

### Impregnated Bit



- 1, Turbo Type Bit
- 2, V-ring Type Bit
- 3, Deep Hole Bit
- 4, Gear Type Bit
- 5, Cylinder Type Bit
- 6, Stepped Bit
- 7, DHM Bit

**Impregnated Bit** The main technical parameters of impregnated diamond core bits include diamond type, size, concentration and diamond grade, matrix hardness and crown shapes etc. If users can make rational selections according to the rock formations, then they can get satisfied drilling performance on various formations with different hardness. To avoid excessive bit wear, diamond tungsten carbide inserts are used on both sides of the waterway and the larger diamonds are used on the inside and outside.

### Impregnated Bits Matrix Selection Guide

Rock Type	Abrasiveness	Rock Hardness	Matrix Hardness	Series. NO	Color
Clay, Shale, Siltstone, Cypsum	Medium	Soft	HRC 50	DVY1#	Black
Ash Stone, Coal, Argillite,, Volcanics, Sandy Pebble	Very High	Soft	HRC 48-50	DVY1/DVY2	Black
Sandstone, Sandy Shale, Lithoid, Limestone, Limonite Sandstone	Very High	Medium Soft	HRC 45-48	DVY1#/DVY2	Black
Medium-hard Limestone, Medium-hard Shale, Medium-hard Ash Stone	High	Medium	HRC 40-45	DVY3/DVY4	Red
Marble, Hard Schist, Hard Streak Stone	Medium	Medium	HRC 38-42	DVY5/DVY6/ DVY7	Blue
Diabase, Andesite, Gneiss	Medium	Medium Hard	HRC 38	DVY6/DVY7	Blue
Grandiorite, ,Limonite	Medium	Medium Hard	HRC 35-38	DVY7/DVY8	Green
Cranite, Basalt, Hard Streak Stone	Medium To Low	Hard	HRC 32-35	DVY8/DVY9	Green
Rhyolite, Crystauize Gneiss, Quartz Porphyry	Medium To Low	Hard	HRC 25-30	DVY9/DVY10	Yellow
Silicious Stone, Hard Sandstone	Medium To Low	Extreme Hard	HRC 20-25	DVY11/DVY12	Silver
Rhyolite, Dense Quartzite, Iron Stone	Low	Ultra Hard	HRC 10-20	DVY12#	White

### Surface Set Diamond Bit



**Natural diamond surface set bits** differ from impregnated bits in that they only have a single layer of diamonds set onto the working surface of bits according to a pre-determined pattern, Its waterways are usually shallower than an impregnated bit because of the single layer of diamonds. Some bits are designed with face Discharge holes to minimize core wash when drilling in soft and fractured formations.

We supply a wide range of surface set bits, which includes a variety of profiles, diamond grades and sizes designed to provide the most efficient cutting ability in all different rock formations.

Some other types of bits such as pilot type, special discharge type or concave type non-coring special purpose bits are available on request.

**Rule of thumb: The harder the rock it, the smaller the diamonds we should use.**

**Number of Stones** is a very important factor in determining how well a bit will cut. Our engineers use mathematical formulae to set each diamond on bit cutting area to ensure proper overlap with a minimum of diamonds to keep the carat weight (and initial bit cost) as low as possible in a balanced design.

**Diamond Grade** is the most important factor to take into consideration when selection a bit. As it affects total meters drilled and therefore affects cost per meter drilled. It obviously also affects bit price. The diamonds we use have been selected carefully and also have been improved over the years.

#### 3 kind of natural diamond for choice

**A- Economic quality natural diamond**






**AA- Medium quality natural diamond**

**AAA-High quality natural diamond**

#### Diamond Bit Crown Shapes

#### Standard Diamond Size Range

Diamond Size(SPC)↕	Actual Number of Stones Per Carat↕
6/8↕	6-8↕
10↕	9-12↕
15↕	13-20↕
25↕	21-35↕
50↕	36-60↕
75↕	61-90↕
100↕	91-120↕

Profile	Applications
<b>Semi-round</b> 	Suitable for drilling medium-hard and hard rocks,. Diamond distributions on the bit face is well, therefore this crown bit can also suit few broken and lose formations.
<b>Flat</b> 	For impregnated diamond bit only. Suitable for drilling various hardness and abrasives rocks.
<b>Face Discharges</b> 	Suitable for drilling sedimentary or metamorphic formations containing some more powder mineral. It can prevent excessive core washing out, so as to get high coring percentage.
<b>Stepped</b> 	Suitable for drilling medium-hard, fractured or interbedded formations, hole deviation can be prevented.
<b>Serrated(V-ring)</b> 	Suitable for drilling hard and dense formations with high penetration rate.

## Diamond Reaming Shell



1, Blank Reaming Shell

2, Diamond Reaming Shell

3, PDC Reaming Shell

**Diamond Reaming Shells** are very important reamer tools to be used together with bits in core drilling. Its main functions are maintaining the borehole gage, improving drill rods stability and protecting lower part of drill rod from excessive wear.

Helical type reaming shells provides good passages for water flowing, the matrix is wear proof and its service life is long. "SINODRILLS" brand has a high reputation in and out of China.

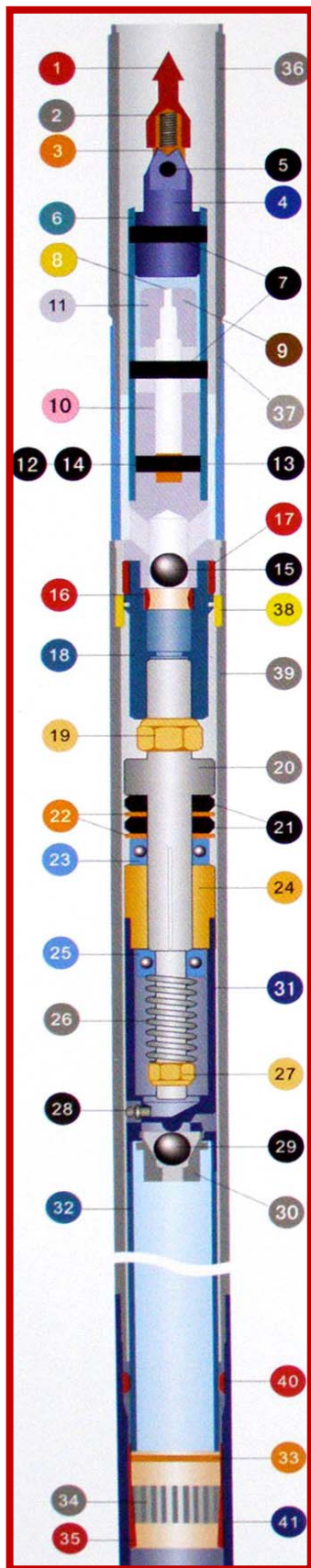
### Normal Diamond Bit And Reaming Shell

Standard	Category	Commonly Used Sizes
Chinese Standard	Single Tube	Φ 36, Φ46, Φ48, Φ56, Φ59, Φ60, Φ66, Φ75, Φ76, Φ77, Φ78, Φ91, Φ92, Φ93, Φ94, Φ95, Φ96, Φ98, Φ100, Φ110, Φ112, Φ130, Φ132, Φ152, Φ171, Φ173, Φ225, Φ245, Φ279, Φ325
	Double Tub/SD Double Tube	Φ36, Φ46, Φ48, Φ56, Φ59, Φ60, Φ66, Φ75, Φ76, Φ77, Φ91, Φ94, Φ110, Φ130, Φ150
	Wire-line	S56, S59, S60, S76, S77,
Overseas Standard	"TT", "T2", "T6", "T" Series	TT46, T2-46, T2-56, T2-66, T2-76, T2-86, T2-101, T6-86, T6-101, T6-116, T6-131, T6-146, TB56, TBW, TNW, TS-116, T6-H
	"Q" Series	AQ, BQ, BQ3, NQ, NQ2, NQ3, NQTT, HW, HQ3, HQTT, PQ, PQ3, PQTT, AQTK, BQTK
	DCDMA Series	T, Z, B, WF, WT, WM, WG
	Others	ATW, BTW, NTW, NMLC, HMLC, NX-D3, NXC, NX, AX, AXT, LTK48, BGM, ADBG, 412F.

Remarks: Apart from above commonly used products, various nonstandard and special products are all available on customer' request.

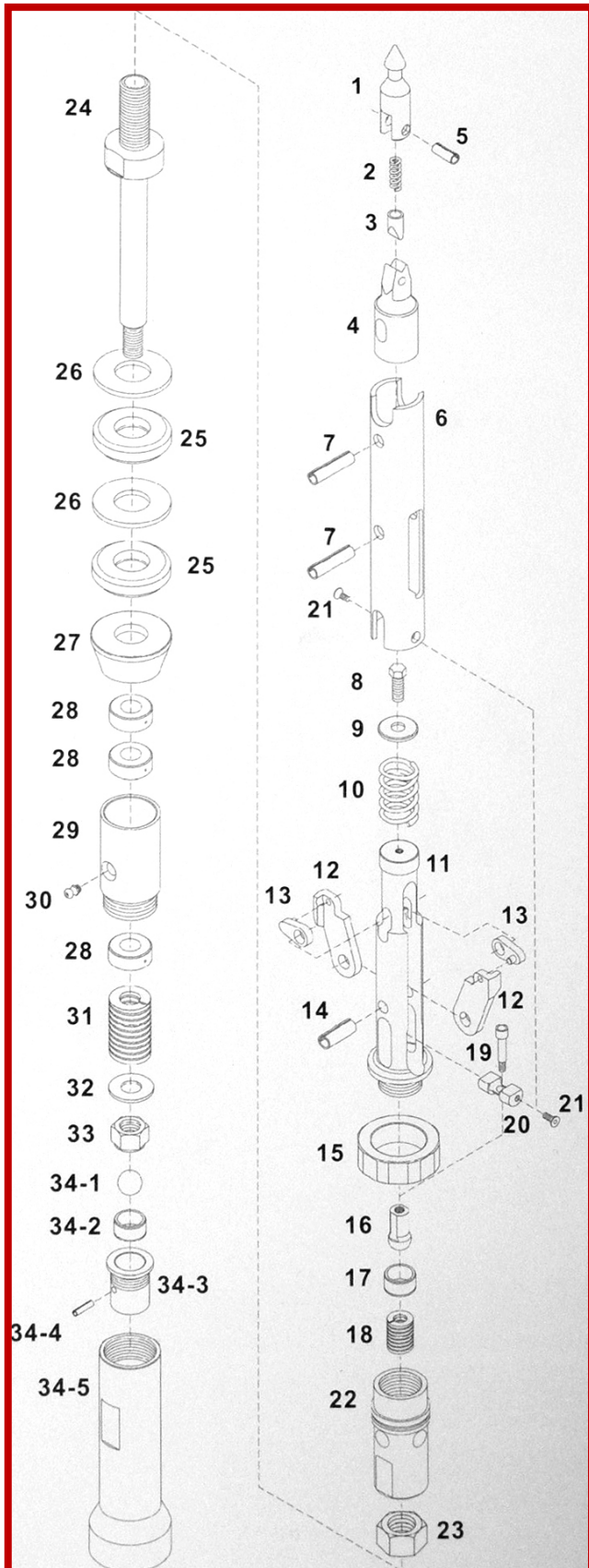


### NQ&HQ Wireline Core Barrel Assembly



ITEM	PART NO		DESCRIPTION	Qty			WIGHT(KG)		
	NQ	HQ		PC	NQ	HQ	PC	NQ	HQ
	NQ-A-1	HQ-B-1	Core Barrel Assy 5Ft	--	39	70			
	NQ-A-2	HQ-B-2	Core Barrel Assy 10Ft	--	60	103			
	NQ-A-3	HQ-B-3	Inner Tube Assy 5Ft	--	17	30			
	NQ-A-4	HQ-B-4	Inner Tube Assy 10Ft	--	21	39			
	NQ0000	HQ0000	Head Assy	--	10	19			
1	NQ0001	HQ0001	Spearhead Point	1	0.2	0.2			
2	NQ0002	HQ0002	Compression Spring	1	*	*			
3	NQ0003	HQ0003	Detent Plunger	1	*	*			
4	NQ0004	HQ0004	Spearhead Base	1	0.36	0.36			
5	NQ0005	HQ0005	Spirol Pin	1	*	*			
6	NQ0006	HQ0006	Latch Retracting Case	1	1.1	2.95			
7	NQ0007	HQ0007	Spring Pin	2	*	*			
8	NQ0008	HQ0008	Bolt	1	*	*			
9	NQ0009	HQ0009	Washer	1	*	*			
10	NQ0010	HQ0010	Upper Latch Body	1	*	*			
11	NQ0011	HQ0011	Latch Spring	1	1.4	2.3			
12	NQ0012	HQ0012	Latch	2	0.3	0.7			
13	NQ0013	HQ0013	Link	2	*	*			
14	NQ0014	HQ0014	Spring Pin	1	*	*			
15	NQ0015	HQ0015	Stainless Steel Ball.22mm	1	*	*			
16	NQ0016	HQ0016	Landing Indicator Bushing	1	*	*			
17	NQ0017	HQ0017	Landing Shoulder	1	0.14	0.2			
18	NQ0018	HQ0018	Lower Latch Body	1	1.2	2.3			
19	NQ0019	HQ0019	Hex Nut	1	*	*			
20	NQ0020	HQ0020	Spindle	1	1.4	*			
21	NQ0021	HQ0021	Shut-off Valve, Hard	2	*	*			
22	NQ0022	HQ0022	Valve Adjusting Washer	2	*	*			
23	NQ0023	HQ0023	Thrust Bearing	2	*	*			
24	NQ0024	HQ0024	Spindle Bearing	1	0.7	1.8			
25	NQ0025	HQ0025	Hanger Bearing	1	*	*			
26	NQ0026	HQ0026	Compression Spring	1	*	0.5			
27	NQ0027	HQ0027	Self Lock Nut	1	*	*			
	NQ0028	HQ0028	Inner Tube Cap Assemble(28.29.30.31)	1	1.5	3.3			
28	NQ0029	HQ0029	Grease Fitting	1	*	*			
29	NQ0030	HQ0030	Stainless Steel Ball	1	*	*			
30	NQ0031	HQ0031	Inner Tube Cap	1	1.3	3.1			
31	NQ0032	HQ0032	Check Valve Body	1	1.42	2.9			
32	NQ33152	HQ33152	Inner Tube 1.52m/5Ft	1	5.6	8.1			
32	NQ33152	HQ33305	Inner Tube 3.05/5Ft	1	11.1	16.1			
33	NQ0034	HQ0034	Stop Ring	1	*	*			
34	NQ0035	HQ0035	Core Lifter	1	*	*			
34	NQ0035	HQ0035	Fluted Core Lifter	1	*	*			
35	NQ0036	HQ0036	Core Lifter Case	1	*	*			
36	NQ0037	HQ0037	Locking Coupling	1	2.5	4.3			
37	NQ0038	NQ0038	Adapter Coupling	1	1.6	2.7			
38	NQ0039	NQ0039	Landing Ring	1	0.2	0.3			
39	NQ40152	HQ40152	Outer Tube 1.52m/5Ft	1	20	25.9			
39	NQ40305	HQ40305	Outer Tube 3.05m/5Ft	1	35.9	51.4			
40	NQ0041	HQ0041	Inner Tube Stabilizer	1	0.16	0.26			
41	NQ0042	HQ0042	Thread Protector	1	1.8	3.5			

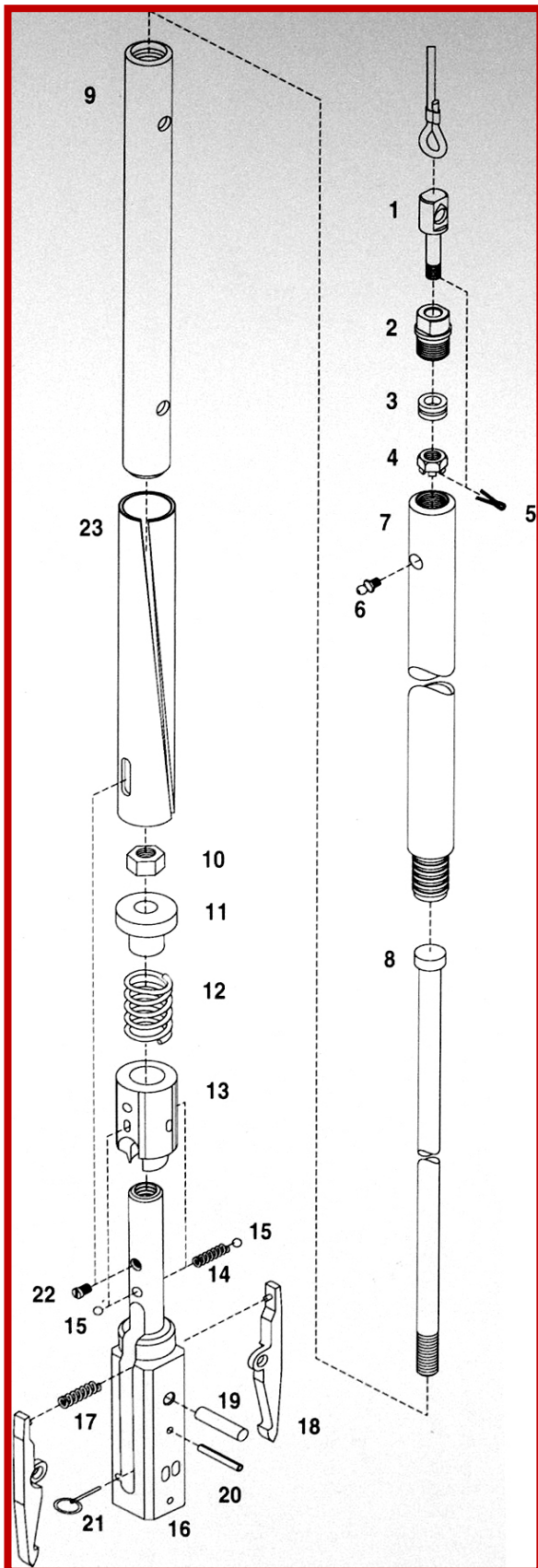
### Head Assembly-PQ



Item	Description	Qty
	Core Barrel Assy 10Ft	1
	Inner Tube Assy 10Ft	1
	Head Assy	1
1	Spearhead Point	1
2	Compression Spring	1
3	Detent Plunger	1
4	Spearhead Point	1
5	Spirol Pin	1
6	Latch Retracting Case	1
7	Spring Pin	2
8	Bolt	1
9	Washer	1
10	Latch Compression Spring	1
11	Upper Latch Body	1
12	Latch	2
13	Link	2
14	Spring Pin	1
15	Landing Shoulder	1
16	Threaded Ball	1
17	Fluid Retention Bushing	1
18	Fluid Retention Spring	1
19	Shoulder Bolt	1
20	Dry Hold Valve Holder	1
21	Nylon Insert Machine Screw	2
22	Lower Latch Body	1
23	Hex Nut	1
24	Spindle, Hollow	1
25	Shut-off Valve	2
26	Valve Adjusting Washer	2
27	Washer, Tapered	1
28	Thrust Bearing	3
29	Spindle Bearing	1
30	Grease Fitting	1
31	Compression Spring	1
32	Washer	1
33	Stover Lock Nut	1
34	Inner Tube Cap Assembly	1
34-1	Stainless Steel Ball 22mm	1
34-2	Bushing	1
34-3	Check Valve Body	1
34-4	Spring Pin	1
34-5	Inner Tube Cap	1

### Ezy Lock Overshot Assembly

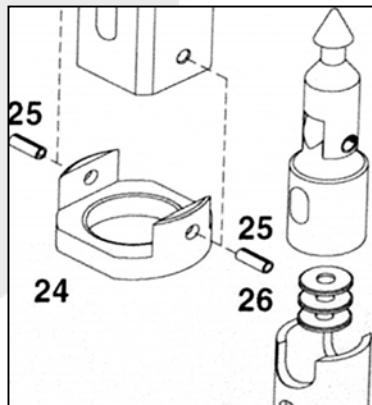
#### **NQ & HQ**



1-23	Ezy Lock Overshot Assembly	--
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Item	Part No	Description	Qty
1	SD-1	Eye Bolt	1
2	SD-2	Cable Swivel Collar	1
3	SD-3	Thrust Bearing	1
4	SD-4	Castle Nut	1
5	SD-5	Cotter Pin	1
6	SD-6	Grease Fitting	1
7	SD-7	Cable Swivel Body	1
8	SD-8	Jar Staff	1
9	SD-9	Jar Tube	1
10	SD-10	Hex Nut 9/16 UNC	1
11	SD-11	Cap. Ezy Lock O/Shot	1
12	SD-12	Spring. Ezy Lock O/Shot	1
13	SD-13	Sleeve. Ezy Lock O/Shot	1
14	SD-14	Compression Spring	1
15	SD-15	Ball 11/32"	2
16	SD-16	Ezy Lock Overshot Head	1
17	SD-17	Compression Spring	1
18	SD-18	Lifting Dog	2
19	SD-19	Plain Pin 1/2"x2-1/8"	1
20	SD-20	Spring Pin 1/4"x2	1
21	SD-21	Locking Pin	1
22	SD-22	Set Screw, 3/8 UNF X 3/4 Nyloc	1
23	SD-23	Locking Sleeve	1
-	-	Dry Hole Lowering Kit	-
24	SD-24	Dry Hole Overshot Cap	1
25	SD-25	Spring Pin 1/4"x 5/8"	2
26	SD-26	Flat Washer 1" SAE	3

#### **Dry Hole Lowering Kit**





## Wire-line Core Drill Rod



Our Drill Rod are manufactured by CNC machines, and made high quality alloy steel. All our drill rods are heart treated.

### **General Characteristic:**

- \* Both ends thickened;
- \* Good concentricity;
- \* High precision;
- \* Long life.

### **The Specifications for Drill Rod we are supplying.**

Size	O.D	Thickness	Material	Desc
NQ	70mm	4mm	30CrMnSiA	Heat treated at two ends
HQ	89mm	5mm	42MnMo7	

## Matrix Comparison

VY	Longyear	Christensen	Hobic	Hoffman	Dimatec	Fordia	Huddy
DVY12*	Series#10	Gold	Hobic#10	10-Copper/Black	MX12/MX-10/MX-8	DXP-2	H-10
DVY12	Series#10/#9/9-F	Purple	Hobic#9	9-Copper/Blue	MX10/MX-8/GX8B	Shark#9	H-8/Gold
DVY11	Series#9/#9-F	Gold	Hobic#9	9-Copper Blue	MX-10/MX-8/GX8B	Shark#9	H-6
DVY10	Series#8	Purple	Hobic#8	9-Copper	GX8B/GX8C	Shark#7	Copper
DVY8	Series#8/#7-F	Black	Hobic#7-R/#7-C	8-Copper	GX8A/GX7B/GX7C	Shark#7	Yellow
DVY7	Series#7	White	Hobic#7AA/#7	7-Bronze	GX7C/GX7A/MX-7	P-200/P-150	Orange
DVY6	Series#7	Black	Hobic#6	7-Bronze	MX-7	DXP-33	Red
DVY5	Series#6	White	Hobic#5/#4	6-Gray	GX6/MX-5	P-150	
DVY4	Series#6	Grey	Hobic#4/#3	6-Gray	GX6/MX-5	DXP-33	Green
DVY3	Series#4/#2	Black		5-Blue	MX-4	P-155	Silver-Blue
DVY3	Series#2	Green	Hobic#3	2-Green(Dark)	MX-2	P-155	Blue
DVY2	Series#1	Grey	Hobic#2	1-Saper Green(Bright)	MX-1	P-160	
DVY1	Series#2/#1	Green	Hobic#1		MX-2	DXP-2	Black
DVY1*	Series#2/#1	Green	Hobic#1	6-Grey	MX-1	P--150	

**Remarks:** The above comparison is based on the similarity between our bits and other companies' bits. This table is just for your reference. When ordering bits, please choose bits according to your rock formations.

## PDC Bits



### Flat Face PDC Non-coring Bits (New Design)

Description: Fast penetration, strong abrasion resistance. It has good performance for various rock formations, and it could be the first choice for general drilling.



### PDC Face Discharged Coring Bits

Description: Good cutting, face penetration, long bit life, water pass through fluently and high efficiency in getting core. It is applied to soft to medium hard rock formation.

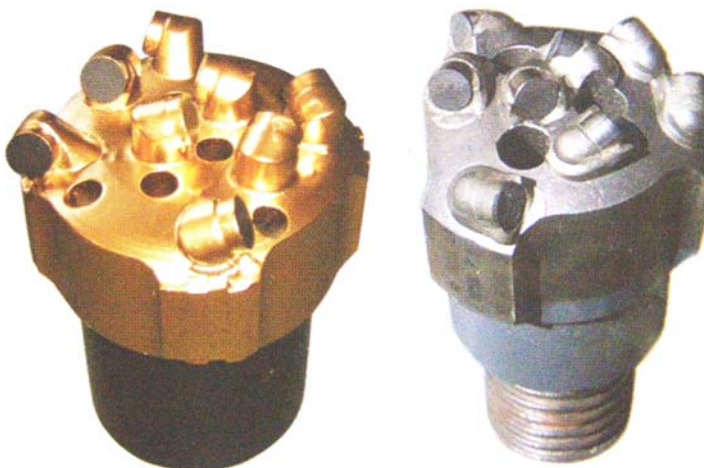


### Multi-Blade PDC Non-coring Bits

Description: Suitable for opening holes. It has fast penetration and high drilling efficiency in soft rock. It can be used to drill big hole.

### Round Profile PDC Non-coring Bits

Description: Only has small interface with the rock. It is applied to soft to medium rock formation.



### Three Wings Round Profile PDC Bits

Description: Improved according to oil bits. This type bits have faster penetration, longer life and stronger adaptability than conventional concave multi-wing bits. It is widely applied to medium soft rock formation.





## Set Diameters For Core Bits

E-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
EWG, EWM	1.475 / 1.465	37.46 / 37.21	0.850 / 0.840	21.59 / 21.34
TEW	1.475 / 1.465	37.46 / 37.21	0.903 / 0.893	22.94 / 22.68
EWT (EXT)	1.475 / 1.465	37.46 / 37.21	0.910 / 0.900	23.11 / 22.86
IEW, IEWS	1.475 / 1.465	37.46 / 37.21	1.000 / 0.990	25.40 / 25.15

Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
AQ	1.880 / 1.870	47.75 / 47.50	1.067 / 1.057	27.10 / 26.85
AQ-RSG	1.895 / 1.885	48.13 / 47.88	1.067 / 1.057	27.10 / 26.85
AXC (AWC3)	1.895 / 1.885	48.13 / 47.88	1.067 / 1.057	27.10 / 26.85
ATW	1.880 / 1.870	47.75 / 47.50	1.190 / 1.180	30.22 / 29.97
AGM	1.880 / 1.870	47.75 / 47.50	1.198 / 1.188	30.43 / 30.18
AQTK	1.880 / 1.870	47.75 / 47.50	1.206 / 1.196	30.63 / 30.38
AWT (AXT)	1.880 / 1.870	47.75 / 47.50	1.286 / 1.276	32.66 / 32.41
TAW	1.880 / 1.870	47.75 / 47.50	1.312 / 1.302	33.32 / 33.07
ATK-34 (AW34)	1.880 / 1.870	47.75 / 47.50	1.325 / 1.315	33.65 / 33.40
IAW, IAWS	1.880 / 1.870	47.75 / 47.50	1.394 / 1.384	35.40 / 35.15
LTK48, JTK48	1.880 / 1.870	47.75 / 47.50	1.394 / 1.384	35.40 / 35.15

B-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
BQ	2.350 / 2.340	59.69 / 59.44	1.438 / 1.428	36.52 / 36.27
BQ-RSG	2.365 / 2.355	60.07 / 59.82	1.438 / 1.428	36.52 / 36.27
BQ-2.400	2.405 / 2.395	61.09 / 60.83	1.438 / 1.428	36.52 / 36.27
BXB (BWC3)	2.365 / 2.355	60.07 / 59.82	1.438 / 1.428	36.52 / 36.27
BQ3	2.350 / 2.340	59.69 / 59.44	1.325 / 1.315	33.65 / 33.40
BQTK	2.350 / 2.340	59.69 / 59.44	1.606 / 1.596	40.79 / 40.54
BGM (BTW)	2.350 / 2.340	59.69 / 59.44	1.659 / 1.649	42.13 / 41.88
BWG, BWM, BX	2.350 / 2.340	59.69 / 59.44	1.660 / 1.650	42.16 / 41.91
LTK60	2.350 / 2.340	59.69 / 59.44	1.742 / 1.732	44.25 / 44.00
BWT	2.350 / 2.340	59.69 / 59.44	1.755 / 1.745	44.58 / 44.32
BTK44 (BW44)	2.350 / 2.340	59.69 / 59.44	1.760 / 1.750	44.70 / 44.45
BW44-2.400	2.405 / 2.395	61.09 / 60.83	1.760 / 1.750	44.70 / 44.45
TBW	2.350 / 2.340	59.69 / 59.44	1.785 / 1.775	45.34 / 45.09

N-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
NQ	2.970 / 2.960	75.44 / 75.19	1.880 / 1.870	47.75 / 47.50
NQ-RSG	2.985 / 2.975	75.82 / 75.57	1.880 / 1.870	47.75 / 47.50
NQ-3.032	3.037 / 3.027	77.14 / 76.89	1.880 / 1.870	47.75 / 47.50
NQ2	2.970 / 2.960	75.44 / 75.19	2.000 / 1.990	50.80 / 50.55
NQ2-RSG	2.985 / 2.975	75.82 / 75.57	2.000 / 1.990	50.80 / 50.55
NQ2-3.032	3.037 / 3.027	77.14 / 76.89	2.000 / 1.990	50.80 / 50.55
NQ3 (NQTT)	2.970 / 2.960	75.44 / 75.19	1.780 / 1.770	45.21 / 44.96
NQ3-RSG	2.985 / 2.975	75.82 / 75.57	1.780 / 1.770	45.21 / 44.96
NQ3-3.032	3.037 / 3.027	77.14 / 76.89	1.780 / 1.770	45.21 / 44.96
CHD76	2.985 / 2.975	75.82 / 75.57	1.717 / 1.707	43.61 / 43.36

NGR	2.970 / 2.960	75.44 / 75.19	1.742 / 1.732	44.25 / 44.00
NXB (NWC3)	2.985 / 2.975	75.82 / 75.57	1.880 / 1.870	47.75 / 47.50
NXB-3.032	3.037 / 3.027	77.14 / 76.89	1.880 / 1.870	47.75 / 47.50
NMLC	2.970 / 2.960	75.44 / 75.19	2.052 / 2.042	52.12 / 51.87
NWD4	2.985 / 2.975	75.82 / 75.57	2.065 / 2.055	52.45 / 52.20
NWD4-3.032	3.037 / 3.027	77.14 / 76.89	2.065 / 2.055	52.45 / 52.20
NWG, NWM, NX	2.970 / 2.960	75.44 / 75.19	2.160 / 2.150	54.86 / 54.61
NGM (NTW)	2.970 / 2.960	75.44 / 75.19	2.214 / 2.204	56.23 / 55.98
NWT	2.970 / 2.960	75.44 / 75.19	2.318 / 2.308	58.87 / 58.62
TNW	2.970 / 2.960	75.44 / 75.19	2.394 / 2.384	60.80 / 60.55
N-Devico(DeviDrill WL76)	2.970 / 2.960	75.44 / 75.19	1.248 / 1.240	31.70 / 31.50

H-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
HQ	3.770 / 3.755	95.76 / 95.38	2.505 / 2.495	63.63 / 63.38
HQ-RSG	3.790 / 3.775	96.27 / 95.89	2.505 / 2.495	63.63 / 63.38
HQ-3.830	3.840 / 3.825	97.54 / 97.16	2.505 / 2.495	63.63 / 63.38
HQ-3.895	3.897 / 3.882	98.98 / 98.60	2.505 / 2.495	63.63 / 63.38
HQ3 (HQTT)	3.770 / 3.755	95.76 / 95.38	2.411 / 2.401	61.24 / 60.99
HQ3-RSG	3.790 / 3.775	96.27 / 95.89	2.411 / 2.401	61.24 / 60.99
HQ3-3.830	3.840 / 3.825	97.54 / 97.16	2.411 / 2.401	61.24 / 60.99
HQ3-3.895	3.897 / 3.882	98.98 / 98.60	2.411 / 2.401	61.24 / 60.99
CHD101	3.975 / 3.960	100.96 / 100.58	2.505 / 2.495	63.63 / 63.38
HXB (HWD3)	3.655 / 3.645	92.83 / 92.58	2.405 / 2.395	61.09 / 60.84
HXB-3.750	3.755 / 3.745	95.38 / 95.13	2.405 / 2.395	61.09 / 60.84
HWD4	3.655 / 3.645	92.83 / 92.58	2.411 / 2.401	61.24 / 60.99
HWD4-3.750	3.755 / 3.745	95.38 / 95.13	2.411 / 2.401	61.24 / 60.99
HMLC	3.897 / 3.882	98.98 / 98.60	2.505 / 2.495	63.63 / 63.38
HTW	3.770 / 3.755	95.76 / 95.38	2.797 / 2.787	71.04 / 70.79
HWG, HWM, HX	3.897 / 3.882	98.98 / 98.60	3.005 / 2.995	76.33 / 76.08
HWF (Long Type)	3.912 / 3.897	99.36 / 98.98	3.005 / 2.995	76.33 / 76.08
HWF Coreline (Long Type)	3.912 / 3.897	99.36 / 98.98	2.840 / 2.830	72.13 / 71.88
HWAF	3.920 / 3.910	99.57 / 98.31	2.770 / 2.760	70.35 / 70.10
HWAF Coreline	3.920 / 3.910	99.57 / 98.31	2.682 / 2.672	68.13 / 67.88
412F	4.225 / 4.215	107.31 / 107.06	2.938 / 2.928	74.62 / 74.37
412F Coreline	4.225 / 4.215	107.31 / 107.06	2.879 / 2.869	73.13 / 72.88
HWL, HWM (Brazil)	3.897 / 3.882	98.98 / 98.60	3.005 / 2.995	76.33 / 76.08
T6-H	3.897 / 3.882	98.98 / 98.60	3.115 / 3.105	79.12 / 78.87
T6-H Coreline	3.897 / 3.882	98.98 / 98.60	2.997 / 2.987	76.12 / 75.87
94mm*	3.944 / 3.929	100.18 / 99.80	2.405 / 2.395	61.09 / 60.84

\* Standard set diameters for the common 94mm Core Barrel configuration are shown. Other set diameters for different core barrel configurations

P-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
PQ	4.815 / 4.795	122.30 / 121.80	3.350 / 3.340	85.09 / 84.84
PQ3	4.815 / 4.795	122.30 / 121.80	3.275 / 3.265	83.18 / 82.93
PWF (Short Type)	4.735 / 4.715	120.27 / 119.76	3.635 / 3.620	92.33 / 91.95
PWF (Long Type)	4.755 / 4.740	120.78 / 120.40	3.635 / 3.620	92.33 / 91.95
PWF Coreline(Long Type)	4.755 / 4.740	120.78 / 120.40	3.430 / 3.420	87.13 / 86.88
4.62 x 3.00 CBC	4.883 / 4.868	124.03 / 123.65	3.005 / 2.995	76.33 / 76.08

S-Gauge Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
SWF (Short Type)	5.735 / 5.715	145.67 / 145.16	4.447 / 4.432	112.95 / 112.57
SWF (Long Type)	5.755 / 5.740	146.18 / 145.80	4.447 / 4.432	112.95 / 112.57
SWF Coreline (Long Type)	5.755 / 5.740	146.18 / 145.80	4.220 / 4.205	107.19 / 106.81
Geobor-S, WSK-146	5.755 / 5.740	146.18 / 145.80	4.016 / 4.006	102.00 / 101.75

WL-Type Core Bits (For HAGBY Wireline System)				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
WL56/39	2.230 / 2.220	56.64 / 56.39	1.540 / 1.530	39.12 / 38.87
WL56/42	2.230 / 2.220	56.64 / 56.39	1.622 / 1.612	41.20 / 40.95
WL66	2.639 / 2.629	67.03 / 66.78	1.989 / 1.979	50.52 / 50.27
WL76	2.997 / 2.987	76.12 / 75.87	2.269 / 2.259	57.63 / 57.38

"T", "TT" and "T2"- Type Metric Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
T36	1.422 / 1.412	36.12 / 35.87	0.859 / 0.849	21.82 / 21.57
TT46	1.818 / 1.808	46.18 / 45.92	1.394 / 1.384	35.40 / 35.15
T2-46	1.818 / 1.808	46.18 / 45.92	1.253 / 1.243	31.82 / 31.57
TT56	2.210 / 2.200	56.13 / 55.88	1.788 / 1.778	45.41 / 45.16
T2-56	2.210 / 2.200	56.13 / 55.88	1.647 / 1.637	41.83 / 41.58
T2-66	2.603 / 2.593	66.12 / 65.87	2.040 / 2.030	51.81 / 51.56
T2-76	2.997 / 2.987	76.12 / 75.87	2.434 / 2.424	61.82 / 61.57
T2-76 Coreline	2.997 / 2.987	76.12 / 75.87	2.288 / 2.278	58.12 / 57.87
T2-86	3.391 / 3.381	86.13 / 85.88	2.828 / 2.818	71.83 / 71.58
T2-86 Coreline	3.391 / 3.381	86.13 / 85.88	2.682 / 2.672	68.13 / 67.88
T2-101	3.981 / 3.971	101.12 / 100.87	3.300 / 3.290	83.82 / 83.57
T2-101 Coreline	3.981 / 3.971	101.12 / 100.87	3.155 / 3.145	80.13 / 79.88

"T6"- Type Metric Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
T6-76	2.997 / 2.987	76.12 / 75.87	2.249 / 2.239	57.12 / 56.87
T6-86	3.391 / 3.381	86.13 / 85.88	2.643 / 2.633	67.13 / 66.88
T6-86 Coreline	3.391 / 3.381	86.13 / 85.88	2.525 / 2.515	64.13 / 63.88
T6-101	3.981 / 3.971	101.12 / 100.87	3.115 / 3.105	79.12 / 78.87
T6-101 Coreline	3.981 / 3.971	101.12 / 100.87	2.997 / 2.987	76.12 / 75.87
T6-116	4.575 / 4.560	116.20 / 115.82	3.667 / 3.657	93.14 / 92.89
T6-116 Coreline	4.575 / 4.560	116.20 / 115.82	3.548 / 3.538	90.12 / 89.87
T6-131	5.165 / 5.150	131.19 / 130.81	4.257 / 4.247	108.13 / 107.88
T6-131 Coreline	5.165 / 5.150	131.19 / 130.81	4.080 / 4.070	103.63 / 103.38
T6-146	5.755 / 5.740	146.18 / 145.80	4.847 / 4.837	123.11 / 122.86
T6-146 Coreline	5.755 / 5.740	146.18 / 145.80	4.651 / 4.641	118.13 / 117.88

"T6S"- Type Metric Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
T6S-76	3.009 / 2.999	76.43 / 76.18	1.883 / 1.873	47.83 / 47.58
T6S-86	3.403 / 3.393	86.43 / 86.18	2.277 / 2.267	57.83 / 57.58



T6S-101	3.993 / 3.983	101.43 / 101.18	2.828 / 2.818	71.83 / 71.58
T6S-116	4.586 / 4.571	116.48 / 116.10	3.379 / 3.369	85.83 / 85.58
T6S-131	5.177 / 5.162	131.48 / 131.10	3.970 / 3.960	100.83 / 100.58
T6S-146	5.767 / 5.752	146.48 / 146.10	4.560 / 4.550	115.83 / 115.58

"B"- Type (ISO 3552-1) Metric Core Bits				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
B36	1.422 / 1.412	36.12 / 35.87	0.859 / 0.849	21.82 / 21.57
B46	1.818 / 1.808	46.18 / 45.92	1.253 / 1.243	31.82 / 31.57
B56	2.210 / 2.200	56.13 / 55.88	1.647 / 1.637	41.83 / 41.58
B66	2.603 / 2.593	66.12 / 65.87	2.040 / 2.030	51.81 / 51.56
B76	2.997 / 2.987	76.12 / 75.87	2.434 / 2.424	61.82 / 61.57
B86	3.391 / 3.381	86.13 / 85.88	2.828 / 2.818	71.83 / 71.58
B101	3.981 / 3.971	101.12 / 100.87	3.418 / 3.408	86.82 / 86.57
B116	4.575 / 4.560	116.20 / 115.82	4.009 / 3.999	101.83 / 101.58
B131	5.165 / 5.150	131.19 / 130.81	4.599 / 4.589	116.82 / 116.57
B146	5.755 / 5.740	146.18 / 145.80	5.190 / 5.180	131.82 / 131.57

"D"- Type Metric Core Bits (Germany)				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
D101	3.981 / 3.971	146.18 / 145.80	3.194 / 3.184	81.13 / 80.88
D116	4.575 / 4.560	116.20 / 115.82	3.785 / 3.775	96.14 / 95.89
D131	5.165 / 5.150	131.19 / 130.81	4.336 / 4.326	110.13 / 109.88
D146	5.755 / 5.740	146.18 / 145.80	4.803 / 4.793	122.00 / 121.75

"RUS"- Type Metric Core Bits (Russia)				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
RUS-59	2.331 / 2.319	59.20 / 58.90	1.659 / 1.649	42.13 / 41.88
RUS-76	3.000 / 2.988	76.20 / 75.90	2.290 / 2.280	58.16 / 57.91
RUS-93	3.669 / 3.657	93.20 / 92.90	2.882 / 2.870	73.20 / 72.90
RUS-112	4.417 / 4.405	112.20 / 111.90	3.630 / 3.618	92.20 / 91.90

Bits for Large Diameter DCDMA Core Barrels				
Size	Outside Set Diameter		Inside Set Diameter	
	Inch	mm	inch	mm
2-3/4 x 3-7/8 DCDMA	3.845 / 3.835	97.66 / 97.41	2.695 / 2.685	68.45 / 68.20
4 x 5-1/2 DCDMA	5.440 / 5.430	138.18 / 137.92	3.975 / 3.965	100.97 / 100.71
6 x 7-3/4 DCDMA	7.660 / 7.650	194.56 / 194.31	5.975 / 5.965	151.77 / 151.51