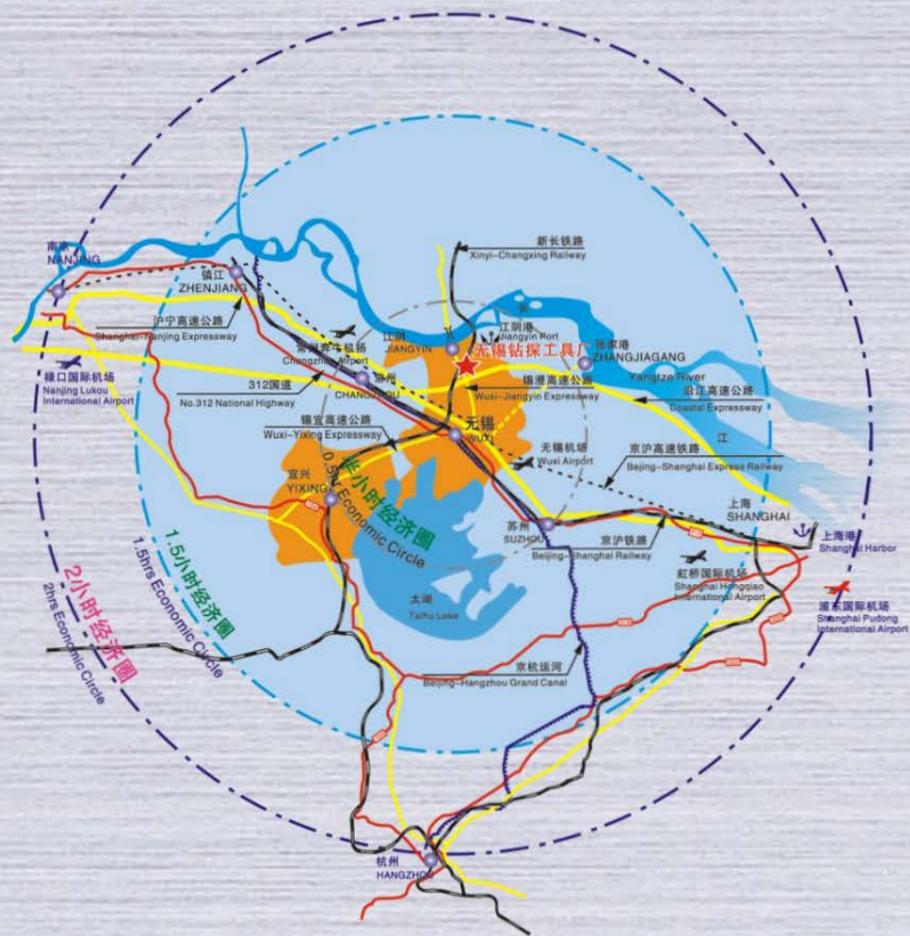




金三角



地质钻探工具



非开挖钻具



锚固钻具



硬质合金

XZ 无锡钻探工具厂有限公司
WUXI DRILLING TOOLS FACTORY CO.,LTD

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Carryle Gao



中国地质装备集团有限公司
CHINA GEOLOGICAL EQUIPMENT GROUP CO.,LTD



无锡钻探工具厂有限公司
WUXI DRILLING TOOLS FACTORY CO.,LTD



金三角

无锡钻探工具厂有限公司
Wuxi Drilling Tools Factory Co., Ltd

企业宗旨:

一流的基地, 一流的产品

企业作风:

团结协作, 求真务实,

真抓实干, 雷厉风行

HISTORY 发展史

2014年本企业改制工作已完成, 正式更名为“无锡钻探工具厂有限公司”

We finished the structural reform of state-owned enterprise and Changed the name to be Wuxi Drilling Tools Co.,Ltd.in the year of 2014.

2010年通过美国石油协会API5DP相关产品认证。同年, 深孔CNHT绳索钻杆试制成功, 并在安徽313地质队施工中创造了2706.68米国内小口径绳索施工记录。

2010,Certified by the American can Petroleum Institute API5DP related products.The CNHT drill rod successful used in Anhui 313 geological team construction to create a record with drilled 2706.68 m.

2008年我厂迁入无锡市惠山开发区投入2800万左右的资金进行技术改造, 引进多条专用生产线, 现已成为国内一流的钻探工具生产基地

In the year of 2008, the factory moved into HuiShan Economic Development District in Wuxi City, and about RMB 28million was invested on the technological transformation, meanwhile, a number of dedicated production line were introduced, thus the factory becomes a domestic Top production base for drilling tools.

2005年S75A/S95A绳索加厚钻杆试制成功

Trial production of S75A/S95A wire line Forged drill rod was successfully conducted in 2005

2002年非开挖整体钻杆试制成功

HDD drill rod forged one piece was successfully conducted in 2002

1991年与长春地院共同研制的贯通式气动潜孔冲击器通过部级鉴定

Drive-through type pneumatic down-the-hole hammer jointly developed with Changchun Geography Institute passed the ministry-level identification

1990年12月我厂绳索取心钻具系列产品被评为地质部优质产品

Wire line core-drilling tool series products were evaluated as high quality products of Geography Ministry in December 1990

1985年12月 $\phi 46 \phi 76$ 孕钻人造金刚石普通双管钻头获国家银奖

$\phi 46 \phi 76$ common double-tube drill bit with impregnated artificial diamond obtained national silver medal in December 1985.

1981年9月金刚石螺旋型扩孔器产品获国家优质产品银质奖

Diamond spiral bitbrace product got the silver medal of national high-quality product in September 1981

1980年2月地质部委托我厂负责小口径钻杆接头螺纹规, 金刚石扩孔器螺纹环塞规部标设计编制工作

Ministry of Geography entrusted our factory to design and compile the ministrylevel standard for coupling thread gauge with small diameter drill rod and thread measurement meter for diamond bitbrace.

2012年阿特拉斯.科普柯矿山与岩石开挖技术部与我厂的战略合作签约

We signed the Strategic Partnership Agreement with Atlas Copco (Mining and Rock Excavation Division) in the year of 2012.

2011年通过江苏省高新技术企业认证, 同年, 我厂相关产品获得无锡市科技进步三等奖

In 2011 got the Jiangsu provincial high-tech enterprise certification, The same year,our products won the Wuxi Municipal Science and technology progress prize three.

2009年CNH绳索钻杆试制成功。同年, 国际标准Q系列绳索产品推广应用

In 2009 CNH cord drill-rod trial-produce is successful. The same year,The international standard Q series drill tools became popular.

2006大口径($\phi 1420\text{mm}$)非开挖螺旋钻杆由中国石油管道工程公司在印度施工成功。

Trenchless helix drill rod with large diameter($\phi 1420\text{mm}$) was successfully constructed by PetroChina Pipeline Company in India in 2006.

2003年我厂参与了大陆科学钻探大口径绳索取心钻具的投标

Our factory was engaged in the bidding for wire line coredrilling tools with large diameter in the drilling project of continental scientific in 2003

2000年6月石油油井管端加厚试制成功

Trial production of end upsetting for petroleum oil well pipe was successfully conducted in June 2000

1991年4月我厂获国家级企业技术进步奖, 地矿部唯一获得这一光荣称号的企业

Our factory won reward of National Science and Technology Progress in April, 1991, and it was the only enterprise obtaining this title belonged to Ministry of Geology and Mineral Resources

1990年9月我厂被正式批准为国家二级企业

Our factory was formally approved to be National Secondary Enterprises in September, 1990

1984年4月金刚石薄壁钻头通过地质部工业局技术鉴定

Diamond thin wall drill bit magnet passed the identification made by Industrial Bureau of Geography ministry in april 1984

1981年12月XD55螺杆钻具试制成功

Trial production of XD55 screw drill tool was successfully conducted in December 1981

1980年4月我厂被江苏省人民政府命名为大庆式企业

The factory was named as enterprise of Daqing Style by the People's Government of Jiangsu Province in April, 1980

汶川地震科学钻探项目施工现场



金三角

金三角
工具有限公司

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金三角
工具有限公司

公司简介

INTRODUCTION
INTRODUCTION



无锡钻探工具厂有限公司（原地质矿产部无锡钻探工具厂）始建于1958年，2014年3月企业正式改制更名，现为中国地质装备集团有限公司直属企业，是国内钻探工具专业生产基地。2008年5月迁入无锡市惠山经济开发区，占地面积120亩，现有固定资产近两亿元，职工人数600多人，技术力量雄厚。迁入新厂区后，投入资金2800万元进行技术改造，引进了多台套国内一流的专业化生产线。近几年，企业加强同中国地质大学（武汉）、吉林大学、中国地质科学院勘探技术研究所合作，承担多个国家、省部级科技研究项目，企业拥有多项自主知识产权专利，新产品多次刷新国内深孔小口径钻探施工记录，是《地质岩心钻探钻具》国家标准的制定者，是国内唯一一家具有地勘产品量规设计制造能力的企业。企业营销网络健全，并设有国际贸易部，拥有自营进出口权。2001年，通过了ISO9001：2000质量体系认证；2010年通过美国石油协会API 5DP产品认证；2011年被评为高新技术企业。2012年企业成功申报江苏省重大科技成果转化专项资金项目，同年阿特拉斯.科普柯矿山与岩石开挖技术部与我厂的战略合作签约；2014年本企业改制工作已完成，正式更名为“无锡钻探工具厂有限公司”

主要产品有：地质钻探工具、非开挖钻杆及机具、各种牌号的硬质合金及硬质合金制品、冲击器与跟管钻具、人造金刚石钻头扩孔器等。

公司宗旨：“用户是上帝”，用户的需要就是我们的工作，竭诚为用户服务，不断改善产品结构，让用户满意。

Wuxi Drilling Tools Factory Co., Ltd. (Geology and Mineral Resources Bureau Wuxi Drilling Tools Factory) founded in 1958, which now is a state-owned enterprise directly under China Geological Equipment Group Co.,Ltd. , the production base for manufacturing geological drilling tools in China. In May 2008, we relocated our plant in Huishan district covering an area of 80000㎡ with USD 35,000,000 fixed assets. Over 600 employees and a strong technical force team in our company. USD 5,000,000 has been invested for making the technical transformation and introducing a series of national-advanced production lines, in the recent years, we strength our connection to China University of Geosciences (Wuhan), Jilin University, Exploration Institute of Technology of Chinese Academy of Geological Sciences, undertaken lots of national-provincial level scientific researching projects, owned so many proprietary intellectual property rights, our new patent drill rods has refreshed the depth records of small-bore drilling at the site investigation repeatedly. We participated in and set the “Geological Core Drilling Tools” (China national standard: ISO 3551:1992, Diamond core drilling equipment system A, ISO 10097:1999, wireline diamond core drilling equipment system A, NEQ), and the only one who has the ability to design and manufacture the gauges for geological drilling tools in China. Our marketing system is effective and comprehensive for domestic and oversea markets, we have domestic & oversea sales divisions and Import Export License for do the international business. There are some special events for us: In 2001, we’ re certified by ISO9001:2000 Quality System Certification; In 2010, we passed the API 5DP production certification; In 2011, we’ re awarded High & New Technical Enterprise honor. In 2012, we’ re successfully applied for getting the fund support of achievement transformation of Jiangsu province significant scientific and technological achievement project. And signed the Strategic Partnership with Atlas Copco Ming and Rock Exploration Division; In 2014, we complete the restructuring of enterprise, named to be Wuxi Drilling Tools Factory Co., Ltd.

Products Scope: Geological drilling tools, HDD drill rods & accessories, various kinds of tungsten carbide and their products, DTH hammers, impregnated/surface set diamond bits and reaming shells.

Company Mission: “Customer is God”, your requirement is our job, wholeheartedly at your service , constantly improve products structure to meet your satisfaction.



生产设备

PRODUCTION EQUIPMENT

检测设备

TEST EQUIPMENT



钻杆数控加工生产线
NC processing production line for drill rod



抛丸设备 Blasting equipment



大吨位管端加厚机组
Large tonnage end upsetting machine set



机械强度测试
Mechanical strength test



理化分析
Physical-chemical analysis



接头调质连续生产线
Continuous quenching and tempering line for coupling



合金压力烧结炉
Carbide pressure sintering furnace



螺纹加工专用量规
Special gauge for processing thread



摩擦焊接生产线
Friction welding production line



接头数控加工生产线
CNC machining production line for subs



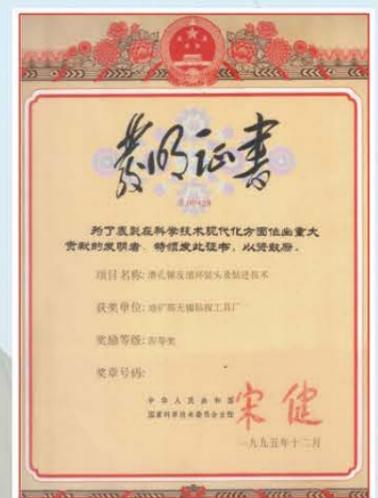
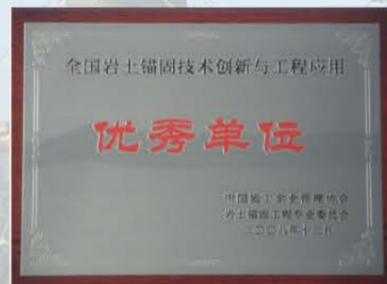
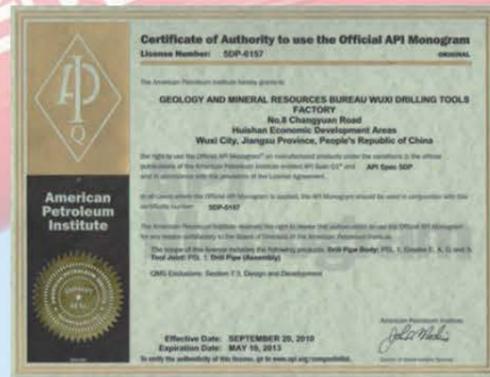
化学分析
Chemical analysis



光谱分析仪
Spectroscope

资质认证 QUALITY CERTIFICATION

全国地勘钻探职业技能大赛决赛

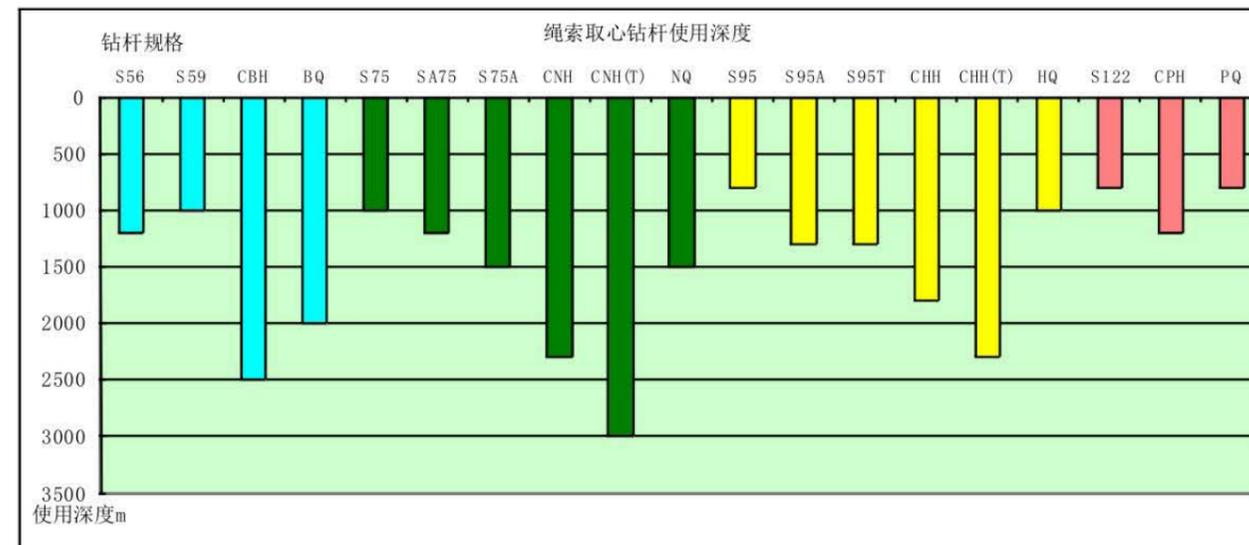




绳索取心钻杆 Drill Rod

我厂最新推出高强度绳索取心钻杆已被广泛的应用于多个深孔施工项目以及国家科学钻探项目中，已成功完成的国内深孔项目主要有：

序号	时间	施工地点	施工单位	孔深 (m)	终孔直径 (mm)	钻杆型号
1	2010年	辽宁	辽宁402地质队	2522	Φ75	CNH
2	2010年	安徽	安徽313地质队	2706	Φ75	CNHT
3	2011年	山东	山东黄金	2660	Φ75	CNHT
4	2011年	山东	山东三队	3309	Φ75	CNHT
5	2012年	山东	山东三队	2738	Φ75	CNHT
6	2012年	江西赣州	安徽313地质队	2970	Φ75	CNHT
7	2012年	安徽庐纵	安徽313地质队	3000	Φ75	CNHT
8	2012年	甘肃金川	山东三队	3000	Φ75	CNHT
9	2013年	安徽铜陵	安徽321地质队	2500	Φ95	CHHT
10	2014年	青海	山东三队	3000	Φ75	CNHT



绳索取心钻杆规格主要技术参数 Wire line core drill rod parameters

NO.	规格 Size	系列 Series	杆体尺寸	接头尺寸 O.D/I.D	螺纹标准 Thread type	热处理方式 Heat treatment	钻杆材质 Raw material	接头材质/处理工艺	使用深度m Design hole deep
1	S56	普通钻杆	53x4.5	54/43	地标、冶标	钻杆体不做热处理	45MnMoB	30CrMnSiA调质	1200
2	S59	普通钻杆	55.5x4.75	56.5/46	地标、冶标		45MnMoB	30CrMnSiA调质	1000
3	S75	普通钻杆	71x5	73/60.7	地标、冶标		45MnMoB	30CrMnSiA调质	1000
4	S95	普通钻杆	89x5	90.5/78.5	地标、冶标		ZT520	30CrMnSiA调质	800
5	S122	普通钻杆	114.3x6.35	116.3/101.6	厂标		45MnMoB	30CrMnSiA调质	800
6	SA75	整体加厚钻杆	71x5.5	73/60	厂标	端部加厚	45MnMoB	30CrMnSiA调质	1200
7	S75A	两端加厚钻杆	71x5	73/60	厂标		45MnMoB	30CrMnSiA调质	1500
8	S95A	两端加厚钻杆	89x5	92/77	厂标		45MnMoB	30CrMnSiA调质	1300
9	S95T	两端加厚钻杆	91x5	94.5/79	厂标	45MnMoB	30CrMnSiA调质	1300	
10	CBH	C系列钻杆	55.5x4.75	57/43	厂标	钻杆整体调质，接头螺纹镀镍磷	30CrMnSiA	ZT850调质	2500
11	CNH	C系列钻杆	71x5	74/60	厂标		30CrMnSiA	ZT850调质	2300
12	CNH(T)	C系列钻杆	71x5	74/58	厂标		ZT850	ZT850调质	3000
13	CHH	C系列钻杆	89x5	92/77	厂标		30CrMnSiA	ZT850调质	1800
14	CHH(T)	C系列钻杆	89x5	92.5/77	厂标	30CrMnSiA	ZT850调质	2300	
15	CPH	C系列钻杆	114.3x6.35	117/101.6	厂标	45MnMoB	30Cr调质,镀镍磷	1200	
16	BQ	Q系列钻杆	55.6x4.8		国际标准	钻杆整体调质	ZT850	自接式钻杆, 螺纹镀镍磷	2000
17	NQ	Q系列钻杆	70.1x5		国际标准		ZT850		1500
18	HQ	Q系列钻杆	89x5.6		国际标准		ZT850		1000
19	PQ/PHD	Q系列钻杆	114.3x6.35		国际标准		螺纹镀镍磷		45MnMoB



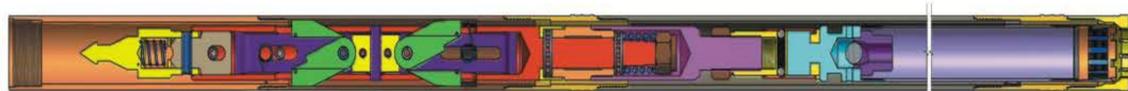
打捞器 Overshot Assembly

双管总成
Core Barrel Assembly

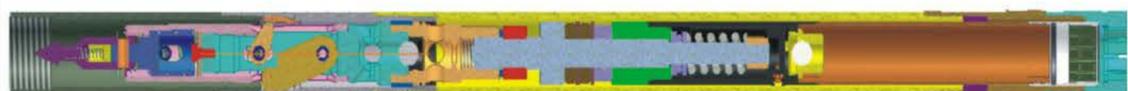
绳索取心钻具 Wire line core Drilling tool

绳索取心钻具是一种不提钻，直接捞取岩矿心的钻探工具。整套钻具包括：钻具总成、打捞器、提引器、夹持器及自由钳等配件。它具有钻进效率高、岩心采取率高、钻头寿命长、劳动强度小等优点。随着钻孔深度加深，其优势更为明显。

Wire-line core drilling technology is a method for getting the core sample directly without the need to pull the rod string out of hole. A complete set of this system including: Core barrel assembly, overshot, hoist, clamp and circle wrench... This wireline system increased the productivity with drilling efficiency, possessing high core recovery rate, longer service life of bits, lower labor strength. The advantage will be clear with the depth increased.



双弹卡(SF)钻具总成示意图
SF Series Core Barrel Assembly



Q系列钻具总成示意图
Q Series Core Barrel Assembly



煤层气绳索取心钻具CBM (Coal Bed Methane) wire-line coring drill tools

绳索取心钻具规格及技术参数 Wire line core drilling tools parameters

系列 Series	规格 Size	钻头 Bit		扩孔器 外径 Reaming Shell O.D	外管 Outer Tube		内管 Inner Tube		配套钻杆规格 Drill rod parameters	配套打捞器 Overshot Assembly
		外径 O.D	内径 I.D		外径 O.D	内径 I.D	外径 O.D	内径 I.D		
普通系列 钻具	Sc56	56	35	56.5	54	45	41	37	S56	S系列
	S59	59.5	36	60	58	49	43	38	S59	
	S75	75	49	75.5	73	63	56	51	S75/S75A	
	S95	95	64	95.5	89	79	73	67	S95/S95A	
Q系列 钻具	BQ	59.5	36.5	60	57.2	46	42.9	38.1	BQ	Q系列
	NQ/NQ3	75.3	47.6/45	75.8	73	60.3	55.6	50	NQ	
	HQ/HQ3	95.6	63.5/61.1	96	92.1	77.8	73	66.7	HQ	
	PQ/PQ3	122	85/83	122.6	117.5	103.2	95.6	88.9	PQ	
深孔复杂 地层系列 钻具	S75-SF	75	49	75.5	73	63	56	51	S75A/CNH	S系列
	S95-SF	95	64	95.5	89	79	73	67	S95A/CHH	
	S75B-2	76	47	76.5	73	63	54	49	S75A/CNH/CNH(T)	Q系列
	S95B-2	95.5	62	96	89	79	71	65	S95A/CHH/CHH(T)	
	S75-SF-2	76	47	75.5	73	63	54	49	S75A/CNH/CNH(T)	S系列
	S95-SF-2	96	62	96.5	89	79	71	65	S95A/CHH/CHH(T)	
煤层气 绳索取 心钻具	5吋	133	36		89	69	43	38	89石油钻杆, NC38扣	Q系列
	6吋	152	54		108	80	62	56.5	89石油钻杆, NC38扣	
	8.5吋	216	66		127	101.6	77	70	127石油钻杆, NC50扣	



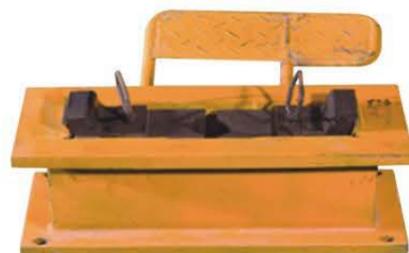
绳索取心钻具辅具 Wire-line coring drill accessories

主要辅具规格

名称	规格	备注
手搓式提引器Hoisting Plugs	S56, S59, S75, S75A, S95, S95T, S95A, BQ, NQ, HQ, PQ, CBH, CNH, CHH, CPH, CNH(T), CHH(T), S122	可直接与钻杆连接
卡槽式提引器Hoisting Plugs	Φ65:10T,30T,40T,60T; Φ75:10T,30T,40T,60T	需配提杆接头使用
爬杆式提引器Hoisting Plugs	N口径:10T,30T,40T,60T; H口径:10T,30T,40T,60T; P口径:10T,30T,40T,60T	需配蘑菇头使用
水龙头 Water swivel	Φ50, Φ50II, Φ42-50, Φ89, Φ121, Q系列水头	
绳索绞车 Wire line winch	SJC-1000, SJC-1500, SJC-2000, SJC-3000	可选电机或柴油机动力
自重夹持器Foot clamp B	S75/NQ/Φ71, S95/HQ, Φ89, PQ/Φ114	加强型, 深孔使用
木马夹持器Foot clamp A	S56, S59, S75, S95	浅孔使用
合金自由钳	Φ53, Φ55.5, Φ71/73, Φ89, Φ92, Φ114/117	钻杆、外管钳, 镶合金卡瓦
金刚石自由钳	Φ41/43, Φ54, Φ56, Φ71, Φ73, Φ95	内管钳
套管钳	Φ73/89, Φ89/108, Φ108/127, Φ127/146, Φ146/168, Φ168/194, Φ194/219, AW, BW, HW, PW	拆卸套管使用



绳索木马夹持器
Foot clamp A



自重夹持器
Foot clamp B



手搓提引器

叉口提引器
Hoisting Plugs

爬杆提引器

水龙头
Standard duty water swivel



绳索绞车
Wire line winch



孔口投放漏斗



垫叉



简易打捞机构

双弹卡钻具辅助工具



变径接头



提杆接头



蘑菇头



丝扣油Tread grease

请坚持使用绳索钻杆专用丝扣油!
Please always use thread grease!

我们生产的丝扣油专门适用于套管、钻杆、内外管的螺纹保护。能有效的起到密封和润滑作用。其主要作用是增强钻杆螺纹的抗腐蚀性，在螺纹啮合时形成一层金属保护膜，防止钻杆螺纹粘扣，方便钻杆拆卸。

Our threadgrease is suitable for casing, tubing and pip line thread sealing and lubrication. The thread grease can protect the thread from erosion, most important is the thread grease make pin and box separate from each other easily.

自由钳钳口金刚石/合金分布均匀、耐磨、不易脱落。使用时不打滑、不伤管壁，可以延长钻探工具的使用寿命，适合各口径钻杆及套管的装拆。

Manufactured with advanced technique, circle wrenches can avoid damage to rods and bit. They are especially used to screw up and off rods.



金刚石自由钳
Diamond circle wrenches

合金自由钳
Tungsten Carbide circle wrenches

套管自由钳
Casing circle wrenches

液压拧管机 Hydraulic pipe clamp

SQ114/6型液压动力钳是用于地质绳索取心钻杆进行快速上卸扣的一种开口型动力钳。
SQ114/6 hydraulic pipe clamp is specialized in screwing up and off coring drill rods efficiently.

主要技术参数 Main technical parameters

- 1) 应用范围: 57mm、73mm、92mm、114.3mm (绳索钻杆接头)
Application: 57mm, 73mm, 92mm, 114.3mm (coring drill rod couplings)
- 2) 高档额定扭矩: High rated torque: 1.5 kN.m
- 3) 低档额定扭矩: Low rated torque: 8 kN.m
- 4) 高档最大转速: High gear - Max rotary speed: 85r/min
- 5) 低档最大转速: Low gear - Min rotary speed: 20r/min



液压拧管机
Hydraulic pipe clamp



▶▶ 金刚石钻头、扩孔器 Impregnated Diamond Bit and Reaming Shell



金刚石钻头的钻进效率和使用寿命是衡量钻头质量的最重要参数指标。根据工况施工岩层情况，选择级配适合的钻头，可发挥钻头的最佳使用效率。

The penetration rate and the working life of the bit are a very important indicator to justify if the bit quality is good or not. To maximize the optical performance of the bits, the suitable bits should be selected according to the virtual rock formations.

金刚石钻头的胎体硬度选择 Matrix Selection Chart

一般情况下，胎体硬度低的钻头适用于钻进硬地层，胎体硬度高的钻头适用于钻进软地层。
Generally speaking, soft matrix bits are for hard rock formation, hard matrix bits for soft rock formation

钻头级别 Matrix	HRC	适用岩层 Rock formation	代表性岩石 Rock	钻头代号 Series No.
特软 Ultra soft	<20	坚硬致密岩层 Competent formation	泥岩、页岩、很软的砂岩、泥灰岩、泥质岩、火山岩等 Clay, Shale, Very soft sandstone, Marl, Argillite, etc.	B8#, B10#
软 Soft	20-30	坚硬的中等研磨性岩层 Competent and medium abrasive formation	石灰岩、流纹岩、安山岩、大理石、硬砂岩、褐铁矿、白云母、片岩等 Limestone, Rhyolite lava, Andesite, Marble, Hard sandstone, Limonite, Dolomite, Schist, etc.	B7#, B8#
中软 Medium Soft	30-35	硬的中等研磨性岩层 Hard and medium abrasive formation	玄武岩、片麻岩、花岗闪长岩、角闪岩、伟晶岩、辉绿岩等 Basalt, Gneiss, Granodiorite, amphibololite, Pegmatite, Diabase, etc.	B6#
中硬 Medium Hard	35-40	中硬的中等、强研磨性岩层 Medium hard and ultra abrasive formation		B4#
硬 Hard	40-45	硬的强研磨性岩层 Hard and ultra abrasive formation		B2#
特硬 Ultra Hard	>45	硬、坚硬的强研磨性地层，硬、脆、碎地层 Hard, competent and ultra abrasive formation; Hard, unconsolidated and fractured formation	坚硬花岗岩、英砾岩、石英岩、硬板岩、流纹岩等 Hard granite, Quartzitic conglomerate, Quartzite hard slate, Qhyolite, etc.	B1#



■ 金刚石钻头及扩孔器规格 Specifications for IMP bits and reaming shells

Bit type	Size	Remarks
单管钻头/扩孔器 single tube bits and reamers	Φ46、Φ56、Φ59、Φ75、Φ75、Φ91、Φ110、Φ130、Φ150、Φ170、Φ200、Φ219、Φ325、AW、BW、NW、HW、PW	
双管钻头/扩孔器 double tube bits and reamers	Φ56、Φ59、Φ75、Φ75、Φ91、Φ110、Φ130、Φ150、Φ200	
绳索钻头/扩孔器 coring bits and reamers	S56、S59、S75、S95、BQ、NQ、HQ、PQ、NQ3、HQ3、PQ3	National standards、DCDMA etc.标准及其他标准钻头
薄壁钻头、套管钻头 Thin kerf bits ,casing bits	Φ73、Φ89、Φ108、Φ127、Φ146、S59、S75、S95、BQ、NQ、HQ、PQ、AW、BW、NW、HW、PW	扫孔、保护钻杆/套管底端螺纹，钻具可从中通过cleaning bottom of hole,protecting rods/the bottom thread of casing,permitting free passage of drill bits and core barrels in corresponding sizes

注：1、以上钻头可根据用户要求加工各种特规、异型钻头；2、也可根据需要，加工不同水口结构、不同水口大小、水口数量、不同金刚石粒度、浓度的钻头，进口料、高胎体、超高胎体钻头及各种金刚石扩孔器。
Note:1,Except for the standard bits mentioned above,we also do the Customized products; 2,To satisfy your requirements,we can manufacture various kind of waterways,other impregnation depth ,diamond qualities and sizes are available on request.

钻头唇面形状的选择



平底型 Flat profile

适用于各种不同硬度和研磨性的岩层。It's suitable for a broad range of rock formations



尖齿型 W profile

适用于坚硬致密岩层，钻进速度高。suitable for competent formations



齿轮型 Shaped gear profile

适用于坚硬致密岩层，能增大排粉排水空间，钻进速度高。It's suitable for competent formations, and can expand the flushing ways and improve the penetration rate.



圆弧形 Semi-round Profile

适用于中硬-硬岩层，钻头唇面金刚石分布好，适应少量破碎、松散地层。It's suitable for medium hard -hard formations, diamonds was well-regulated embedded in the matrix ,working well for a little broken and unconsolidated formations.



底喷型 Face discharge

适用于沉积岩、变质岩等粉矿较多岩层，避免岩心冲蚀，提高取心率。It's suitable for sedimentary and metamorphic formations,or the formations including with lots of mineral powders, this design can protect the core from flushing and improve the getting efficiency of core samples.



斜直齿型 Slanted teeth profile

适用于坚硬岩层，高钻进速度，同时又能保证钻头使用寿命。It's suitable for competent formation within a high penetration rate , meanwhile, it can make sure a good service life.



阶梯型/凹槽型 Stepped and fluted profile

于中硬岩层、破碎岩层，破碎与完整交错岩层，可防治孔斜。It's suitable for medium hard & fractured formations, broken and completely interlaced formations, this design can protect the formations from deviation.

▶▶ 复合片钻头，合金钻头



复合片(PDC)钻头 PDC Bit

■ 复合片钻头规格 PDC drill bit specifications

钻头类型 Bit Type	钻头规格 Bit Description	备注 Remarks
全断面钻头 Full-face bit	Φ56、Φ66、Φ75、Φ76、Φ91、Φ110、Φ130、Φ150、Φ171	可根据用户要求加工各类异形钻头
取心钻头 Coring Bit	Φ56、Φ59、Φ75、Φ91、Φ110、Φ130、Φ150	

▶▶ 合金钻头及空白圆钻头 Tungsten Carbide Bits and Blank Drill Bit



■ 合金钻头及空白圆钻头规格 Drill bit and a blank circle drill specifications

钻头类型 Bit Type	钻头规格 Bit Description	备注 Remarks
空白圆钻头 Blank Drill Bit	Φ56、Φ66、Φ75、Φ76、Φ91、Φ110、Φ130、Φ150、Φ171	可根据用户要求加工各类异形钻头
单/双管合金钻头 Single/Double tube T.C bit	Φ56、Φ59、Φ75、Φ91、Φ110、Φ130、Φ150、Φ171	



▶▶ 普通地质钻头，小口径地质钻杆，锁接头、钻杆接箍



普通地质钻杆(外丝钻杆) Common Geological drill Rod (external threaded)				
规格 Size	外径及壁厚 O.D×W	加厚形式	钻杆材质 Raw material	配套接头规格 coupling size
42	Φ42×6	内外加厚	45MnMoB	57锁接头
50	Φ50×6.5	内外加厚	R780	65锁接头
60	Φ60.3×7.1	内外加厚	R780	75锁接头
73	Φ73×7	内外加厚	R780	105锁接头
89	Φ89×10	内外加厚	R780	121锁接头

小口径地质钻杆(内丝钻杆) Slim hole Geological drill Rod (internal treaded)					
规格 Size	外径及壁厚 O.D×W	标准GB standard	钻杆材质 Raw material	螺纹大小径尺寸	配套接头规格 coupling size
43	Φ43×6.35	DZ 74.7标准	R780	Φ34/Φ31	43
50	Φ50×6.5	DZ 74.7标准	R780	Φ41.5/Φ38	50
43	Φ43×6	DZ 76.7标准	R780	Φ35/Φ32	43
50	Φ50×5.5	DZ 76.7标准	R780	Φ42.5/Φ39.5	50
43	Φ43×6	DZ1.1-84标准	R780	Φ35/Φ32	43
54	Φ54×6	DZ1.1-84标准	R780	Φ46/Φ43	54

锁接头、钻杆接箍 Drill Pipe Box And Pin/Drilling Subs



锁接头生产规格 (Description of Box and Pin):

Φ57、Φ65、Φ75、Φ105、Φ121

钻杆接箍生产规格 (Description of Drilling Coupling):

Φ57、Φ65、Φ75

小口径接头

Drill Adapter For Small-bore Hole Drill rods



小口径接头生产规格

43(74.7标准、76.7标准、DZ1.1-84标准)

50(74.7标准、76.7标准)

54(DZ1.1-84标准)



▶▶ 单动双管钻具 Swivel-tube barrel

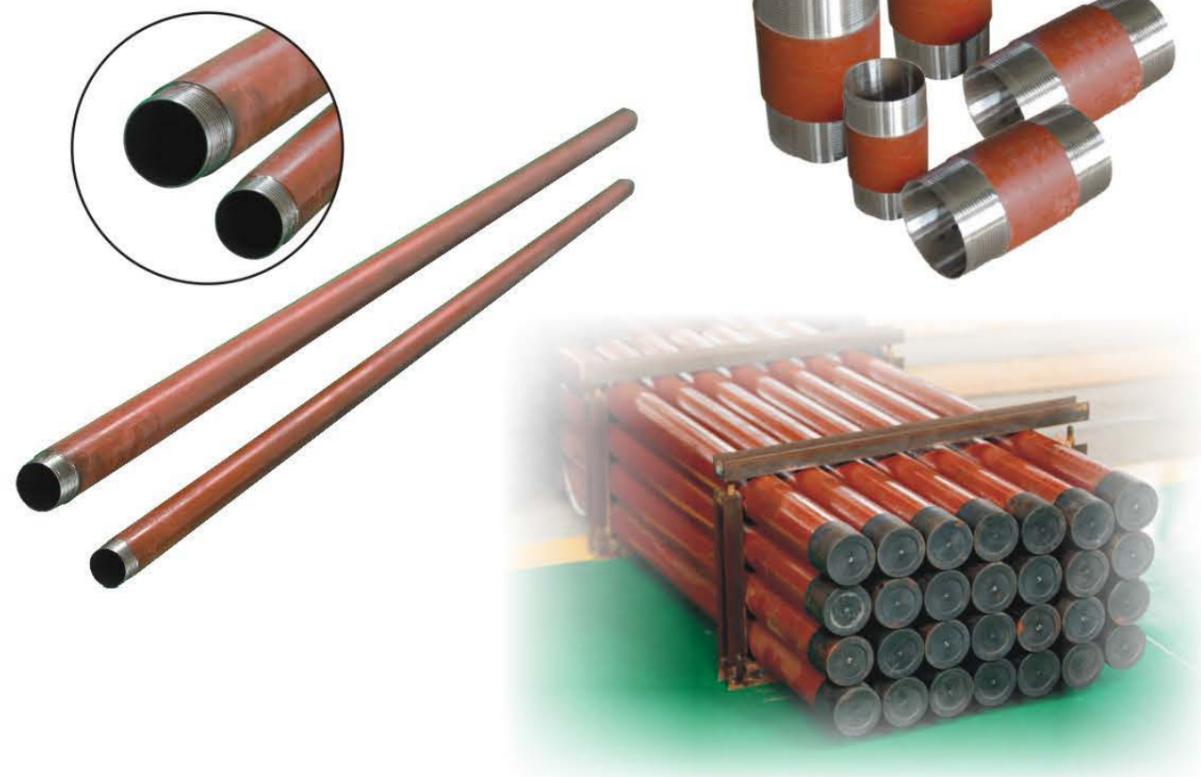
单动双层岩心管钻具结构简单，操作方便，同轴度好，使用寿命长，能有效地提高岩心、矿心采取率，保证岩心的完整度。

Swivel-tube barrel with simple structure, handle easily, good concentricity, long service life, it can improve core recovery ratio and make sure the integrity of the core.

钻具型号 Tool Type	钻头外径/内径 Bit O.D/I.D	扩孔器外径/内径 Reaming Shell O.D/I.D	外管外径/内径 Outer Tube O.D/I.D	内管外径/内径 Inner Tube O.D/I.D	钻杆外径 Rod O.D/I.D
P56	Φ56/Φ39	Φ56.5/Φ46	Φ55/Φ48	Φ45/Φ41	Φ50
P59	Φ59/Φ41.5	Φ59.5/Φ49	Φ58/Φ51	Φ47.5/Φ43	Φ50
P75	Φ75/Φ54.5	Φ75.5/Φ64	Φ73/Φ65.5	Φ62/Φ56.5	Φ50
P91	Φ91/Φ68	Φ91.5/Φ79	Φ89/Φ81	Φ77/Φ70	Φ50
PA-110	Φ112/Φ79	Φ112.5/Φ96	Φ108/Φ99.5	Φ89/Φ81	Φ50/Φ60
PA-130	Φ132/Φ97.5	Φ132.5/Φ116	Φ127/Φ118	Φ108/Φ99.5	Φ50/Φ60
P150	Φ150/Φ116	Φ150.5/Φ132	Φ146/Φ136	Φ127/Φ118	Φ50/Φ60
P157	Φ158/Φ122	Φ158.5/Φ139	Φ154/Φ139	Φ133/Φ125	Φ60/Φ73
PA-200	Φ202/Φ167	Φ202.5/Φ183	Φ194/Φ181	Φ177/Φ169	Φ60/Φ73/Φ89
P219	Φ225/Φ171	Φ225.5/Φ202	Φ219/Φ199	Φ190/Φ176	Φ60/Φ73/Φ89



▶▶ 地质套管及岩心管 Geological casing, core tube



■ 套管及岩心管规格 Casing and the core tube specifications

执行标准 Standard	规格 Size	外径及壁厚 O.D×W	材质 Material	备注 Remark
GB/T16950-1997	73	Φ73×3.75	DZ40	定尺长度及螺纹 要求可根据用户 要求定制
	89	Φ89×4.5	DZ40	
	108	Φ108×4.5	DZ40	
	127	Φ127×4.5	DZ40	
	146	Φ146×5	DZ40	
	168	Φ168×6.5	DZ40	
DCDMA	178	Φ178×7	DZ40	Length and thread depends can be customized
	AW	Φ57X4.25	R780	
	BW	Φ73X6.35	R780	
	NW	Φ88.9X6.35	R780	
	HW	Φ114.3X6.35	R780	
厂标	PW	Φ139.7X6.35	R780	
	91	Φ91x5	R780	
	114.3	Φ 114.3x6.35	R780	
	139.7	Φ 139.7 × 6.35	R780	



▶▶ 套管夹板，垫叉、拔叉，打捞丝锥，钻心管接头及各种变径

套管夹板 Casing clamp



套管夹板主要规格有：
Casing clamp main specifications:
Φ73、Φ89、Φ108、Φ127、Φ146

丝锥 Recovery Taps



我公司生产的丝锥丝扣性能好，适合各类钻杆、套管、岩心管，使用优质合金钢材料，采用先进的渗碳淬火工艺，使该产品有稳定的使用性能。

Our taps was made of premium alloy steel, processed with advanced carburizing and quenching technology, which can keep it optimal performance when recovery the rods, casing ,and core barrels.

各类变径管接头、岩心管钻杆接头 Various types of Adapter subs, core tube coupling



根据客户具体要求，提供各类互换性良好的各规格变径接头。
According to the requirements of customers, We can providing various types adapter subs with good quality.

垫叉、拔叉 Padding fork、spanner fork



垫叉、拔叉主要规格有：
Padding fork、spanner fork Main specifications
Φ43、Φ50、Φ57、Φ65、Φ75



非开挖钻杆及机具

Horizontal Directional Drilling Tools

▶▶ 非开挖整体式加厚钻杆 One-piece Forged Drill Rod



非开挖整体式钻杆
One-piece Forged Drill Rod



非开挖整体式钻杆剖样
One-piece Forged Drill Rod



■ 非开挖整体钻杆规格及参数

规格 Size	外径(mm) O.D	壁厚(mm) W	加厚外径(mm) Forged O.D	最小弯曲半径(M) Minbend Roding	最大扭矩(KNM) Max. Torque	材质 Material
60	Φ60	7.5	Φ67	40	6	G105/S135
73	Φ73	8	Φ80.5	62	13	G105/S135
76	Φ76	10	Φ88	65	15	G105/S135
83	Φ83	9	Φ93	70	18	G105/S135
89	Φ89	10	Φ92	72	25	G105/S135

长度可根据用户要求定制
The length can be customized according to the customer's demands



非开挖钻杆及机具

Horizontal Directional Drilling Tools

▶▶ 非开挖摩擦焊钻杆 Friction welding drill rod



■ 非开挖摩擦焊钻杆规格及参数 HDD Friction welding drill rod parameters

规格 Size	外径(mm) O.D	壁厚(mm) W	接头外径(mm) Coupling O.D	螺纹形式 Thread Type	最大扭矩(KNM) Max. Torque	材质 Material
73	Φ73	10	Φ99	D75	16	G105/S135
89	Φ89	10	Φ105、Φ121	D100、NC31、NC38	25	G105/S135
102	Φ101.6	8.38	Φ127	NC38	40	G105/S135
114	Φ114.3	8.56	Φ127/Φ139.7/Φ150	NC38/NC40/NC46	65	G105/S135
127	Φ127	9.19	Φ168.3	NC50	110	G105/S135
140	Φ140	10.54	Φ190.5	5 1/2FH	130	G105/S135

长度可根据用户要求定制
The length can be customized according to the customer's demands





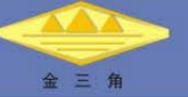
Horizontal Directional Drilling Tools

▶▶ 非开挖钻具及配件

根据客户要求可提供各种规格的导向钻头、钻头板、钻头、短节与接头、拉管接头、分动器。

We can manufacture all kinds of drill heads, sonde housings, directional blades, drill bits, adapters saver subs, starter rods, pullers and pullback swivels according to requirements.

名称 Name	规格 Description	名称 Name	规格 Description
圈式切扩头 ringed reamer	Φ400-Φ1800	翼式切扩头 Ringed Reamer	Φ250-Φ350
筒式挤扩头 barrel reamer	Φ200-Φ1800	流道式回扩头 fluted back reamer	Φ200-Φ1500
导向钻头 Pilot drilling	Φ80-Φ127	分动器 Swivel	10T-200T



▶▶ WC/GWC系列气动潜孔锤 WC/GWC pneumatic down-hole hammer



WC/GWC系列气动潜孔锤为中/高压无阀式结构，可配在各类锚杆钻机上使用。外平钻杆的壁厚、长度、螺纹可按客户要求配置。

GWC High pressure pneumatic DTH hammer WC/GWC series pneumatic DTH hammer with foot valve, can be used with kinds of anchoring rigs. The thickness, length, thread type of outer flat drill rod can be customized on your request.

■ 主要技术参数 Main Technical Parameters

型号 Type	钻孔直径 Hole Dia. (mm)	钻具直径 Tool Dia. (mm)	耗风量 Air Consumption (m ³ /mm)	工作压力 Air Pressure (MPa)	冲击功 Power (J)	冲击频率 Frequency (Hz)	长度 Length (mm)	重量 Weight (Kg)	配外平钻杆 Outer Flat Rod (mm)
WC56	65	56	3-4	0.5-0.6	50-60	12-14	910	12	Φ50
WC70	75-95	66	3-4	0.5-0.6	60-80	12-16	1030	16	Φ50、60
WC85	95-110	85	3-4	0.5-0.6	80-120	10-16	1112	23	Φ60、73
WC110	115-180	102/106	4-6	0.5-0.7	180-420	12-15	1200	42	Φ73、89
WC130	135-150	124	4-6	0.6-0.8	160	18	923	60	Φ73、89
WC150	150-180	142	6-10	0.6-1.2	200-580	12-15	1230	68	Φ89、114
WC200	205-250	185	18-21	0.6-1.7	150-800	10-14	1400	118	Φ114、127
GWC98	110-130	98	7-17	1-2.4	400-800	24-27	1045	38	Φ89

▶▶ 偏心/同心跟管钻具，跟管套管，外平钻杆

配合我厂生产的潜孔锤，可以钻进复杂、易坍塌地层。

Used with our Down the hole hammer, it can penetrate in complicated formations in which drilling holes are easy to collapse.



■ 主要技术参数 Main Technical Parameters

型号 Type	潜孔锤 Down-Hole hammer	成孔直径 Hole Dia. (mm)	套管规格 Description of Casing Pipe	外平钻杆 Outer Flat Drill Pipe
GZ108	WC85	Φ120	Φ108	Φ73
GZ127	WC110	Φ140	Φ127	Φ73、89
GZ146	WC110	Φ158	Φ146	Φ73、89
GZ168	WC130	Φ179	Φ168	Φ89
GZ178	WC150	Φ190	Φ178	Φ89、114

套管 Casing

套管产品质量稳定，在小湾水电站的锚固施工中跟管70米深。套管规格有Φ89、Φ108、Φ127、Φ146、Φ168、Φ178、Φ194、Φ219、Φ273，套管长度一般定尺为1500mm，可根据用户要求定制。

Our casing have been drilled into 70 meters under the overburden drilling in Xiaowan Hydro-power Station. The size are: Φ89、Φ108、Φ127、Φ146、Φ168、Φ178、Φ194、Φ219、Φ273, the standard length is 1500mm, but your special requirement is available.



套管、接箍
Casing Tube
Casing Coupling

外平钻杆 Outer flat drill rod

与风动潜孔冲击器配套使用，又有利于反渣。

规格有Φ50、Φ60、Φ73、Φ89、Φ114长度定尺为1500mm，也可根据用户要求定制。

Outer flat drill rod was used with pneumatic DTH hammer together, making rock debris removal easily. Size are listed below: Φ50、Φ60、Φ73、Φ89、Φ114, among them, Φ73、Φ89、Φ114 can be alternative of one-piece drill rod, their strength has been improved a lot. the standard length is 1500mm, also can be customized.



■ 外平钻杆规格 Outer Flat Drill Rod Specifications

规格	钻杆外径及壁厚	结构形式	配套潜孔锤	备注
50	Φ50×6	接头与杆体焊接	WC50、WC70	定尺长度一般为1500mm，也可根据用户要求定制
60	Φ60×6.5	接头与杆体焊接	WC70、WC85	
73	Φ73×8	接头与杆体焊接/整体内加厚	WC85、WC110、WC130	
89	Φ89×10	接头与杆体焊接/整体内加厚	WC110、WC130、WC150	

▶▶ 气动贯通式潜孔锤

Air-driven hollow DTH hammer

气动贯通式潜孔锤与双壁钻杆配套使用，可实现反循环连续取心（样）、正循环、局部反循环等多种钻进工艺，适用于硬岩或复杂地层地质勘探、水井、工程施工钻孔，具有钻进效率高，钻头寿命长、钻孔岩矿心（样）质量好等优点。

It always work with Dual-wall drill pipes to retrieve rock core sample from R.C drilling, clockwise circulation drilling, local air reverse circulation drilling, suitable for hard rock formation or complex formation geological exploration, water well, engineering construction drilling. Advantage are: high penetration efficiency, long working life, high quality core sample.



■ 主要技术参数 Main Technical Parameters

参数 parameter	型号 type	GQ80	GQ89	GQ100	GQ108	GQ127	Gq146	GQ160	GQ200	GQ250
冲击器外径 (mm) outside diameter		80	89	95	108	127	146	160	184	240
贯通直径 (mm) diameter of drilling hole		28	33	38	44	44	44	60	62	60
钻孔直径 (mm) diameter of drilling hole		84-95	95-110	98-105	112-132	132-152	152-175	168-250	205-257	260-350
耗风量 (m ³ /min) air consumption		3	4-5	2-3.5	5-7	8-10	10-12	10-12	10-20	10-25
冲击器压力降 (MPa) air pressure difference across hammer		0.5-1.1	1.2-1.4	0.5-1.1	1.0-1.4	1.0-1.4	1.0-1.4	1.0-1.2	1.0-1.2	1.0-1.5
单次冲击功 (J) single impact energy		50-120	140-155	66-145	110-130	250-280	400-450	500-640	650-850	680-880
冲击频率 (Hz) impact frequency		18	17-19	13.5-18.6	16-18	16-18	16-18	14-16	14-16	14-16

▶▶ 双壁钻杆 Dual-wall drill pipes

双壁钻杆是用于反循环钻进的一种钻具，钻进时循环介质从双壁钻杆环状空间流向孔底，携带岩心(样)从内孔中间返回地面，能有效防止井壁坍塌，提高岩心(样)采取率，配合我厂反循环气(龙头和GQ)贯通式潜孔冲击器，能圆满完成反循环连续取心(样)钻进。

Dual-wall drill pipes is used for R.C drilling, when it works, circulating medium is flowing through the gaps between the dual-wall pipes, carrying samples out of the holes efficiency, meanwhile, it can protect the hole from collapse, matching up with our R.C air(water) swivel, GQ air-driven hollow DTH hammer can complete get the samples constantly.



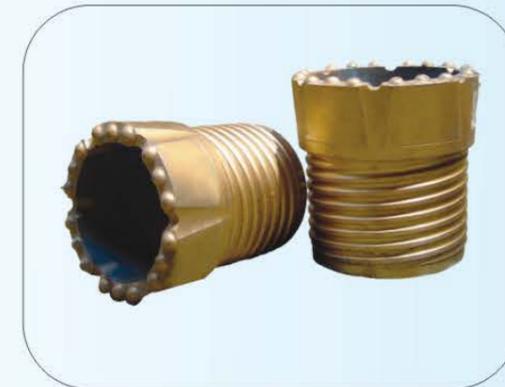
规格 Description	外管Outer Tube		内管Inner Tube	
	外径(mm) O.D	内径(mm) I.D	外径(mm) O.D	内径(mm) I.D
Φ73/41	73	63	45	41
Φ89/43	89	76	47.5	43
Φ102/39	102	88.6	50	39



▶▶ 套管钻头



钻头 Bit



套管钻头
Casing shoe bit

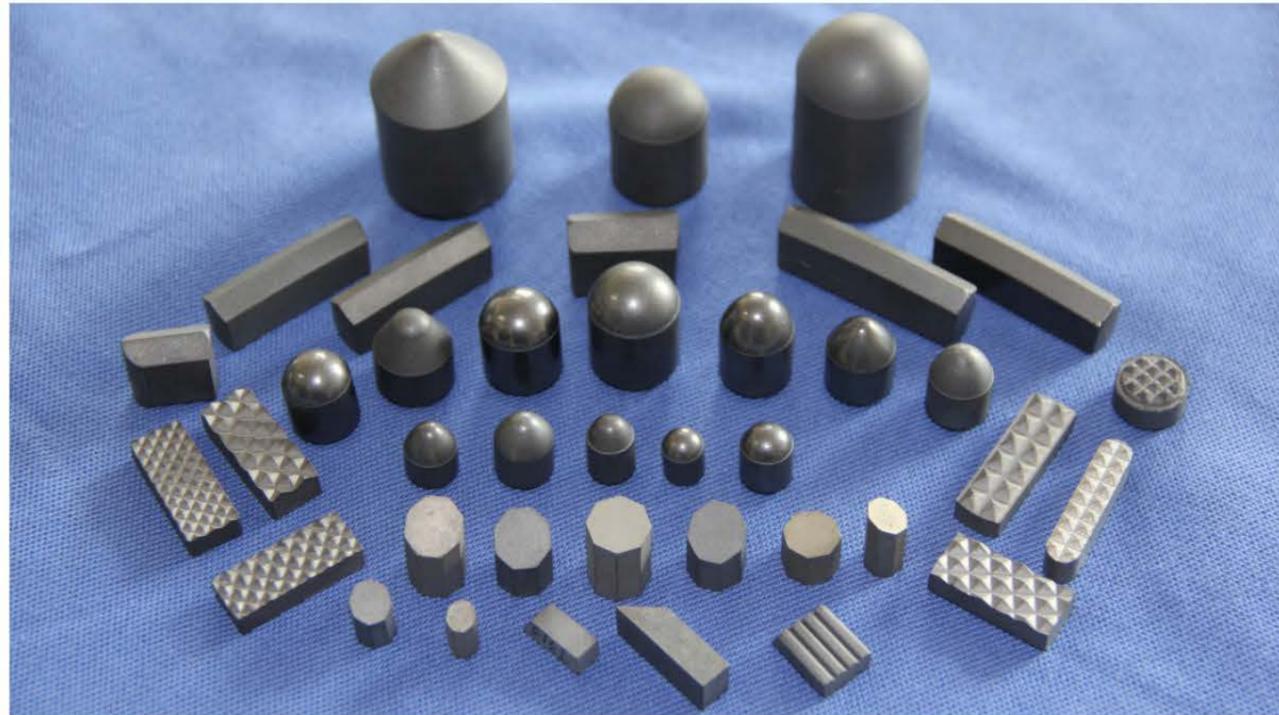


与国外钻机配套的接头
Coupling matched to foreign drill rigs



硬质合金

Carbide



T型地质合金 T type geological tungsten carbide

用于镶制钻进硬地层取岩芯钻头。
It can be mounted on the surface of the coring bit

型号	T105	T106	T106A(K532)	T110	T110A	T110B	T308	T308-2	T310	T310-1	T310-2	T313	T313-2
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S型球齿合金 S type button inserts

用于中硬岩层的基岩的中小规格的球齿冲击钻头。
It can be used on the medium to small size button percussive bit for drilling in medium hard rock formations.

SQ半球形Hemispherical Type	SD抛物线型Parabolic Type
16×25	16×25
14×20	14×22
13×20	12×21
11×16	11×19.5
10×14	9×14.5
9×13	8×12
8×12	7×11
7×11	

硬质合金

Carbide



K型钨齿合金 K type plates- as sintered

用于镶制一字型、十字型硬质合金钻头。
For integral drill steel and rock splitters

KO型号	K1型号
K026	K106
K028	K107
K030	K108
K032	K109
K032-B	K110
K034	K112
K036	K116
K036-B	K117
K038-C	K119
K038-B	K121
K038-C	K122
K040	K124
K040-B	K126
K042	
K046	



我们展示的产品为目前我公司地质合金、球齿合金、钨齿合金的标准生产范围。此外，我们拥有一套先进的硬质合金生产设备和生产工艺。可根据用户需求定制特殊规格和牌号的硬质合金产品。我们极富经验的销售队伍与技术队伍真诚地期盼与您合作！
Tungsten Carbides indicated here represent our standard products range : Geological cemented carbide, Button inserts , customized inserts and so on. on the other hand, we introduced one advanced and sophisticated production line for making them. The size not listed or those with non-standard can be available on request. Our experienced and skilled sales & technical team are looking forward to cooperate with you in the near future.