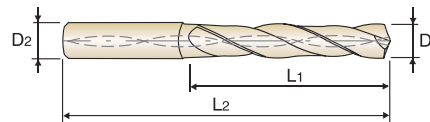




### \* NEW SIZE

### SOLID CARBIDE DREAM DRILLS-GENERAL (with 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 | 3x 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	
* DH711008	1/8	.1250	3/16	1.102	2.992	DH711221	U	.3680	3/8	1.87	4.174	*
0081BTF	1/8	.1250	15/64	1.102	2.992	2211BTF	U	.3680	25/64	1.870	4.174	
* DH711011	11/64	.1719	3/16	1.417	3.386	DH711024	3/8	.3750	3/8	1.969	4.174	*
0111BTF	11/64	.1719	15/64	1.417	3.386	0241BTF	3/8	.3750	25/64	1.969	4.174	
* DH711012	3/16	.1875	3/16	1.575	3.543	0251BTF	25/64	.3906	25/64	1.969	4.174	*
0121BTF	3/16	.1875	15/64	1.575	3.543	DH711025	25/64	.3906	7/16	1.969	4.174	*
0131BTF	13/64	.2031	15/64	1.082	3.228	0261BTF	13/32	.4062	27/64	2.067	4.567	*
* DH711013	13/64	.2031	1/4	1.082	3.228	DH711026	13/32	.4062	7/16	2.067	4.567	*
0141BTF	7/32	.2188	15/64	1.181	3.228	0271BTF	27/64	.4219	27/64	2.165	4.567	*
* DH711014	7/32	.2188	1/4	1.181	3.228	DH711027	27/64	.4219	7/16	2.165	4.567	*
0151BTF	15/64	.2344	15/64	1.181	3.228	DH711028	7/16	.4375	7/16	2.264	4.803	*
* DH711015	15/64	.2344	1/4	1.181	3.228	0281BTF	7/16	.4375	15/32	2.264	4.803	*
* DH711016	1/4	.2500	1/4	1.279	3.465	0291BTF	29/64	.4531	15/32	2.264	4.803	*
0161BTF	1/4	.2500	17/64	1.279	3.465	DH711029	29/64	.4531	1/2	2.264	4.803	*
2061BTF	F	.2570	17/64	1.279	3.465	0301BTF	15/32	.4688	15/32	2.362	4.803	*
* DH711206	F	.2570	5/16	1.279	3.465	DH711030	15/32	.4688	1/2	2.362	4.803	*
0171BTF	17/64	.2656	17/64	1.378	3.465	0311BTF	31/64	.4844	1/2	2.461	5.039	*
* DH711017	17/64	.2656	5/16	1.378	3.465	0321BTF	1/2	.5000	1/2	2.559	5.039	*
2091BTF	I	.2720	.2720	1.378	3.465	0331BTF	33/64	.5156	35/64	2.657	5.276	*
* DH711209	I	.2720	5/16	1.378	3.465	DH711033	33/64	.5156	9/16	2.657	5.276	*
0181BTF	9/32	.2812	5/16	1.476	3.701	0341BTF	17/32	.5312	35/64	2.756	5.276	*
0191BTF	19/64	.2969	5/16	1.476	3.701	DH711034	17/32	.5312	9/16	2.756	5.276	*
0201BTF	5/16	.3125	5/16	1.575	3.701	0351BTF	35/64	.5469	35/64	2.756	5.276	*
0211BTF	21/64	.3281	11/32	1.673	3.937	DH711035	35/64	.5469	9/16	2.756	5.276	*
* DH711021	21/64	.3281	3/8	1.673	3.937	DH711036	9/16	.5625	9/16	2.854	5.512	*
2171BTF	Q	.3320	11/32	1.673	3.937	0361BTF	9/16	.5625	37/64	2.854	5.512	*
* DH711217	Q	.3320	3/8	1.673	3.937	0371BTF	37/64	.5781	37/64	2.953	5.512	*
0221BTF	11/32	.3438	11/32	1.772	3.937	DH711037	37/64	.5781	5/8	2.953	5.512	*
* DH711022	11/32	.3438	3/8	1.772	3.937	0381BTF	19/32	.5937	5/8	3.051	5.709	*
* DH711023	23/64	.3594	3/8	1.87	4.174	0391BTF	39/64	.6094	5/8	3.051	5.709	*
0231BTF	23/64	.3594	25/64	1.870	4.174	0401BTF	5/8	.6250	5/8	3.150	5.709	*

▶ Other shank types are available on your request

◎ : Excellent ○ : Good

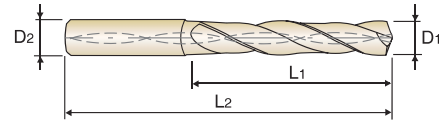
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
~HB225	HB225~325	HRC30~45	HRC45~55	HRC55~							
○	◎	◎			○		○				



### \* NEW SIZE

### SOLID CARBIDE DREAM DRILLS-GENERAL (with 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



DIN 6537

MG

h6

m7

140°



P.26

## DREAM DRILLS | 3×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	
DH406030	3.0		.1181	6	20	62	DH406015F	5.953	15/64	.2344	6	28	66	*
DH406031	3.1		.1220	6	20	62	DH406060	6.0		.2362	6	28	66	
* DH406008F	3.175	1/8	.1250	6	20	62	DH406061	6.1		.2402	8	34	79	
DH406032	3.2		.1260	6	20	62	DH406062	6.2		.2441	8	34	79	
DH406033	3.3		.1299	6	20	62	DH406063	6.3		.2480	8	34	79	
DH406034	3.4		.1339	6	20	62	DH406016F	6.35	1/4	.2500	8	34	79	*
DH406035	3.5		.1378	6	20	62	DH406064	6.4		.2520	8	34	79	
* DH406009F	3.572	9/64	.1406	6	20	62	DH406065	6.5		.2559	8	34	79	
DH406036	3.6		.1417	6	20	62	DH406066	6.6		.2598	8	34	79	
DH406037	3.7		.1457	6	20	62	DH406067	6.7		.2638	8	34	79	
DH406038	3.8		.1496	6	24	66	DH406017F	6.747	17/64	.2656	8	34	79	*
DH406039	3.9		.1535	6	24	66	DH406068	6.8		.2677	8	34	79	
* DH406010F	3.969	5/32	.1563	6	24	66	DH406069	6.9		.2717	8	34	79	
DH406040	4.0		.1575	6	24	66	DH406070	7.0		.2756	8	34	79	
DH406041	4.1		.1614	6	24	66	DH406071	7.1		.2795	8	41	79	
DH406042	4.2		.1654	6	24	66	DH406018F	7.144	9/32	.2812	8	41	79	*
DH406043	4.3		.1693	6	24	66	DH406072	7.2		.2835	8	41	79	
* DH406011F	4.366	11/64	.1719	6	24	66	DH406073	7.3		.2874	8	41	79	
DH406044	4.4		.1732	6	24	66	DH406074	7.4		.2913	8	41	79	
DH406045	4.5		.1772	6	24	66	DH406075	7.5		.2953	8	41	79	
DH406046	4.6		.1811	6	24	66	DH406019F	7.541	19/64	.2969	8	41	79	*
DH406047	4.7		.1850	6	24	66	DH406076	7.6		.2992	8	41	79	
* DH406012F	4.763	3/16	.1875	6	24	66	DH406077	7.7		.3031	8	41	79	
DH406048	4.8		.1890	6	28	66	DH406078	7.8		.3071	8	41	79	
DH406049	4.9		.1929	6	28	66	DH406079	7.9		.3110	8	41	79	
DH406050	5.0		.1969	6	28	66	DH406020F	7.938	5/16	.3125	8	41	79	*
DH406051	5.1		.2008	6	28	66	DH406080	8.0		.3150	8	41	79	
* DH406013F	5.159	13/64	.2031	6	28	66	DH406081	8.1		.3189	10	47	89	
DH406052	5.2		.2047	6	28	66	DH406082	8.2		.3228	10	47	89	
DH406053	5.3		.2087	6	28	66	DH406083	8.3		.3268	10	47	89	
DH406054	5.4		.2126	6	28	66	DH406021F	8.334	21/64	.3281	10	47	89	*
DH406055	5.5		.2165	6	28	66	DH406084	8.4		.3307	10	47	89	
* DH406014F	5.556	7/32	.2188	6	28	66	DH406085	8.5		.3346	10	47	89	
DH406056	5.6		.2205	6	28	66	DH406086	8.6		.3386	10	47	89	
DH406057	5.7		.2244	6	28	66	DH406087	8.7		.3425	10	47	89	
DH406058	5.8		.2283	6	28	66	DH406022F	8.731	11/32	.3438	10	47	89	*
DH406059	5.9		.2323	6	28	66	DH406088	8.8		.3465	10	47	89	

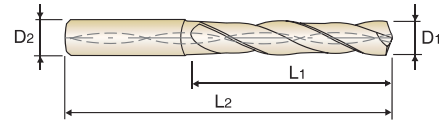
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### \* NEW SIZE

## SOLID CARBIDE DREAM DRILLS-GENERAL (with 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



DIN 6537

MG

h6

m7

140°



P.26

# DREAM DRILLS | 3x 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
DH406089	8.9		.3504	10	47	89	DH406114	11.4		.4488	12	55	102
DH406090	9.0		.3543	10	47	89	DH406115	11.5		.4527	12	55	102
DH406091	9.1		.3583	10	47	89	DH406029F	11.509	29/64	.4531	12	55	102
* DH406023F	9.128	23/64	.3594	10	47	89	DH406116	11.6		.4566	12	55	102
DH406092	9.2		.3622	10	47	89	DH406117	11.7		.4606	12	55	102
DH406093	9.3		.3661	10	47	89	DH406118	11.8		.4645	12	55	102
DH406094	9.4		.3701	10	47	89	DH406119	11.9		.4685	12	55	102
DH406095	9.5		.3740	10	47	89	DH406030F	11.906	15/32	.4688	12	55	102
* DH406024F	9.525	3/8	.3750	10	47	89	DH406120	12.0		.4724	12	55	102
DH406096	9.6		.3780	10	47	89	DH406031F	12.303	31/64	.4844	14	60	107
DH406097	9.7		.3819	10	47	89	DH406125	12.5		.4921	14	60	107
DH406098	9.8		.3858	10	47	89	DH406032F	12.7	1/2	.5000	14	60	107
DH406099	9.9		.3898	10	47	89	DH406130	13.0		.5118	14	60	107
* DH406025F	9.922	25/64	.3906	10	47	89	DH406135	13.5		.5314	14	60	107
DH406100	10.0		.3937	10	47	89	DH406140	14.0		.5512	14	60	107
DH406101	10.1		.3976	12	55	102	DH406036F	14.288	9/16	.5625	16	65	115
DH406102	10.2		.4016	12	55	102	DH406145	14.5		.5708	16	65	115
DH406103	10.3		.4055	12	55	102	DH406150	15.0		.5905	16	65	115
* DH406026F	10.319	13/32	.4062	12	55	102	DH406155	15.5		.6102	16	65	115
DH406104	10.4		.4094	12	55	102	DH406040F	15.875	5/8	.6250	16	65	115
DH406105	10.5		.4134	12	55	102	DH406160	16.0		.6299	16	65	115
DH406106	10.6		.4173	12	55	102	DH406165	16.5		.6495	18	73	123
DH406107	10.7		.4212	12	55	102	DH406170	17.0		.6692	18	73	123
* DH406027F	10.716	27/64	.4219	12	55	102	DH406044F	17.463	11/16	.6875	18	73	123
DH406108	10.8		.4252	12	55	102	DH406175	17.5		.6889	18	73	123
DH406109	10.9		.4291	12	55	102	DH406180	18.0		.7087	18	73	123
DH406110	11.0		.4330	12	55	102	DH406185	18.5		.7283	20	79	131
DH406111	11.1		.4370	12	55	102	DH406190	19.0		.7480	20	79	131
* DH406028F	11.113	7/16	.4375	12	55	102	DH406048F	19.05	3/4	.7500	20	79	131
DH406112	11.2		.4409	12	55	102	DH406195	19.5		.7676	20	79	131
DH406113	11.3		.4448	12	55	102	DH406200	20.0		.7874	20	79	131

▶ 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.)