not necessary
 Special design - Reaming is not required
 - Good chip removal
 - Powerful drilling



DIN 6537

MG

h6

m7

140°



P.26

DREAM DRILLS | 5x D

Unit : mm

EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length	EDP No.	Diameter			Shank Diameter	Flute Length	Overall Length
	Metric	Fractional	Decimal					Metric	Fractional	Decimal			
TAIIN	D1			D2	L1	L2	TAIIN	D1			D2	L1	L2
DH424110	11.0		.4331	12	71	118	DH424140	14.0		.5512	14	77	124
DH424111	11.1		.4370	12	71	118	DH424036F	14.288	9/16	.5625	16	83	133
DH424028F	11.113	7/16	.4375	12	71	118	DH424145	14.5		.5708	16	83	133
DH424112	11.2		.4409	12	71	118	DH424148	14.8		.5827	16	83	133
DH424113	11.3		.4449	12	71	118	DH424150	15.0		.5905	16	83	133
DH424114	11.4		.4488	12	71	118	DH424155	15.5		.6102	16	83	133
DH424115	11.5		.4528	12	71	118	DH424158	15.8		.6220	16	83	133
DH424029F	11.509	29/64	.4531	12	71	118	DH424040F	15.875	5/8	.6250	16	83	133
DH424116	11.6		.4567	12	71	118	DH424160	16.0		.6299	16	83	133
DH424117	11.7		.4606	12	71	118	DH424165	16.5		.6495	18	93	143
DH424118	11.8		.4646	12	71	118	DH424168	16.8		.6614	18	93	143
DH424119	11.9		.4685	12	71	118	DH424170	17.0		.6692	18	93	143
DH424030F	11.906	15/32	.4688	12	71	118	DH424175	17.5		.6889	18	93	143
DH424120	12.0		.4724	12	71	118	DH424178	17.8		.7008	18	93	143
DH424123	12.3		.4843	14	77	124	DH424180	18.0		.7087	18	93	143
DH424031F	12.303	31/64	.4844	14	77	124	DH424185	18.5		.7283	20	101	153
DH424125	12.5		.4921	14	77	124	DH424190	19.0		.7480	20	101	153
DH424032F	12.7	1/2	.5000	14	77	124	DH424048F	19.05	3/4	.7500	20	101	153
DH424128	12.8		.5039	14	77	124	DH424195	19.5		.7676	20	101	153
DH424130	13.0		.5118	14	77	124	DH424198	19.8		.7795	20	101	153
DH424135	13.5		.5315	14	77	124	DH424200	20.0		.7874	20	101	153
DH424138	13.8		.5433	14	77	124							

▶ 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
~HB225	HB225~325	HRc30~45	HRc45~55	HRc55~							
○	◎	◎			○		○				



SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

DH414, DH722 Series

WORK MATERIAL				K				P			
				CAST IRON		CAST IRON		CARBON STEELS		ALLOY STEELS	
STRENGTH				< HRC24		> HRC24		< HRC30		HRC30 - 42	
DRILLING SPEED(SFM)				400 ~ 650 ft/min		280 ~ 430 ft/min		250 ~ 400 ft/min		210 ~ 350 ft/min	
DIAMETER				N		IPR		N		IPR	
Fractional		Metric(mm)									
1/8	3/16	3.175	4.763	13120	.006	8750	.005	7880	.005	7000	.005
3/16	5/16	4.763	7.938	8200	.008	5470	.006	4920	.006	4370	.006
5/16	3/8	7.938	9.525	5970	.011	3980	.009	3560	.009	3190	.009
3/8	1/2	9.525	12.700	4690	.014	3120	.011	2810	.011	2500	.011
1/2	9/16	12.700	14.288	3860	.016	2570	.012	2310	.012	2060	.012
9/16	13/16	14.288	20.638	2980	.018	1990	.014	1790	.014	1590	.014

► Recommend to reduce the feed rate as following

DH414(3xD) : Feed 100%

DH722(5xD) : Feed 85%

N = R.P.M

IPR = feed rate(inch/rev.)

SOLID CARBIDE DREAM DRILLS-GENERAL (with COOLANT HOLES)

DH416, DH418, DH711, DH712 Series

WORK MATERIAL				K				P			
				CAST IRON		CAST IRON		CARBON STEELS		ALLOY STEELS	
STRENGTH				< HRC24		> HRC24		< HB240, GG25		< HB300, GG40	
DRILLING SPEED(SFM)				480 ~ 730 ft/min		310 ~ 490 ft/min		280 ~ 430 ft/min		250 ~ 400 ft/min	
DIAMETER				N		IPR		N		IPR	
Fractional		Metric(mm)									
1/8	3/16	3.175	4.763	14870	.006	9620	.006	8750	.006	7880	.005
3/16	5/16	4.763	7.938	8200	.008	6010	.008	5470	.008	4920	.006
5/16	3/8	7.938	9.525	6760	.011	4370	.011	3980	.011	3580	.009
3/8	1/2	9.525	12.700	5310	.014	3440	.014	3120	.014	2810	.011
1/2	9/16	12.700	14.288	4370	.016	2830	.016	2570	.016	2310	.012
9/16	13/16	14.288	20.638	3380	.018	2190	.018	1990	.018	1790	.014

► Recommend to reduce the feed rate as following

DH416/DH711(3xD) : Feed 100%

DH418/DH712(5xD) : Feed 85%

N = R.P.M

IPR= feed rate (Inch/rev.)



SOLID CARBIDE DREAM DRILLS-GENERAL (without COOLANT HOLES)

DH404, DH423, DH424 Series

WORK MATERIAL		P						K					
		NON-ALLOY STEELS			ALLOY STEELS			SOFT GREY CAST IRON			HARD GREY CAST IRON		
STRENGTH		< HRC 20			> HRC 20			< 240 BHN			< 300 BHN		
DRILLING SPEED(SFM)		130 ~ 400 ft/min			115 ~ 340 ft/min			220 ~ 650 ft/min			150 ~ 430 ft/min		
DIAMETER		N	S	IPR	N	S	IPR	N	S	IPR	N	S	IPR
Metric(mm)	Decimal												
1.0	.0394	13000	0.04	.002	11250	0.04	.002	21300	0.04	.002	14200	0.04	.002
2.0	.0787	13000	0.06	.002	11250	0.06	.002	21300	0.06	.002	14200	0.06	.002
3.0	.1181	13000	0.13	.005	11000	0.13	.005	21000	0.13	.005	14000	0.13	.005
4.0	.1575	9500	0.14	.006	8400	0.14	.006	16000	0.14	.006	10500	0.14	.006
5.0	.1969	7600	0.15	.006	6700	0.15	.006	13000	0.15	.006	8300	0.15	.006
6.0	.2362	6400	0.17	.007	5600	0.17	.007	11000	0.17	.007	6900	0.17	.007
7.0	.2756	5500	0.19	.007	4800	0.19	.007	9100	0.19	.007	5900	0.19	.007
8.0	.3150	4800	0.21	.008	4200	0.21	.008	8000	0.21	.008	5200	0.21	.008
9.0	.3543	4200	0.23	.009	3700	0.23	.009	7100	0.23	.009	4600	0.23	.009
10.0	.3937	3800	0.25	.010	3350	0.25	.010	6400	0.25	.010	4150	0.25	.010
12.0	.4724	3200	0.27	.011	2800	0.27	.011	5300	0.27	.011	3450	0.27	.011
14.0	.5512	2750	0.29	.011	2400	0.29	.011	4550	0.29	.011	3000	0.29	.011
16.0	.6299	2400	0.31	.012	2100	0.31	.012	4000	0.31	.012	2600	0.31	.012
18.0	.7087	2100	0.33	.013	1850	0.33	.013	3550	0.33	.013	2300	0.33	.013
20.0	.7874	1900	0.35	.014	1650	0.35	.014	3200	0.35	.014	2100	0.35	.014

► Recommend to reduce the feed rate as following
 DH404(3xD), DH423(3xD) : Feed 100%
 DH424(5xD) : Feed 85%

N = R.P.M
 S= feed rate (mm/rev.)
 IPR= feed rate (Inch/rev.)

SOLID CARBIDE DREAM DRILLS-GENERAL (with COOLANT HOLES)

DH406, DH408, DH421 Series

WORK MATERIAL		P						K					
		NON-ALLOY STEELS			ALLOY STEELS			SOFT GREY CAST IRON			HARD GREY CAST IRON		
STRENGTH		< HRC 20			> HRC 20			< 240 BHN			< 300 BHN		
DRILLING SPEED		160 ~ 490 ft/min			150 ~ 440 ft/min			270 ~ 820 ft/min			170 ~ 530 ft/min		
DIAMETER		N	S	IPR	N	S	IPR	N	S	IPR	N	S	IPR
Metric(mm)	Decimal												
1.0	.0394	16250	0.05	.002	14800	0.05	.002	26600	0.05	.002	17300	0.05	.002
2.0	.0787	16250	0.07	.003	14800	0.07	.003	26600	0.07	.003	17300	0.07	.003
3.0	.1181	16000	0.16	.006	14500	0.16	.006	26000	0.16	.006	17000	0.16	.006
4.0	.1575	12000	0.17	.007	11000	0.17	.007	20000	0.17	.007	13000	0.17	.007
5.0	.1969	9550	0.18	.007	8600	0.18	.007	16000	0.18	.007	10000	0.18	.007
6.0	.2362	8000	0.20	.008	7200	0.20	.008	13000	0.20	.008	8500	0.20	.008
7.0	.2756	6800	0.22	.009	6100	0.22	.009	11500	0.22	.009	7300	0.22	.009
8.0	.3150	6000	0.24	.009	5400	0.24	.009	9900	0.24	.009	6400	0.24	.009
9.0	.3543	5300	0.27	.011	4800	0.27	.011	8800	0.27	.011	5700	0.27	.011
10.0	.3937	4800	0.30	.012	4300	0.30	.012	8000	0.30	.012	5100	0.30	.012
12.0	.4724	4000	0.33	.013	3600	0.33	.013	6600	0.33	.013	4250	0.33	.013
14.0	.5512	3400	0.36	.014	3050	0.36	.014	5700	0.36	.014	3650	0.36	.014
16.0	.6299	3000	0.39	.015	2700	0.39	.015	5000	0.39	.015	3200	0.39	.015
18.0	.7087	2650	0.42	.017	2400	0.42	.017	4400	0.42	.017	2850	0.42	.017
20.0	.7874	2400	0.45	.018	2150	0.45	.018	4000	0.45	.018	2550	0.45	.018

► Recommend to reduce the feed rate as following
 DH406(3xD) : Feed 100%, DH408(5xD) : Feed 85%
 DH421(8xD) : Feed 70%

N = R.P.M
 S= feed rate (mm/rev.)
 IPR= feed rate (Inch/rev.)