Chenghui Drilling Co., Ltd

About Chenghui

Who We Are

Chenghui is a professional manufacturer dedicated to delivering reliable drilling solutions for global partners. With years of industry experience and strong engineering expertise, we focus on precision manufacturing, consistent quality, and long-term cooperation built on trust.

What We Do

We specialize in the development and production of high-performance drilling tools designed to meet demanding working conditions. From material selection to machining and final inspection, every process is strictly controlled to ensure durability, stability, and dependable performance.

How We Work

Reliability is not a slogan — it is our standard. Our engineers, technicians, and quality control team work closely together to monitor each detail, optimize product structure, and continuously improve production efficiency. We believe that strong internal teamwork leads to stable external performance.

Our Commitment

We understand that every project carries expectations and responsibility. That is why we emphasize transparent communication, fast response, and consistent support throughout the cooperation process. Our goal is not only to supply products, but to build long-term partnerships.

Our Culture

At Chenghui, people come first. We foster a culture of respect, accountability, and collaboration. When individuals feel valued and motivated, they create products that customers can truly rely on. Technology drives us forward, quality defines us, and our united team stands behind every solution we deliver worldwide.

Rock hardness grading

Formation classification	F1	F2	F3	F4	F5	F6-F7	F8-F9	F10-F11	F12
Firmness	**loose ground**	**Loose rock**	**soft rock**	**Softer rock**	**harder rock**	**harder rock**	**hard rock**	**hard rock**	**Hard rock The hardest rock**
Represents rock layer	Secondary loess Secondary laterite Soft sandy soil free of gravel and breccia diatomite	loess Red earth peaty argillaceous Sandy soil Kaolin	Highly weathered shale SLATE Schist slightly consolidated sand	shale Sandy shale Oil shale Carbonaceous shale Calcareous shale Sand-shale interbedded shale limestone	Crushed rock and gravel avalanche Muddy SLATE Sericite chlorite SLATE rock schist limestone marble Sand-shale interbedded shale limestone	chlorite mica SLATE schist Silicified limestone Calcite marble Sand-shale interbedded shale limestone	Silicified mica gneiss basalt diabase pyroxenite Quartz andesite porphyry Calcite marble Sand-shale interbedded shale limestone	granite Granodiorite gneiss rhyolite Quartzite calcite marble Sand-shale interbedded shale limestone	quartzite Jasper rock hornstone Corundum rock quartz comite jasper

Diamond composite sheet (PDC) is made of synthetic diamond with diamond under high temperature conditions

Tungsten carbide one-time synthesis of special superhard material, it not only has diamond

High hardness, wear resistance and other advantages, but also has a strong impact resistance of cemented carbide,

With the characteristics of large edge, using it as the blade of the drill can greatly improve the work of the drill

Efficiency, ideal for drilling in medium and hard rock formations

The strength of diamond composite sheet (PDC) bit is mainly determined by the strength of diamond composite sheet, and the current diamond composite sheet bit is mainly divided into ordinary type, reinforced type and super type

quartzite
Jasper rock
Isotypic suitable rock layer

General PDC bit F≤4 slightly softer rock
Medium hard rock with PDC bit F≤9 reinforced
Strong PDC bit F≤11 hard rock

Product application and precautions

Application field: The current application field of diamond composite sheet bits is relatively broad, our company's diamond bits are all over the country coal field, oil drilling, geological exploration, water conservancy and hydropower, railway and highway, tunnel construction, geothermal energy, water Wells and other industries.

Isotypic suitable rock layer
Maintenance instructions:

1. During normal operation, it is strictly prohibited to suddenly reverse the direction of operation to prevent the composite bit from falling off.

2, in normal operation, the power of the drill can not have a large fluctuation phenomenon, to ensure a stable enough power output, in order to extend the use of diamond composite bit time.

3. When the new composite bit is used for the first time, it should be run in at a low speed for half an hour, and then gradually used normally.

4, in the geological harsh environment operation, to reduce the axial pressure and speed, to prevent the drill bit fracture.

5, in the normal drilling operation, if the drill bit needs to be replaced midway, it is necessary to strictly check whether there is debris in the hole, and ensure that the hole is clean before using the new composite bit.

6, in order to make the drill in the deep hole normal and stable work, regularly check whether the rod stabilizer wear smaller need to be replaced regularly. 7,

when the new composite piece drill is used, pay attention to the cleaning of the punching part to prevent debris from affecting the normal use.

8, before replacing the new drill, carefully check whether the thread and teeth are intact, and gently push the hand to try whether there is no problem. To ensure that there is no foreign matter in the interior, the water outlet is smooth, the thread is lubricated, and the drill can be used after being connected by lifting and rotating.

9, it is strictly prohibited to use bent drill pipe, in order to avoid the damage of the drill due to uneven force, affecting the normal use time.

10, according to different circumstances to choose different drill bits, and operation methods.

11. Check each part carefully before drilling the composite bit to ensure that there is no problem with the bit before starting to use.

12, the composite bit should be reasonably stored, the drill should be installed in a special packaging box to avoid vibration collision with each other.

13, when using, remove the drill bit from the packaging box should be installed on the connecting device of the drill or replace the drill bit library, and then put back into the packaging box.

Alloy rigid-screw coring bit

The wear resistance of ordinary material is more than 5 times by using tungsten carbide alloy rigid die-casting

The screw nozzle design cleverly avoids water blocking and drilling jam, and increases the drill penetration virtually

Mainly used for: geological exploration, rock sampling, water Wells.

Suitable strata: limestone, dolomite, carbonaceous limestone, marl, shale, marble, gneiss, calcite...

Medium and hard strata

The use of imported oil pieces has the footage efficiency of flat pieces and the wear resistance and impact resistance of ball pieces

The gear shape is machined on the basis of chamfered sheet performance to increase drilling efficiency again

Processed with granite formula into an inverted triangle sharp curved needle
Strongly weathered flowers on basalt,there are super-hard formations like granite
Very good footage effect

Spiral heightening and thickening rigid body coring bit

Custom bread slices adapted to strata: sand pebbles, pebbles...

Pebbly strata

Name	Size	Cutters	Bit type	Adaptive bed	Weight KG
coring bit	75mm	6pcs1005	Chamfer plate Gear piece Enhanced PDC bit	Medium hard rock F≤8	1
coring bit	91mm	8pcs1005	Inverted triangle Super strong PDC bit	Hard rock F≤10	1.3
coring bit	113mm	10pcs1005			1.5
heightencoring bit	113mm	8pcs1305	spherule Enhanced PDC bit Pebble formation rock F≤6	Pebble formation rock F≤6	2.7
heightencoring bit	133mm	10pcs1305			3.2
heightencoring bit	153mm	12pcs1305			3.7

Spiral double core bit

Customized bread spiral nozzle no plugging and no sticking drilling for pebbles, backfill and other strata penetration fast core rate is very high

Spiral frame coring bit

Pineapple rib combination play mixed rock, no water blocking, no stuck drilling, good slag discharge using imported oil small piece footage fast body super wear-resistant suitable for medium and hard crushed formation

Name	Size	Cutters	Bit type	Adaptive bed	Weight KG
Spiral double core bit	94mm	7pcs1305	spherule Enhanced PDC bit	Pebble formation rock F≤6	1.8
Spiral frame coring bit	89-113mm	12pcs1005	Chamfer plate Enhanced PDC bit	Medium hard broken rock F≤8	2.5

Five wing arc PDC bit

Name	Size	Cutters	Bit type	Adaptive bed	Weisght/KG
Five wing arc PDC bit	152mm	20pcs1613 26pcs1308 25pcs1005	Mirror plate Enhanced PDC bit	Medium hard rock F≤8	24
Five wing arc PDC bit	165mm	18pcs1613 29pcs1308 25pcs1005			28
Five wing arc PDC bit	190mm	26pcs1613 27pcs1308 25pcs1005			37
Five wing arc PDC bit	216mm	23pcs1613 33pcs1308 25pcs1005	Super diamond Super strong PDC bit	Hard rock F≤11	48
Five wing arc PDC bit	241mm	31pcs1613 31pcs1308 25pcs1005			59
Five wing arc PDC bit	269mm	37pcs1613 31pcs1308 25pcs1005			74
Five wing arc PDC bit	311mm	44pcs1613 34pcs1308 25pcs1005			99

SIZE：6、6-1/2、7-1/2、8-1/2、9-1/2、10-5/8、12-1/4(inch）

Use for :Wells, geothermal, mines, coal fields, oil

Three/four wing Angle coreless bit

Drill type: 75, 94, 113, 133 (mm)

Common drill pipe: 42, 50, 63.5, 73, 76, 89

Mainly used for: grouting hole, tile wire discharge hole, slope, support, anchor cable, water well, geothermal

Suitable strata: red sandstone, mudstone, coal seam, backfill, weathered rock and medium hard broken strata

Three wing Angle cordless bit

Steel body made of alloy steel material super wear-resistant

It can be matched according to different hardness rock layers

Diamond composite sheet

Four wing Angle cordless bit

Name	Size	Cutters	Bit type	Adaptive bed	Weight KG
Three wing Angle cordless bit	75mm	8pcs1308	1308 Flat pieces, ball pieces Regular PDC bit	Hard rock F≤6	1.8
Three wing Angle cordless bit	91mm	10pcs1308			2.9
Three wing Angle cordless bit	113mm	12pcs1308	1308 Flat pieces, ball pieces Enhanced PDC bit	Medium hard rock F≤8	4.4
Three wing Angle cordless bit	133mm	13pcs1308			5.5
Four wing Angle cordless biT	94mm	10pcs1308	1308 Flat pieces, ball pieces Regular PDC bit	Hard rock F≤6	3.1
Four wing Angle cordless bit	113mm	12pcs1308	1308 Flat pieces, ball pieces Enhanced PDC bit	Medium hard rock F≤8	4.8

Tungsten carbide sintered body flat top coreless drill

Mainly used for: grouting hole, tile wire discharge hole, water well, geothermal

Suitable strata: limestone, dolomite, white sandstone, coal seam and other medium hard intact strata

The matrix is sintered from tungsten carbide material

Longer service life with super strong oil flakes

It is mainly used for hard and intact formations

Flat top coreless bit

Steel body made of alloy steel material super wear-resistant

It can be matched according to different hardness rock layers

Diamond composite sheet

Name	Size	Cutters	Bit type	Adaptive bed	Weight(KG)
Flat top coreless bit Tungsten carbide sintered body	65mm	5PCS1308	Flat piece, ball piece General type PDC bit	Medium hard rock F≤6	1.4
Flat top coreless bit Tungsten carbide sintered body	75mm	6PCS1308			1.7
Flat top coreless bit Tungsten carbide sintered body	91mm	7PCS1308	Flat piece, ball piece Enhanced PDC bit	Medium hard rock F≤8	3.1
Flat top coreless bit Tungsten carbide sintered body	113mm	10PCS1308			5.5
Flat top coreless bit Tungsten carbide sintered body	133mm	13PCS1308	Tungsten carbide sintered matrix with super strong oil sheets Super strong PDC bit	Hard rock F≤11	6.5
Flat top coreless bit Tungsten carbide sintered body	153mm	17PCS1308			12

Spiral three wing recessed coreless bit

94# spiral three-wing recessed coreless bit

98# spiral three-wing recessed coreless bit

113# spiral three-wing recessed coreless drill bit

Mainly used for: grouting hole, tile wire discharge hole, water well, hydrogeology

Suitable strata: limestone, dolomite, white sandstone, coal seam and other medium hard intact strata

Name	Size	Connecting thread	Bits type	Adaptive bed	Composite sheet quantity	Weight KG
Spiral three wing recessed bit	94 mm	Standard with 42, 50, 76/60, 63.5, 73 female buckle variable diameter	1308 Flat pieces, ball pieces Regular PDC bit	Hard rock F≤6	Six 1308 Two 1305 pills	2.4
Spiral three wing recessed bit	98 mm	Standard with 42, 50, 76/60, 63.5, 73 female buckle variable diameter	1308 Flat pieces, ball pieces Enhanced PDC bit	Medium hard rock F≤8	Six 1308 Two 1305 pills	3
Spiral three wing recessed bit	113 mm	Standard with 42, 50, 76/60, 63.5, 73 female buckle variable diameter			Nine 1308 Two 1305 pills	3.7

101 Double pipe hot press drill bit

94 Double pipe thickened hot press bit with point

94 Double tube curved hot press drill bit

101# Double tube hot pressing: mainly used for core-pulling concrete pile

94# double pipe hot pressing: mainly used for crushing, pebble, backfill and other strata

Drill layer sintering hardness: low, medium, height (according to different formation rock selection)

Name	Model	Outside diameter/inside diameter		Bit type	Adaptive bed	Number of bits	weight / kg
Hot pressed double core bit	75mm	75/49		Hot pressing process HRC (Low, medium, high)	Broken, pebbly strata F≤8 Soft - Hard	8tooth	1.2
Hot pressed double core bit	94mm	94/68				8tooth	1.7
Hot pressed double core bit	101mm	normal	101/83	Hot pressing process Concrete (C30/C40)	Beton	12tooth	1.4
		Bottom spray	101/81				

Hot-pressed wireline coring bit

SIZE	BQ	NQ	NQ3	HQ	HQ3	PQ	PQ3	NTW	HTW
outside(mm)	59.6	75.3	75.3	95.6	95.6	122	122	75.5 Bottom spray(76)	95.5 Bottom spray(96)
inside(mm)	36.4	47.6	45.1	63.5	61.1	85	83.1	56 Bottom spray(54)	71 Bottom spray(68)

NQ hot press drill bit

HQ hot press drill

NTW hot press drill bit

Common models: AQ, BQ, NQ, HQ, PQ, (NTW, HTW)

Mainly used for: deep hole drilling rock sampling

Applicable strata: Can be used for soft, medium and hard strata

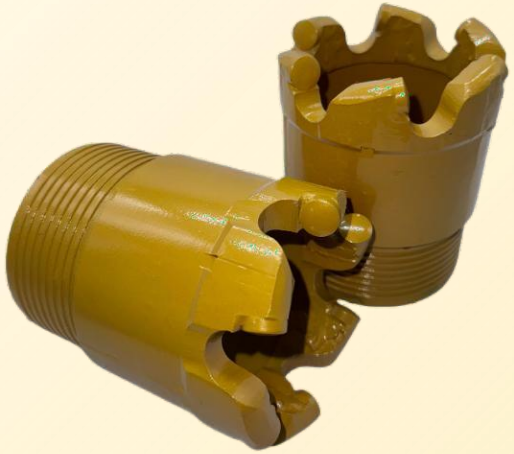
Working layer sintering hardness: low, medium, height (according to the formation rock selection)

Hot press drill with bottom injection is suitable for: loose sand, broken core rate is low formation

Name	Size	Number of bits	Bit type	Adaptive bed	Weight KG
Hot Press drill bit	NQ	8tooth	Hot pressing process HRC (Low, medium, hig)	F≤11 Soft - Hard	0.8
Hot Press drill bit	HQ	10tooth			1.8
Hot Press drill bit	PQ	12tooth			2.6
Hot Press drill bit	NTW	8tooth	Hot pressing process Bottom jet bit HRC (Low, medium, high)	F≤11 Soft - Hard	0.8
Hot Press drill bit	HTW	10tooth			1.4

core bit

Custom drill bit



Ball core bit

Pellet core bit

Electroplated diamond bit

Electroplated diamond core bit

Mainly used for: geological exploration, rock sampling, water Wells

Suitable strata: limestone, dolomite, carbonaceous limestone, marl, shale, marble, gneiss, calcite... Medium and hard strata

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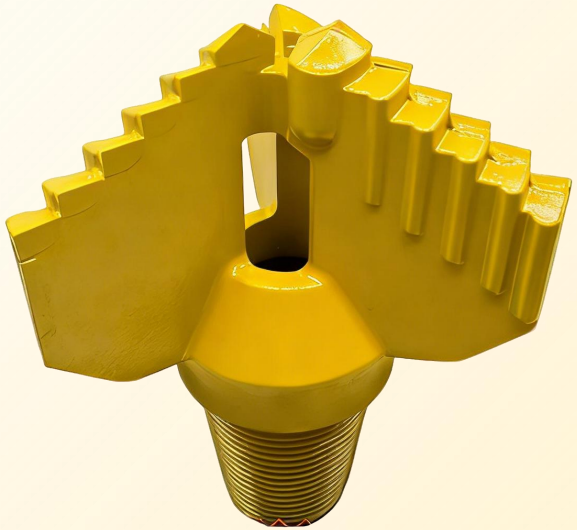
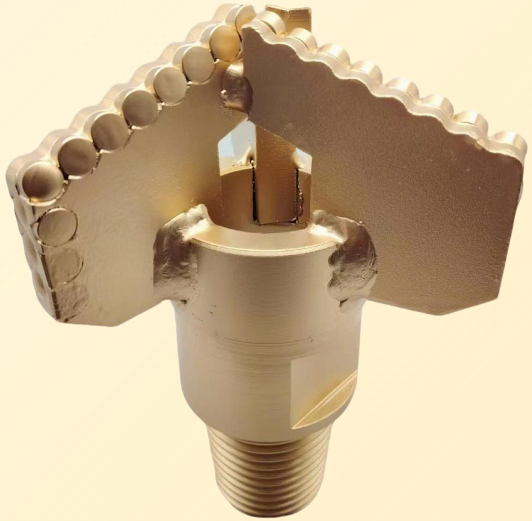
steel body is made of tungsten carbide alloy material, die-casting, integrally formed, stronger and wear-resistant, with high-quality alloy blades, faster drilling speed for slightly soft formations, various sizes of drill bits and connection threads support customized processing

Three-wing concave coreless drill bit

Four-wing concave coreless drill bits



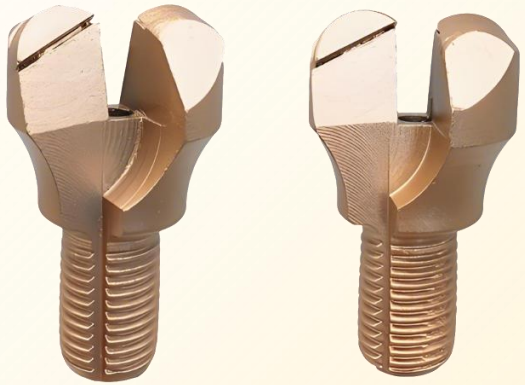
Three-wing alloy scraper coreless drill bit

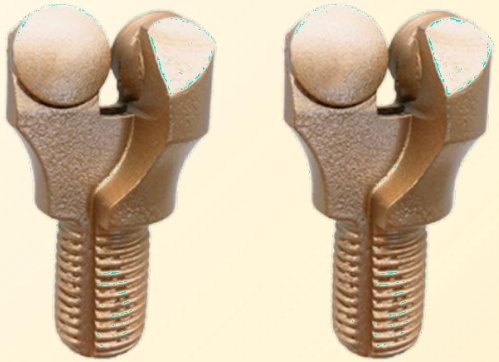


Three-wing scraper coreless drill bit

Mainly used for: grouting holes, varsity discharge holes, slopes, supports, anchor cables, wells, and geothermal

Applicable strata: red sandstone, mudstone, coal seam, backfill, limestone, dolomite and other medium and complete strata



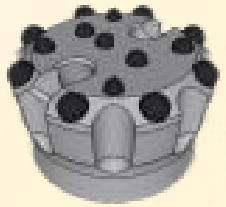


Bolt bit B19 female thread

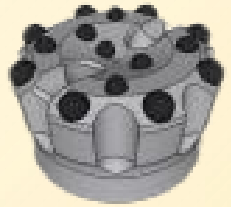
mainly used for: coal mine roadway, tunnel, anchor net hanging net through anchor cable, to prevent rocks or coal seams from falling in the hole

Name	Size	Connecting thread	Bit type	Adaptive bed	Composite sheet quantity	Weight KG
Bolt bits	28mm 30mm	M14*1.5 M16*2.0 B19	1004/1304 Flat pieces Regular PDC bit	Hard rock F≤4	2pcs	0.3
	32mm 38mm		Chamfer plate 1305spherule Enhanced PDC bit	Medium hard rock F≤8	2pcs	0.3
	42mm 45mm				4pcs	0.4

Convex



Flat



Concave

DTH bit

Design Concept & Product Advantages

down-the-hole drill bits we produce are produced from high-quality nickel alloy steel and molybdenum alloy steel, which enhances the durability and wear resistance of the drill bits. Professional heat treatment standards and rigorous and precise production processes ensure the consistency of product performance

cemented carbide	Diamond composite teeth
	
Suitable for hard and hard rock formations	Suitable for hard and extremely hard formations

Bit Size Diam.	Face Design	Air Holes	Angle	Gauge Inserts	Face Inserts	Weight	Porduct Code
135mm	凸面 (V)	2	35°	7xΦ18mm	6xΦ14mm	15.0kg	G130-F2Q7Y-P350
140mm	凸面 (V)	2	38°	7xΦ18mm	6xΦ14mm	16.0kg	G140-V2Q7Y-P350
146mm	平面 (F)	2	35°	7xΦ18mm	7xΦ14mm	17.0kg	G146-F2Q7Y-P350
152mm	平面 (F)	2	35°	8xΦ18mm	7xΦ14mm	17.5kg	G152-F2Q8Y-P350
165mm	凹面 (C)	3	35°	8xΦ18mm	8xΦ16mm	18.5kg	G165-C3Q9Y-P350

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