



Being the best through innovation

CARBIDE



DREAM DRILLS -MQL TYPE

- (带油孔)

用最少量的润滑剂，钻深孔(10D,15D 和 20D)

WITH COOLANT HOLES

Minimum Quantity Lubrication. Drilling Deep Holes, 10D, 15D & 20D

SELECTION GUIDE

整体硬质合金梦幻钻头-MQL类型(带油孔)
用最少量的润滑剂, 钻深孔(10D,15D 和 20D)

项目	型号	规格	尺寸		页
			最小	最大	
ITEM	MODEL	DESCRIPTION	SIZE		PAGE
			MIN	MAX	
10XD DH510		油孔硬质合金 梦幻钻头 -MQL类型 CARBIDE, DREAM DRILLS MQL TYPE with COOLANT HOLES 超长 EXTRA LONG	D3.0	D14.0	88
15XD DH515		油孔硬质合金 梦幻钻头 -MQL类型 CARBIDE, DREAM DRILLS MQL TYPE with COOLANT HOLES 超长 EXTRA LONG	D3.0	D12.0	89
20XD DH520		油孔硬质合金 梦幻钻头 -MQL类型 CARBIDE, DREAM DRILLS MQL TYPE with COOLANT HOLES 超长 EXTRA LONG	D3.0	D12.0	89
		推荐的切削条件 RECOMMENDED CUTTING CONDITIONS			90

SOLID CARBIDE DREAM DRILLS-MQL TYPE

SOLID CARBIDE DREAM DRILLS - MQL TYPE (with Coolant Holes)

Minimum Quantity Lubrication. Drilling Deep Holes, 10D, 15D & 20D

◎ : 优(Excellent)
○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		铸铁	铝	不锈钢	钛	低碳钢	铜	青铜
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~							
◎	◎	○			○				○		
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**DREAM DRILLS
-MQL TYPE**

DH510 SERIES

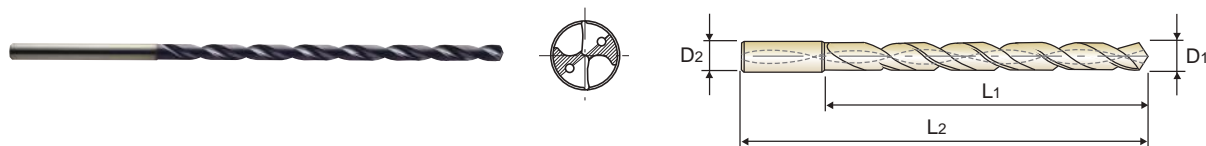
油孔硬质合金 梦幻钻头 -MQL类型

超长

CARBIDE, DREAM DRILLS MQL TYPE with COOLANT HOLES EXTRA LONG

- ▶ 应用：用于加工一般钢件, 铸钢, 铸铁, 冷硬铸铁, 可锻铸铁, 非铁重金属, 非铁轻金属, 耐磨塑料等材料。
- ▶ 优点：可以一次性加工长达产品直径10倍深的孔(少量的润滑油)
适合加工MQL(少量的润滑油)
出色的定位-不需要导套
特殊的设计-良好的排屑性能
强力钻削

- ▶ **Application** : Drilling steels in general, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics.
- ▶ **Advantage** : Non step drilling up to 10 times of drill diameter. Available for processing MQL(Minimum Quantity Lubrication).
Excellent positioning - Bush is not necessary.
Special design - Good chip removal
Powerful drilling



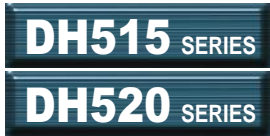
10 × D

单位(Unit) : mm

型号	刃径	柄径	刃长	全长	型号	刃径	柄径	刃长	全长
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
DH510030	3.0	3	39	90	DH510080	8.0	8	104	161
DH510033	3.3	4	46	97	DH510085	8.5	9	111	169
DH510035	3.5	4	46	97	DH510090	9.0	9	117	175
DH510040	4.0	4	52	103	DH510095	9.5	10	124	182
DH510042	4.2	5	59	112	DH510100	10.0	10	130	188
DH510045	4.5	5	59	112	DH510105	10.5	11	137	201
DH510050	5.0	5	65	118	DH510110	11.0	11	143	207
DH510055	5.5	6	72	127	DH510115	11.5	12	150	215
DH510060	6.0	6	78	133	DH510120	12.0	12	156	221
DH510065	6.5	7	85	141	DH510125	12.5	13	163	229
DH510068	6.8	7	91	147	DH510130	13.0	13	169	235
DH510070	7.0	7	91	147	DH510135	13.5	14	176	243
DH510075	7.5	8	98	155	DH510140	14.0	14	182	249

◎ : 优(Excellent) ○ : 良(Good)

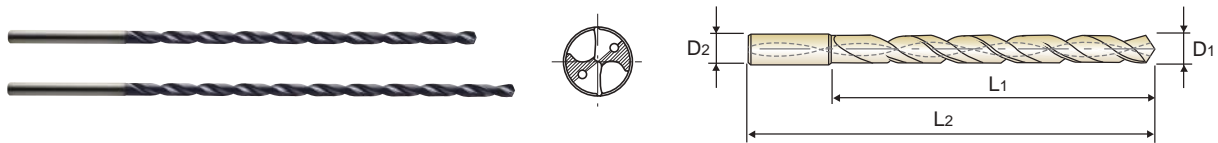
碳钢	合金钢	预硬钢	硬化钢		铸铁	铝	不锈钢	钛	低碳钢	铜	青铜
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		Cast Iron	Aluminum	Stainless Steels	Titanium	Mild Steels	Copper	Bronze
-HB225	HB225~325	HRC30~45	HRC45~55	HRC55~							
◎	◎	○			○				○		



油孔硬质合金 梦幻钻头 -MQL类型 超长
CARBIDE, DREAM DRILLS MQL TYPE with COOLANT HOLES EXTRA LONG

- ▶ 应用：用于加工一般钢件，铸钢，铸铁，冷硬铸铁，可锻铸铁，非铁重金属，非铁轻金属，耐磨塑料等材料。
- ▶ 优点：可以一次性加工长达产品直径15倍(20倍)深的孔
 适合加工MQL(少量的润滑油)
 出色的定位-不需要导套
 特殊的设计-良好的排屑性能
 强力钻削

- ▶ **Application** : Drilling steels in general, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics.
- ▶ **Advantage** : Non step drilling up to 15 times (20 times) of drill diameter.
 Available for processing MQL(Minimum Quantity Lubrication).
 Excellent positioning - Bush is not necessary.
 Special design - Good chip removal
 Powerful drilling



15 × D (DH515) 20 × D (DH520)

单位(Unit) : mm

型号	刃径	柄径	刃长	全长	型号	刃径	柄径	刃长	全长
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
DH515030	3.0	3	54	105	DH520030	3.0	3	69	120
DH515035	3.5	4	63	114	DH520035	3.5	4	81	132
DH515040	4.0	4	72	123	DH520040	4.0	4	92	143
DH515045	4.5	5	81	134	DH520045	4.5	5	104	157
DH515050	5.0	5	90	143	DH520050	5.0	5	115	168
DH515055	5.5	6	99	154	DH520055	5.5	6	127	182
DH515060	6.0	6	108	163	DH520060	6.0	6	138	193
DH515070	7.0	7	126	182	DH520070	7.0	7	161	217
DH515080	8.0	8	144	201	DH520080	8.0	8	184	241
DH515090	9.0	9	162	220	DH520090	9.0	9	207	265
DH515100	10.0	10	180	238	DH520100	10.0	10	230	288
DH515110	11.0	11	198	262	DH520120	12.0	12	276	341
DH515120	12.0	12	216	281					

◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		铸铁	铝	不锈钢	钛	低碳钢	铜	青铜
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~							
◎	◎	○			○				○		

- DREAM DRILLS
- DREAM DRILLS -GENERAL
- DREAM DRILLS -SOFT
- DREAM DRILLS -INOX
- DREAM DRILLS -MQL TYPE
- DREAM DRILLS for HARDENED STEELS
- GENERAL CARBIDE DRILLS
- NC-SPOTTING DRILLS
- MULTI-1 DRILLS
- HPD DRILLS
- GOLD-P DRILLS
- WORM PATTERN DRILLS
- STRAIGHT SHANK DRILLS
- TAPER SHANK DRILLS
- NC-SPOTTING DRILLS
- CENTER DRILLS
- SPADE DRILLS
- TECHNICAL DATA



**DREAM DRILLS
-MQL TYPE**

推荐的切削条件

RECOMMENDED CUTTING CONDITIONS

MQL油孔硬质合金钻头, TiAlN涂层

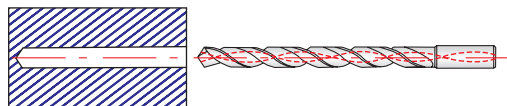
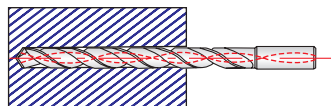
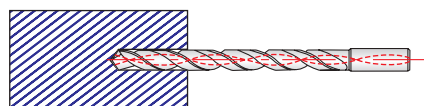
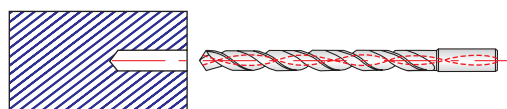
CARBIDE, DREAM DRILL MQL TYPE with COOLANT HOLES, TiAlN COATED

DH510, DH515, DH520 SERIES

单位(Unit) : mm

被加工材料	碳钢, 合金钢		铸铁		球墨铸铁	
WORK MATERIAL	CARBON STEELS ALLOY STEELS		CAST IRON		DUCTILE CAST IRON	
STRENGTH	~ 1060 N/mm ²		250 ~ 350 N/mm ²		400 ~ 500 N/mm ²	
DRILLING SPEED	63 ~ 125 m/min		63 ~ 125 m/min		60 ~ 80 m/min	
DIAMETER	N	S	N	S	N	S
3.0	7500	0.06~0.12	7500	0.06~0.12	7500	0.06~0.12
4.0	6400	0.08~0.16	6400	0.08~0.16	5600	0.08~0.16
5.0	5800	0.10~0.20	5800	0.10~0.20	4500	0.10~0.20
6.0	4800	0.12~0.24	4800	0.12~0.24	3800	0.12~0.24
8.0	3600	0.16~0.28	3600	0.16~0.28	2800	0.16~0.28
10.0	2900	0.20~0.35	2900	0.20~0.35	2300	0.20~0.35
12.0	2400	0.24~0.42	2400	0.24~0.42	1900	0.24~0.42
14.0	2050	0.28~0.46	2050	0.28~0.46	1600	0.28~0.46

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



1. 导钻应该在3xD和5xD深度之间做在直径基础上+0.1mm的孔
Guide Drilling should be done as Diameter+0.1mm between 3xD and 5xD depth.
2. 对于主要钻孔, 应在导钻孔上使用低速进行
(钻速300, 进给400mm/min)
For Main Drilling, proceed with low RPM at Guide Drilling segment.
(RPM 300, FEED 400mm/min)
3. 在加工完导孔时, 把进给降到0, 同时根据提供的切削条件表增加钻速
(参考以上)
Just before the end of Guide Drilling segment, reduce feed to zero and increase the RPM according to Recommended Cutting Condition chart (See above).
4. 然后, 在没有阶梯孔的情况下增加进给进行主孔加工
After then, proceed main drilling by increasing feed without step drilling.
5. 当钻完后从导孔的起始点出来时, 请把钻速降到300, 进给为1000mm/min.
When coming out from Guide Drilling start point after drilling, RPM should be reduced as 300 and feed should be 1000 mm/min.
6. 当从导孔段完全出来时, 进给应降到50%.
When coming out from Guide Drilling segment to the outside, the feed should be decreased as 50%.

i-DREAM DRILLS

DREAM DRILLS -GENERAL

DREAM DRILLS -SOFT

DREAM DRILLS -INOX

DREAM DRILLS -MQL TYPE

DREAM DRILLS for HARDENED STEELS

GENERAL CARBIDE DRILLS

NC-SPOTTING DRILLS

MULTI-1 DRILLS

HPD DRILLS

GOLD-P DRILLS

WORM PATTERN DRILLS

STRAIGHT SHANK DRILLS

TAPER SHANK DRILLS

NC-SPOTTING DRILLS

CENTER DRILLS

SPADE DRILLS

TECHNICAL DATA