



山东益矿钻采科技有限公司

SHANDONG YIKUANG DRILLING AND MINING TECHNOLOGY CO., LTD

益矿科技·让世界爱上中国智造



益矿科技 让世界爱上中国钻具

Yikuang Drilling makes the world to fall in love with
drilling tools made in China



C公司简介 Company profile

公司位于古京杭运河名城、山东省工业重镇聊城市临清市，公司注册资金 5000 万元，厂区占地面积 130000 平米。是一家煤矿钻探装备与钻具、煤与瓦斯突出治理、冲击地压治理、地质勘探、工程锚固等领域的技术开发与装备的生产制造、销售和技术服务为一体的国家高新技术企业。

竞争务实，激情创新。公司积极整合优质技术资源，先后与河南理工大学、山东科技大学、贵州理工学院、中国矿大等多所大学建立产学研合作。多年以来积累了丰富的技术成果，共获得国家专利及软件著作权 76 余件，系列产品获国家矿用产品安全标志证书。

公司主要产品有：定向钻机系列、机械扩孔用液压履带钻机系列、气动钻机系列、降尘设备系列、凿岩设备系列和各种地质勘探、煤矿钻探用钻杆、钻头及打捞工具等系列配套产品。其中公司研发的钻探用系列机械造穴钻机与钻杆成套装备，有效解决了煤矿和锚固工程中，松软地质条件下钻探不成孔的难题，得到了广大使用单位的一致好评。

山东益矿秉承 " 以质量赢得市场，为客户创造价值 " 的核心理念，在矿业能源行业效益下滑，急需控制成本、大力节能降耗的整体形势下，益矿人秉持弘扬中国创造，传播工业智能的伟大愿景，为用户提供品质优良、科技领先的高性价比钻采装备和配套装置与钻具。同时高效提供整套个性化钻采解决方案，为广大用户的节能降耗、降低综合生产成本提供了强有力支持。

山东益矿先后通过并运行了 ISO9001:2015 国际质量体系认证、专精特新企业认证、瞪羚企业认证。拥有多条摩擦焊接、螺旋焊接、装备加工等全自动生产线，采用国内外一流的生产加工设备和检测设备，为每一件产品的优良品质保驾护航。志合者，不以山海为远，益矿人愿以积极务实的工作精神，优质的个性化服务与广大矿山企业结缘！欢迎各界朋友莅临参观指导、来电垂询洽谈合作！

The company is located in Linqing City, Liaocheng City, a famous city along the ancient Beijing Hangzhou Grand Canal and an industrial hub in Shandong Province. The registered capital of the company is 50 million yuan, and the factory covers an area of 130000 square meters. It is a national high-tech enterprise and a gazelle enterprise in Shandong Province that integrates technology development, equipment manufacturing, sales, and technical services in the fields of coal mine drilling equipment and drilling tools, coal and gas outburst control, rockburst control, geological exploration, and engineering anchoring.

Pragmatic competition, passionate innovation. The company actively integrates high-quality technological resources and has established industry university research cooperation with multiple universities such as Henan University of Technology, Shandong University of Science and Technology, Guizhou Institute of Technology, and China University of Mining and Technology. Over the years, we have accumulated rich technological achievements and obtained over 76 national patents and software copyrights. Our series of products have obtained the National Mining Product Safety Mark Certificate.

The company's main products include: directional drilling rig series, hydraulic crawler drilling rig series for mechanical reaming, pneumatic drilling rig series, dust suppression equipment series, rock drilling equipment series and various supporting products such as drill pipes, bits and fishing tools for geological exploration and coal mine drilling. The series of mechanical hole drilling machines and drill pipe complete equipment developed by the company have effectively solved the problem of drilling holes under soft geological conditions in coal mines and anchoring engineering, and have received unanimous praise from the majority of users.

Shandong Yikuang adheres to the core business philosophy of "winning the market with quality and creating value for customers". In the overall situation where the efficiency of the mining energy industry is declining and there is an urgent need to control costs and vigorously save energy and reduce consumption, Yikuang people uphold the great aspiration of promoting Chinese creativity and spreading industrial intelligence, and provide users with high-quality and technologically advanced cost-effective drilling and mining equipment, supporting devices, and drilling tools. At the same time, we efficiently provide a complete set of personalized drilling and production solutions, providing strong support for energy conservation, consumption reduction, and comprehensive production cost reduction for the vast number of users.

Shandong Yikuang has successively passed and operated the ISO9001:2015 international quality system certification, specialized and specialized enterprise certification, and gazelle enterprise certification. It has a number of automatic production lines for friction welding, spiral welding, equipment processing, etc., and adopts first-class production and processing equipment and testing equipment at home and abroad to protect the excellent quality of each product. Those who are like-minded are not far away from mountains and seas. Yikuang people are willing to connect with mining enterprises with a positive and pragmatic work spirit and high-quality personalized services! Welcome friends from all walks of life to visit and guide us, call us for inquiries, and negotiate cooperation!

益矿科技，让世界爱上

YIKUANG TECHNOLOGY, LET THE WORLD FALL IN LOVE WITH

中国钻具!

CHINESE DRILLING TOOLS



合作共赢

COOPERATION

企业文化

Corporate culture

企业使命 — 与客户共发展，与员工共成长，与社会共和谐！益矿科技 让世界爱上中国钻具！
工作理念 — 恪守规范，履行职责，注重细节，追求完美，准确高效！
经营理念 — 诚信为本，双赢为基，以质量赢得市场，为客户创造价值！
质量理念 — 强化管理，精益求精，工件零缺点转序，铸就产品的非凡品质！
营销理念 — 打造“益矿科技”精品品牌，让世界了解益矿，让益矿服务世界！
人才理念 — 不拘一格，广纳群贤，在实践中发现人才、培育人才、锻炼人才、使用人才、成就人才！
创新理念 — 掌握钻采科技，引领行业未来！
服务理念 — 服务创造价值，服务赢得市场。以优质的跟踪服务，为客户快速提供整套个性化高效钻探解决方案和营销方案！

Enterprise mission — develop with customers, grow with employees and promote harmony with society!

Yikuang Technology, Let The World Fall In Love With Chinese Drilling Tools!

Work philosophy—adherence to the norms, performing our duties, paying attention to details, the pursuit of perfection and being accurate and efficient!

Business philosophy—honesty and win-win situation as the basis, winning the market by quality, creating value for customers!

Quality concept— strengthening management, excellence, zero defects of the workpiece to the next working procedure, casting the extraordinary quality of products!

Marketing concept— building "Yikuang Drill" brand. Let the world know of Yikuang, and let Yikuang serve the world!

Talent concept— flexible recruitment, finding talent, training talent, using talent, making talent fulfilled!

Innovation concept —mastering drilling technology, leading the future of the industry!

Service concept—service creates value, service wins the market. By high-quality after-sale service, we strive to provide customers with a full set of personalized, efficient drilling solutions and marketing programs!

01
员工慰问

02
精益求精

06
娱乐生活

03
完美服务

05
创先争优

04
质量宣言





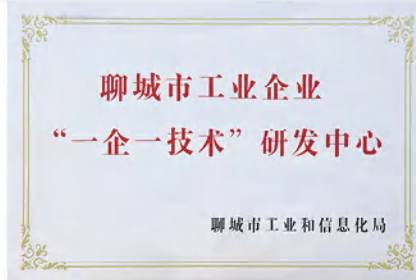
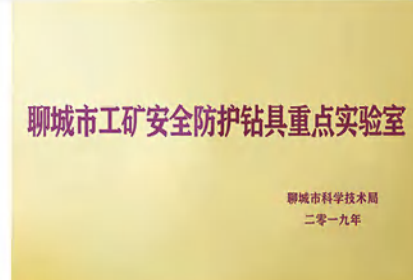
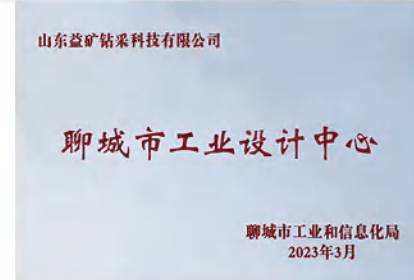
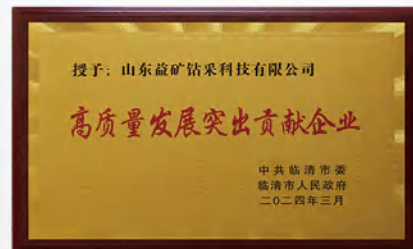
YKDRILL
益矿科技

E企业资质
Enterprise qualification



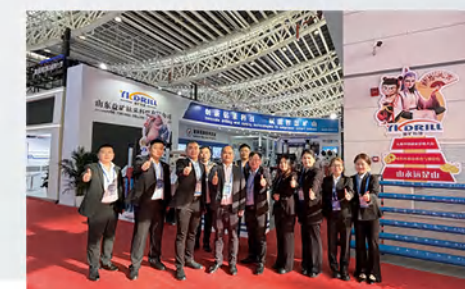
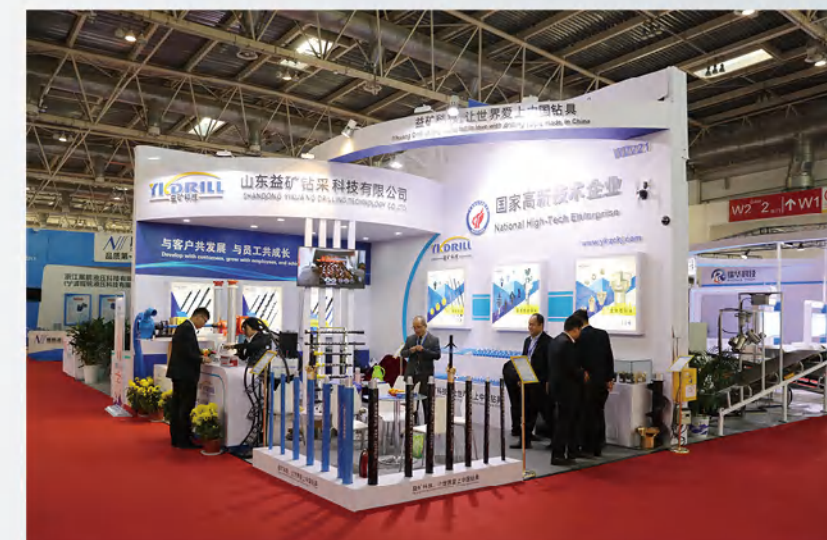
E 企业荣誉

Enterprise honor



C 公司风采

Company elegant demeanour



Drilling Machine Series
钻机设备类产品

01

- 01-02 数字化多参数液压履带钻机
Digital multi parameter hydraulic crawler drilling rig
- 03-04 煤矿用履带式全液压折叠钻机
Crawler type fully hydraulic folding drilling rig for coal mines
- 05-06 煤矿用履带式全液压定向钻机
Crawler type fully hydraulic directional drilling rig for coal mines
- 07-08 煤矿用履带式全液压定向钻机
Crawler type fully hydraulic directional drilling rig for coal mines
- 09-10 煤矿用履带式全液压变径定向钻机 /Crawler type fully hydraulic variable diameter directional drilling rig for coal mines
- 11-12 煤矿用液压机械造穴钻机 /
Hydraulic mechanical hole drilling rig for coal mine
- 13-14 煤矿用履带式全液压坑道钻机 /
Coal mining Crawler full hydraulic tunnel drilling rig
- 15-16 气动履带式钻机 /Pneumatic crawler drilling rig
- 17-18 煤矿巷道履带式清渣装载机 /
Crawler-type slag cleaning loader for coal mine roadway
- 19-20 矿用孔内雾化灭尘降温系统 /
In-hole atomization dust suppression and cooling system for mining
- 21-22 机械式煤层造穴泄压装置 /
Mechanical coal seam caving pressure relief device

Drill pipe series
钻杆类产品

02

- 23-24 中心通缆钻杆 / Central cable drill pipe
- 25-26 无磁钻具 /Non magnetic drilling tool
- 27-28 反循环煤粉取样装置 /
Reverse circulation pulverized coal sampling device
- 29-30 异型多棱刻槽钻杆 /Special-shaped grooved drill pipe
- 31-32 地质勘探钻杆 /Geological drill pipe
- 33-34 地质螺旋钻杆 /Spiral geological drill rod
- 35-36 高效螺旋钻杆 /High efficiency spiral drill rod
- 37-38 三棱钻杆 /Prismatic drill rod
- 39-40 (本体) 肋骨钻杆 /Thick spiral drill pipe/Groove drill rod
- 41-42 新型煤 (麻花) 钻杆 /New type (spiral) coal drill rod
- 43-44 锚索钻杆 / 风钻杆 (成品杆)
Anchor drill rod / Rock dirll rod (Integral drill rod)
- 45-46 重型凿岩杆 /Heavy rock drilling rod

03

钻头类产品 Drill Bit Series

- 47-48 金刚石钻头 /Diamond bit
- 49-50 硬质合金煤岩钻头 /Tungsten carbide drill bit
- 51-52 风钻头 /Rock drill bit
- 53-54 潜孔钻头 /DTH drill bit
- 55-56 截齿工程刀具 /Cutting Pick
- 57-58 三牙轮钻头 /Tricone Drill bit

- 59-60 连接器 / 岩心接头 / 配件 /Connector,Jonit, Adapror
- 61-62 注水器 /Water swivel

配件类产品 Accessories series

04



◎数字化多参数液压履带钻机
Digital multi parameter hydraulic crawler drilling rig

我公司最新研发生产的数字化多参数液压履带钻机 CMS1-7500/75，是以电机为动力源、双液压马达驱动履带行走、变量柱塞泵带动减速箱驱动钻具，适于在矿井下进行施工 500m 以内的深孔钻探作业、通过内置的造穴系统，配合芯杆造穴钻具，可实现终孔直径 400mm 的扩孔造穴作业。该钻机由工作机构、操纵台、车架总成、行走机构、液压系统和电器系统等组成。

我公司在该款钻机的基础上，通过加装矿用隔爆兼本安控制箱、矿用本安型钻杆射频识别计数装置主机、矿用煤层瓦斯压力无线测定仪、矿用本安型无线振动压力传感器等仪器原件，配合芯片钻杆数据动态采集、数据传输与处理等先进技术，可实现钻具智能识别、钻孔进尺实时记录、钻具全生命周期追踪及报废管理、煤层识别等功能。

通过将超高频 RFID 电子芯片嵌入封装在钻杆接头处构成具有独特身份信息的芯片钻杆，根据煤矿井下钻孔施工实际情况开发了钻孔数字管理的软硬件系统，并在实验室对芯片钻杆进行了静态和动态读取试验。

试验结果表明，研发的钻孔数字管理系统能够准确、便捷地采集钻杆数据、钻孔进尺等关键信息，可靠性高，有助于提高煤矿井下钻孔施工监管的数字化管理水平，在钻具管理与配置优化、安全生产等方面也具有重要的工程应用价值。

Our company' s latest digital multi parameter hydraulic crawler drilling rig CMS1-7500/75 is powered by an electric motor, driven by dual hydraulic motors to move the crawler, and driven by a variable displacement piston pump to drive the gearbox to drive the drilling tool. It is suitable for deep hole drilling operations within 500m in underground mines. With the built-in drilling system and core rod drilling tool, it can achieve hole enlargement and drilling operations with a final hole diameter of 400mm. The drilling rig consists of a working mechanism, a control panel, a frame assembly, a walking mechanism, a hydraulic system, and an electrical system.

On the basis of this drilling rig, our company has installed mining explosion-proof and safety control box, mining intrinsic safety drill rod radio frequency identification counting device host, mining coal seam gas pressure wireless measuring instrument, mining intrinsic safety wireless vibration pressure sensor and other instrument components, combined with advanced technologies such as chip drilling rod data dynamic acquisition, data transmission and processing, to achieve intelligent identification of drilling tools, real-time recording of drilling footage, full life cycle tracking and scrap management of drilling tools, coal and rock identification and other functions.

A chip drill pipe with unique identity information was developed by embedding and packaging ultra-high frequency RFID electronic chips at the drill pipe joint. Based on the actual situation of underground drilling construction in coal mines, a software and hardware system for digital management of drilling was developed, and static and dynamic reading tests were conducted on the chip drill pipe in the laboratory. The experimental results show that the developed drilling digital management system can accurately and conveniently collect key information such as drill pipe data and drilling footage, with high reliability, which helps to improve the digital management level of underground drilling construction supervision in coal mines. It also has important engineering application value in drilling tool management and configuration optimization, safety production, and other aspects.

技术参数 Technical Parameters

项目		单位	CMS1-7500/75
整机性能	主机水平打钻高度（包含立柱加长部件）		mm1350-2500
	工作状态稳车工作宽度		mm1100
	运行状态尺寸（长 × 宽 × 高）		mm5000×1100×1850（±50）
	钻孔直径		mm80-250
	钻孔深度		m600
	冲洗水压力		MPa0.6-1.2
	适用钻具		mmΦ89/φ73
	机重		kg6500
	接地比压		MPa0.082
	离地间隙		mm250
	工作电压		V660/1140
	工作电流		A80.6/46.5
	噪声	声功率级	125
		操作点声压级	95
回转机构	装机功率		kW75
	类型特征		-变量马达
	额定转矩		N·m7500
	额定转速		r/min60
	额定工作压力		MPa25
	额定工作流量		L/min167
	最大工作压力		MPa25
给进装置	类型特征		-导轨式液压缸
	工作压力		MPa25
	工作流量		L/min40
	推进行程		mm850
	推进器长度		mm2300
	推进力		kN210
	起拔力		kN210
	推进速度		m/min15
	空载返回速度		m/min15
	俯仰角度		(°)±180
	回转角度		(°)±180
行走机构	水平提升高度		mm1235
	行走方式		-履带式
	驱动机构类型		-液压马达驱动
	工作压力		MPa20
	工作流量		L/min45
	行走速度		m/min22
	爬坡能力		(°)±20
	履带板宽度		mm250
	额定工作压力		MPa28/26
	额定工作流量		L/min170/41
泵站	电动机	额定功率	kW75
		额定电压	V660/1140
		额定电流	A79.6/46
		额定转速	r/min1480
	油泵	类型	-变量柱塞泵
		额定压力	MPa25
	油箱	排量	ml/r115/28
		有效容积	L250



◎煤矿用履带式全液压折叠钻机

Crawler type fully hydraulic folding drilling rig for coal mines

ZDY1250L 煤矿用履带式全液压折叠钻机属于履带自行式,具有结构合理、动力强劲、操作灵活、占地面积小、重量轻、移机快、效率高、固定可靠、维护方便等特点,适于在煤矿井下狭窄、低矮巷道进行钻扩孔作业、用于冲击地压治理、山顶炮孔、探放水孔、瓦斯抽放孔、注浆孔、地质勘探孔及其他工程孔,钻机可进行折叠,低位孔作业优势明显,是矿山、煤矿钻探作业的理想适用机型。

该钻机是一种以液压为动力,配有履带式行走结构的微型深孔钻机。它主要由履带总成、底盘总成、驱动总成、支顶总成、操纵总成、立柱总成、主机总成、胶管总成等部分组成。具有水平和竖直 $\pm 180^\circ$ 调节角度钻孔等优点。

The ZDY1250L coal mine crawler fully hydraulic folding drilling rig belongs to the crawler self-propelled type, which has the characteristics of reasonable structure, strong power, flexible operation, small footprint, light weight, fast relocation, high efficiency, reliable fixation, and easy maintenance. It is suitable for drilling and expanding holes in narrow and low tunnels underground coal mines, as well as for impact ground pressure control, mountain top blasting holes, exploration and drainage holes, gas drainage holes, grouting holes, geological exploration holes and other engineering holes. The drilling rig can be folded, and the advantages of low hole operation are obvious. It is an ideal model for mining and coal mine drilling operations.

This drilling rig is a micro deep hole drilling rig powered by hydraulic pressure and equipped with a tracked walking structure. It mainly consists of track assembly, chassis assembly, drive assembly, support assembly, control assembly, column assembly, main engine assembly, rubber hose assembly and other parts. It has the advantages of horizontal and vertical $\pm 180^\circ$ adjustable angle drilling.

技术参数 Technical Parameters

序号		项目	单位	参 数
		型号	-	ZDY1250L
1	整机	回转额定压力	MPa	20
2		回转额定流量	L/min	55
3		额定转矩	N. m	1250
4		额定转速	r/min	60-200
5		噪声	dB(A)	92
6		钻孔倾角	°	± 180
7		钻杆直径	mm	$\phi 50/\phi 63$
8		最小工作高度	mm	750 ± 10
9		最大工作高度	mm	1580 ± 10
10		外形尺寸 (行走状态)	mm	$1950 \times 800 \times 1400 (\pm 20)$
11		质量	kg	1800
12		类型	-	液压回转
13		工作压力	MPa	20
14		工作流量	L/min	104
15		推进行程	mm	650
16		推进速度	m/min	18
17		空载返回速度	m/min	18.6
18	泵站	推进力	kN	40
19		起拔力	kN	60
20		额定压力	MPa	20
21		额定流量	L/min	104
22		电机型号	—	YBK3-180L-4
23		额定电压	V	660/1140
24		额定电流	A	23.8/13.7
25	行走机构	额定功率	kW	20
26		油箱容积	L	120
27		行走方式	-	履带式
28		工作压力	MPa	15
29		工作流量	L/min	10
30		行走速度	m/min	20
31		爬坡能力	(°)	± 20
32		履带板宽度	mm	180



◎煤矿用履带式全液压定向钻机

Crawler type fully hydraulic directional drilling rig for coal mines

我公司生产的煤矿用履带式全液压定向钻机，适用于孔底马达定向钻进、孔口回转钻进以及复合钻进等多种施工工艺。可用于煤矿瓦斯抽采钻孔施工、井下探放水施工、地质构造和煤层厚度探测、煤层注水、顶板注浆、冲击地压治理等各类高精度定向钻孔的施工，在大直径高位钻孔施工方面具有突出优势。

产品特点：

1. 集成智能化、模块化设计，功能丰富、性能可靠、钻进能力强、结构紧凑、操作方便、布局合理，适用于各种断面的平、斜巷道等复杂工程场景施工；
2. 钻机液压系统主要元件采用国际知名品牌，设置有多种联动系统，具有钻进保护、钻杆螺纹保护、节流快开等逻辑回路，可有效提高钻机工作效率；
3. 采用全液压传动系统，操作灵活方便，具有精准的控制能力，使得设备具有良好的动力和转向性能，可以实现精确定位和定向钻进，能够适应各种地质条件下的钻探作业；
4. 采用多泵系统分别独立工作，回转参数与给进参数可以独立调节，配套使用恒功率控制、负载敏感和恒压变量控制方式，有效降低钻机工作时的能耗；
5. 井下随钻数据实时采集与传输，实现钻机钻孔施工孔口供电随钻测量系统采集的轨迹参数如孔深、倾角、方位角、上下位移、左右位移等关键数据，通过 TCP/IP 协议及矿区工业环网实时传输至地面服务器；
6. 可满足钻孔施工信息监测，实现煤矿井下钻孔施工轨迹参数的信息监测，如：施工时间、进尺情况、施工进度情况，以便记录、查询及追溯；
7. 可根据井下实时上传的钻孔施工情况进行数据分析整理后，生成当班、日、周、月等施工进度信息报表，可下载后打印纸质报表进行记录与审批。

Our company produces a tracked fully hydraulic directional drilling rig for coal mines, which is suitable for various construction processes such as bottom motor directional drilling, hole rotary drilling, and composite drilling. It can be used for high-precision directional drilling construction in coal mine gas extraction drilling, underground water exploration and drainage construction, geological structure and coal seam thickness detection, coal seam water injection, roof grouting, and impact ground pressure control. It has outstanding advantages in large-diameter high-level drilling construction.

Product features:

1. Integrated intelligent and modular design, with rich functions, reliable performance, strong drilling ability, compact structure, easy operation, and reasonable layout, suitable for construction in complex engineering scenarios such as flat and inclined tunnels with various cross-sections;
2. The main components of the hydraulic system of the drilling rig are internationally renowned brands, equipped with various linkage systems, including drilling protection, drill pipe thread protection, throttling and quick opening logic circuits, which can effectively improve the working efficiency of the drilling rig;
3. Adopting a fully hydraulic transmission system, the operation is flexible and convenient, with precise control capabilities, making the equipment have good power and steering performance, which can achieve precise positioning and directional drilling, and can adapt to drilling operations under various geological conditions;
4. Adopting a multi pump system that works independently, the rotation parameters and feed parameters can be adjusted independently, and the matching use of constant power control, load sensitivity, and constant pressure variable control methods effectively reduces the energy consumption of the drilling rig during operation;
5. Real time collection and transmission of underground drilling data, realizing the trajectory parameters such as hole depth, inclination angle, azimuth angle, up and down displacement, left and right displacement collected by the power supply measurement system for drilling construction holes, and transmitting them to the ground server in real time through TCP/IP protocol and industrial environment network in the mining area;
6. It can meet the monitoring of drilling construction information and realize the monitoring of underground drilling construction trajectory parameters in coal mines, such as construction time, footage, and construction progress, for the purpose of recording, querying, and tracing;
7. After analyzing and organizing the real-time drilling construction data uploaded underground, construction progress information reports such as on duty, daily, weekly, and monthly can be generated. Paper reports can be downloaded and printed for recording and approval.

技术参数 Technical Parameters

项 目		单位	ZYWL-8000D
钻孔深度		m	≤ 1000
开孔直径		mm	120
终孔直径		mm	120/133/153/193/203/253
夹持范围		mm	69~96
打捞夹持范围		mm	87~96; 124~130
开孔倾角		°	-5~+20
额定转速		r/min	0~210
推进力		KN	305
起拔力		KN	305
推进速度		m/min	1.5
起拔速度		m/min	1.5
推进行程		mm	1200
泵站	额定功率	KW	90
	油箱有效容积	L	250
行走机构	行走方式	/	履带式
	行走速度	m/min	30
	爬坡能力	°	20
主机外形尺寸 (长 x 宽 x 高)		mm	3980X1600X1800
主机重量		Kg	11000



◎煤矿用履带式全液压定向钻机

Crawler type fully hydraulic directional drilling rig for coal mines

我公司生产的煤矿用履带式全液压定向钻机，适用于孔底马达定向钻进、孔口回转钻进以及复合钻进等多种施工工艺。可用于煤矿瓦斯抽采钻孔施工、井下探放水施工、地质构造和煤层厚度探测、煤层注水、顶板注浆、冲击地压治理等各类高精度定向钻孔的施工，在大直径高位钻孔施工方面具有突出优势。

产品特点：

1. 集成智能化、模块化设计，功能丰富、性能可靠、钻进能力强、结构紧凑、操作方便、布局合理，适用于各种断面的平、斜巷道等复杂工程场景施工；
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3. 采用全液压传动系统，操作灵活方便，具有精准的控制能力，使得设备具有良好的动力和转向性能，可以实现精确定位和定向钻进，能够适应各种地质条件下的钻探作业；
4. 采用多泵系统分别独立工作，回转参数与给进参数可以独立调节，配套使用恒功率控制、负载敏感和恒压变量控制方式，有效降低钻机工作时的能耗；
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7. 可根据井下实时上传的钻孔施工情况进行数据分析整理后，生成当班、日、周、月等施工进度信息报表，可下载后打印纸质报表进行记录与审批。

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Product features:

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6. It can meet the monitoring of drilling construction information and realize the monitoring of underground drilling construction trajectory parameters in coal mines, such as construction time, footage, and construction progress, for the purpose of recording, querying, and tracing;
7. After analyzing and organizing the real-time drilling construction data uploaded underground, construction progress information reports such as on duty, daily, weekly, and monthly can be generated. Paper reports can be downloaded and printed for recording and approval.

技术参数 Technical Parameters

项 目		单位	ZYWL-15000D
钻孔深度		m	≤ 1500
开孔直径		mm	120
终孔直径		mm	120/133/153/193/203/253
夹持范围		mm	69~96
打捞夹持范围		mm	87~96; 124~130
开孔倾角		°	-10~20
额定转速		r/min	46-150
推进力		KN	300
起拔力		KN	300
推进速度		m/min	1.5
起拔速度		m/min	1.5
推进行程		mm	1200
泵站	额定功率	KW	132
	油箱有效容积	L	450
行走机构	行走方式	/	履带式
	行走速度	m/min	25
	爬坡能力	°	20
主机外形尺寸 (长 x 宽 x 高)		mm	3980X1680X1800
主机重量		Kg	15000



◎煤矿用履带式全液压变径定向钻机

Crawler type fully hydraulic variable diameter directional drilling rig for coal mines

ZYWL-6500DB 煤矿用履带式全液压变径定向钻机是我公司最新研发的一款新型普钻升级定向钻机。主要用于煤矿瓦斯抽采钻孔施工，也可用于井下探放水、地质构造和煤层厚度探测、煤层注水、顶（底）板注浆等各类高精度 350m 以内中短距离定向钻孔的施工，该钻机采用分体式结构，主要由钻机主机、泥浆泵车、随钻测量装置、变径刻槽螺旋钻杆等组成。

ZYWL-6500DB tracked full hydraulic variable diameter directional drilling rig for coal mines is our company's latest research and development of a new type of upgraded directional drilling rig for general drilling. Mainly used for coal mine gas extraction drilling construction, it can also be used for underground water exploration and drainage, geological structure and coal seam thickness detection, coal seam water injection, top (bottom) plate grouting, and other high-precision short and medium distance directional drilling construction within 350m. The drilling rig adopts a split structure, mainly composed of the drilling rig host, mud pump truck, while drilling measurement device, variable diameter groove spiral drilling rod, etc.

技术参数 Technical Parameters

ZYWL-6500DB 煤矿用履带式全液压变径定向钻机

项目	单位	规格
外形尺寸 (长 × 宽 × 高)	mm	4500×1500×2750
重量	kg	7000
钻孔深度	m	500
成孔直径	mm	φ98
给进行程	mm	600
钻杆规格	mm	φ73-φ89
钻孔倾角	°	-90~+90
锚固力	kN	160
额定输出转速	r/min	60-200
额定输出转矩	N·m	1600-6000
制动力矩	N·m	2400
推进力	kN	140
起拔力	kN	140
进给速度	m/min	0-12
起拔速度	m/min	0-12
额定压力	MPa	28
电机功率	kW	55
油箱有效容积	L	200
行走速度	m/min	12
爬坡能力	°	15

BLY500 矿用履带式泥浆泵车

项目	单位	规格
外形尺寸 (长 × 宽 × 高)	mm	3480×1300×1650
重量	kg	5500
电机功率	kW	110
最大输出流量	L/min	500
最大输出水压力	MPa	10
油泵排量	ml/r	190
油泵调定压力	MPa	22
泥浆泵排量	ml/r	190
爬坡能力	°	20

YSX1-1000 矿用随钻测量装置

项目	单位	规格
方位角	°	0~360° (±1.5°)
工具面向角	°	0~360° (±1.5°)
倾角	°	-90~+90° (±0.2°)

螺杆马达

项目	单位	规格
规格	mm	φ73
弯头角度	°	1.25



◎煤矿用液压机机械造穴钻机 / Hydraulic mechanical hole drilling rig for coal mine

我公司针对巷道泄压治理、瓦斯抽放治理等工程泄压治理难度大、瓦斯抽放治理效率低的实际情况，最新研发生产的煤矿用机械造穴装备。

煤矿用液压机机械造穴钻机系我公司发明专利产品，专利号：CN202010922779.8、CN202010890623.6，该装备采用液压机机械顶杆式控制原理，广泛应用于煤矿巷道岩层扩孔造穴泄压、煤矿软岩扩孔支护、冲击地压治理和切顶卸压，以及高瓦斯松软煤层的瓦斯防治孔底造穴工程。

该装备采用孔外液压机机械控制原理，使全方位液压履带钻机可提供液压顶杆驱动功能，并布置对应的控制阀组，利用控制阀组进行液压油路及冷却水、风的控制，根据不同施工需要搭配机械芯杆传动钻杆进行推力驱动的远距离高推力输出，使机械扩孔器通过机械顶杆式钻杆（专利号：CN202021510251.1）在造穴目标位置主动打开，造穴完毕后主动关闭。大大提高了造穴工程孔外控制水平。

其主要性能、技术指标在于：

- 1、采用液压机机械控制，使用静压水，无需高压泵站即可完成造穴；
- 2、使用范围广泛，可满足岩巷道造穴卸压、煤层造穴施工需求；
- 3、造穴的孔外机械控制，大大提高了造穴工程的成功率；
- 4、在200米以内深孔钻探中，造穴数量可达到8个以上（同等工矿条件下高压水射流工艺普遍造穴4个左右，每个造穴出煤量1m³）；
- 5、施工成本综合降低，施工效率提高一倍以上。
- 6、能够减少水力造穴产生的高压用水，促进对井下工作面的正规化治理，节约污水处理费用。

Our company has newly developed and produced mechanical cave-making equipment for coal mines in response to the difficult and low efficiency of gas drainage in engineering pressure relief management such as roadway pressure relief management and gas drainage management.

The crawler full hydraulic tunnel drilling rig for coal mines is a patented product of our company, patent numbers: CN202010922779.8, CN202010890623.6. The equipment adopts the hydraulic mechanical ejector type control principle, and is widely used in mine tunnels and rock formations to create caverns and relieve pressure. Mine soft rock reaming support, rock burst control and roof cut pressure relief, as well as gas prevention and cavitation at the bottom of the high gassy soft coal seam.

The equipment adopts the principle of hydraulic mechanical control outside the hole, so that the omni-directional hydraulic crawler drilling rig can provide hydraulic jack drive function, and arrange the corresponding control valve group. The control valve group is used to control the hydraulic oil circuit, cooling water, and wind. The construction needs to be matched with the mechanical core rod transmission drill rod for thrust-driven long-distance high thrust output, so that the mechanical reamer is actively opened at the target location of the cave through the mechanical jack-type drill rod (patent number: CN202021510251.1), and the cave is completed. Actively shut down afterwards. Greatly improve the external control level of the hole-making project.

Its main performance and technical indicators are:

1. Using hydraulic mechanical control and static pressure water, the hole can be created without the need for a high-pressure pump station;
2. Widely used, it can meet the needs of rock tunnel excavation pressure relief and coal seam excavation construction;
3. The external mechanical control of hole making greatly improves the success rate of hole making engineering;
4. In deep hole drilling within 200 meters, the number of holes can reach more than 8 (under the same industrial and mining conditions, high-pressure water jet technology generally creates about 4 holes, with each hole producing 1 meter of coal)³⁾；
5. The construction cost has been comprehensively reduced, and the construction efficiency has been more than doubled.
6. It can reduce the high-pressure water generated by hydraulic drilling, promote the standardized management of underground working faces, and save sewage treatment costs.

性能参数 Technical Parameters

序 号	钻机型号	钻杆型号	钻头型号	扩孔直径
1	ZQLC-1050/15.3S	Φ50mm Φ69mm Φ76mm Φ89mm	Φ75mm Φ110mm Φ125mm Φ150mm	Φ200-400mm
2	ZQLC-1900/16.9S	Φ63.5mm Φ69mm Φ76mm Φ89mm	Φ75mm Φ110mm Φ125mm Φ150mm	Φ200-400mm
3	ZQLC-2100/17.5S	Φ63.5mm Φ69mm Φ76mm Φ89mm	Φ75mm Φ110mm Φ125mm Φ150mm	Φ200-400mm
4	ZDY3250L	Φ63.5mm Φ73mm	Φ94mm Φ113mm	Φ300-500mm
5	ZDY3600L	Φ63.5mm Φ73mm	Φ94mm Φ113mm	Φ300-500mm
6	ZDY4100L	Φ73mm Φ89mm	Φ94mm Φ113mm	Φ300-500mm
7	ZDY4200L	Φ73mm Φ89mm	Φ94mm Φ113mm	Φ300-500mm
8	ZDY6500L	Φ73mm Φ89mm	Φ113mm Φ133mm	Φ350-550mm
9	ZDY8000L	Φ89mm	Φ113mm Φ133mm	Φ350-550mm



◎煤矿用履带式全液压坑道钻机 / Coal mining Crawler full hydraulic tunnel drilling rig

煤矿用履带式全液压坑道钻机为全液压力头式结构，由主机、泵站、操纵台三大部分组成。解体性好，拆迁方便，摆布灵活；回转器为通孔结构，钻杆长度不受钻机结构尺寸限制；机械拧卸钻具，卡盘、夹持器与油缸之间，回转器与夹持器之间可联动操作，自动化程度高，工作效率高。操作简便，工人劳动强度小。

ZDY1900 煤矿用履带式全液压坑道钻机主要用于瓦斯抽放孔、水文勘探及其它工程用孔的钻进施工。

ZDY2200、ZDY3200、ZDY4200 煤矿用履带式全液压坑道钻机主要用于煤矿井下水气害探查与治理钻孔、瓦斯抽（排）放孔、注浆防火孔、防突泄压孔、地质勘探孔及其他工程钻孔。

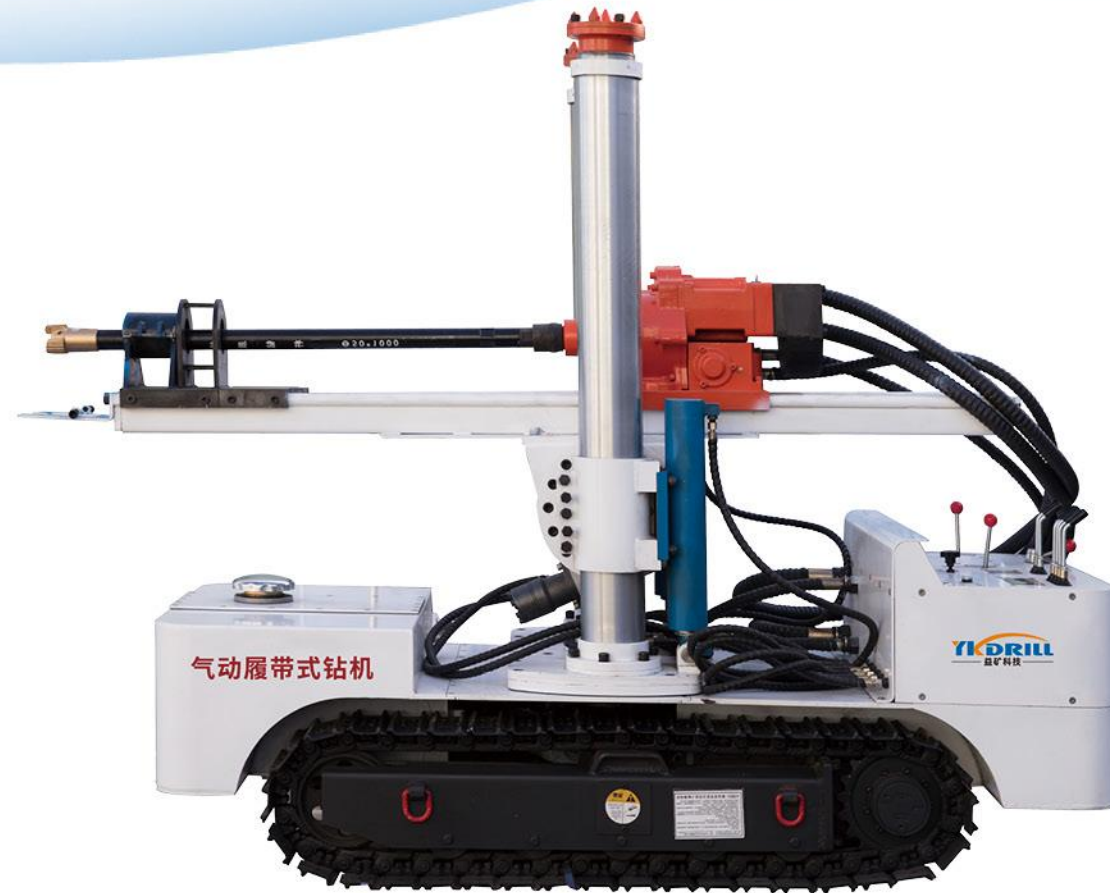
The coal mining crawler full hydraulic tunnel drilling rig is one rig with full hydraulic power head structure, composed of three parts: the host, the pump station and the console. It has Good dismantling, easy to remove and move, flexible arrangement parametes ; the structure of the gyrator a through-hole design, the length of the drill rod is not restricted by the structure size of the rig; mechanically unscrew the drill tool, between the chuck, the holder and the cylinder, the rotator and the holder It can be operated in linkage, with high degree of automation and high work efficiency. The operation is simple and less labor intensity of workers .

The ZDY1900 Coal mining crawler full hydraulic tunnel drilling rig is mainly used for the drilling of gas drainage holes, hydrological prospecting and other engineering holes.

ZDY2200, ZDY3200, ZDY4200 Coal mining crawler full hydraulic tunnel drilling rigs are mainly used for underground water and gas hazard detection and control drilling, gas drainage (drainage) holes, grouting and fire prevention holes, outburst pressure relief holes, geological exploration holes and Other engineering drilling.

技术参数 Technical Parameters

基本性能参数		单位	ZDY-2300LP	ZDY-4200LP	ZDY-6500LP	ZDY-8000LP
整机	回转额定压力	MPa	25	25	25	25
	回转额定流量	l/min	70	85	132	144
	额定转矩	N·m	2300-230	4200-1200	6500-1500	8000-1800
	额定转速	r/min	60-600	60-240	50-200	70-160
	噪声	dB(A)	92	95	100	100
	钻孔倾角	°	0±180	0±180	0±180	0±180
	钻杆直径	mm	Φ50 Φ63.5	Φ63.5 Φ73	Φ73 Φ89	Φ73 Φ89
	最小工作高度	mm	1330±10	1150	1150	1150
	最大工作高度	mm	2210±10	2150	2150	2150
	外形尺寸 (±20)	mm	2400×880×2010 (±20)	3500×1100×2800 (±50)	4400×1100×2950 (±50)	4400×1200×2950 (±50)
	质量	kg	3000	5500	6000	6500
	类型	—	液压回转	液压回转	液压回转	液压回转
	推进 / 起拔工作压力	MPa	22	25	25	25
	工作流量	l/min	22	29	65	65
	推进行程	mm	650	850	840	840
行走机构	推进速度	m/min	27	30	30	30
	空载返回速度	m/min	28.6	30	30	30
	推进力	kN	35	140	150	160
	起拔力	kN	60	140	200	200
	行走方式	mm	履带式	履带式	履带式	履带式
	工作压力	MPa	15	20	20	20
	工作流量	l/min	10	40	55	55
	行走速度	mm/min	18	12	12	12
	爬坡能力	(°)	±20	±15	±15	±15
	履带板宽度	mm	230	230	230	230
泵站	额定压力	MPa	26	30	30	30
	额定流量	l/min	75	100	130	150
	电机型号	—	YBKE3-200L-4	YBK3-250M-4	YBK3-280S-4	YBK3-280M-4
	额定电压	V	380/660/1140	660/1140	660/1140	660/1140
	额定电流	A	56.63/32.69/16.24	59.4/34.4	96.3/55.6	96.3/55.6
	额定功率	kW	30	55	75	90
	油箱容积	L	120	200	240	240



◎气动履带式钻机 / Pneumatic crawler drilling rig

ZQLC 型气动履带式钻机是一种以压缩空气为动力，配有履带式行走结构的轻型深孔钻机。适用于煤矿井下在煤层中的探水、探瓦斯、及抽放孔、泄压孔的施工。

它主要由履带总成、底盘总成、驱动总成、油箱总成、操纵总成、立柱总成、主机总成、胶管总成等部分组成。具有 360°水平角度钻孔 / 操作灵活，机动性能强，安全性能好等优点，最大程度上降低了工人的劳动强度。

The ZQLC pneumatic crawler drilling rig is a light-duty deep hole drilling rig that uses compressed air as power and is equipped with a crawler walking structure. It is suitable for the construction of water exploration, gas exploration, drainage holes and pressure relief holes in the coal seams of coal mines.

It is mainly composed of track assembly, chassis assembly, drive assembly, fuel tank assembly, control assembly, column assembly, main engine assembly, hose assembly and other parts. It has the advantages of 360°horizontal angle drilling/flexible operation, strong maneuverability, good safety performance, etc., which furthest reduces the labor intensity of workers.

技术参数 Technical Parameters

序号	基本性能参数		单位	ZQLC-2100/17.5S			ZQLC-1900/16.9S			ZQLC-1550/16.2S		
1	工作气压		MPa	0.4	0.5	0.63	0.4	0.5	0.63	0.4	0.5	0.63
2	额定转矩		N·m	1800	2100	2200	1700	1900	2100	1350	1500	1650
3	额定转速		r/min	70	80	85	75	85	90	90	100	110
4	额定输出功率		kW	13.1	17.5	19.5	13.3	16.9	19.7	12.7	16.2	19.0
5	最大负荷转矩		N·m	2400	2900	3300	2300	2800	3200	2000	2200	2600
6	动力失速转矩		N·m	2500	3000	3400	2400	2900	3300	2100	2300	2700
7	动力启动转矩		N·m	2450	2950	3350	2350	2850	3250	2050	2250	2650
8	负荷耗气量		m³/min	23	27	29	21	24	26	18	20	22
9	空载转速		r/min	200	220	230	210	240	260	240	270	290
10	1/2 空载转速		r/min	100	110	115	105	120	130	120	135	145
11	1/2 空载转速下转矩		N·m	1200	1500	1600	1100	1300	1400	900	1000	1100
10	钻孔直径		mm	76-150			76-150			76-150		
11	钻尾尺寸		mm	螺纹式			螺纹式			螺纹式		
12	推进力		kN	20			20			20		
13	导轨长度		mm	2170±20			2170±20			2170±20		
14	推进行程		mm	1370±20			1370±20			1370±20		
15	空载推进速度		mm/min	1200			1200			1200		
16	最大工作高度		mm	2000±20			2000±20			2000±20		
17	最小工作高度		mm	1210±20			1210±20			1210±20		
18	冲洗水压力		MPa	0.6-1.2			0.6-1.2			0.6-1.2		
19	噪声	声功率级	dB(A)	120			120			120		
		声压级	dB(A)	110			110			110		
20	主机重		kg	1700			1700			1700		
21	支撑机构机重		kg	300			300			300		
22	行走机构	工作压力	MPa	15			15			15		
		工作流量	L/min	23			23			23		
		行走速度	m/min	18			12			12		
		爬坡能力	(°)	±15°			±15°			±15°		
		离地间隙	mm	200			200			200		
		接地比压	MPa	0.04			0.04			0.04		
		履带宽度	mm	230			230			230		
23	液压泵站	气动马达	耗气量	m³/min	9.0			9.0			9.0	
			额定工作压力	MPa	0.5			0.5			0.5	
		油泵（齿轮式）	额定压力	MPa	16			16			16	
			排量	ml/r	16			16			16	
				油箱有效容积	L	100			100			100



◎煤矿巷道履带式清渣装载机 /
Crawler-type slag cleaning loader for coal mine roadway

我公司最新研发生产的煤矿巷道履带式清渣装载机 YKQZ-18.5L（简称清渣机），系我公司最新专利产品，该设备结构紧凑通过性强，广泛适用于隧道工程中掘进巷道、底抽巷道在采掘钻探施工中产生的矿渣、煤渣，自动化收集转载到矿车或输送皮带，实现高效清运转载施工。

煤矿巷道履带式清渣装载机，采用独立防爆电源、全液压动力系统配置，实现各动力单元的动作执行和履带行走。矿渣收集铲板在上下可调的基础上，采用收集拨轮宽度双向单控可调，提高了清场清渣宽度的方便性。收集铲板内的矿渣通过布置在操控台下的提升输送皮带输送到横向转载皮带。双向伸缩型横向转载皮带可进行左右出渣，在出渣方向发生变化时设备不需要调头即可作业。伸缩长度动态可调，充分保证了对矿车或皮带机转载的高适应性。

煤矿巷道履带式清渣装载机，可实现每小时 20-80 吨的清渣转载能力。大大降低了工人的劳动强度，节省底抽钻探施工周期、成倍提高掘进和钻探施工效率，是一款有效缓解钻采施工矛盾的理想装备。

The mine roadway crawler slag cleaning loader YKQZ-18.5L (referred to as slag cleaning machine) newly developed and produced by our company is the latest patented product of our company. This equipment has a compact structure and strong passability. It is widely used in tunnel engineering. The slag and coal slag generated in the mining and drilling construction of the pumping roadway are automatically collected and transferred to the mine cart or conveyor belt to achieve efficient cleaning and load construction.

Crawler-type slag cleaning loader in coal mine roadway adopts independent explosion-proof power supply and full hydraulic power system configuration to realize the action execution and crawler walking of each power unit. The slag collection shovel plate is adjustable up and down, and adopts the two-way single control and adjustable width of the collection wheel, which improves the convenience of clearing the slag width. The slag in the collecting shovel is transported to the horizontal transfer belt through the lifting conveyor belt arranged under the control console. The two-way telescopic transverse transfer belt can carry out left and right slag discharge, and the equipment does not need to turn around when the slag discharge direction changes. The telescopic length is dynamically adjustable, which fully guarantees the high adaptability to the reload of the mine cart or belt conveyor.

Crawler-type slag removal loader in coal mine tunnels can achieve a slag removal and reloading capacity of 20-80 tons per hour. It greatly reduces the labor intensity of workers, saves the construction period of bottom extraction drilling, and doubles the efficiency of tunneling and drilling construction. It is an ideal equipment to effectively alleviate the contradiction between drilling and mining construction.

性能参数 Technical Parameters

序 号	基本性能参数	单位	YKQZ-18.5L
1	外形尺寸（±20）	mm	2500*1000*1800
2	噪 音	dB (a)	100
3	质 量	Kg	2300
4	类 型	-	履带式
5	行走速度	m/min	18
6	爬坡能力	°	±15°
7	额定功率	kW	18.5
8	额定电压	V	660/1140
9	额定电流	A	51/30
10	邮箱容积	L	200L
11	行走方式	橡胶履带	履带宽度 200mm
12	清渣能力	T	20-80



◎矿用孔内雾化灭尘降温系统 /

In-hole atomization dust suppression and cooling system for mining

矿用孔内雾化灭尘降温系统是针对孔内雾化除尘、为气动马达降温的一种专用装置。本系统由 GLD 电磁流量计、CK 矿用气体流量计、压力表、不锈钢高压球阀、J13W-160P 耐高压截止阀、雾化喷头等组成，具有高压空气流量显示、高压水流量显示和两种介质的混合流量配比调节功能，满足钻孔内雾化降尘的要求和冷却空气马达的目的。

The in-hole atomization dust removal and cooling system for mining is a specialized device designed for in-hole atomization dust removal and cooling of pneumatic motors. This system consists of GLD electromagnetic flow meter, CK mining gas flow meter, pressure gauge, stainless steel high-pressure ball valve, J13W-160P high-pressure stop valve, atomization nozzle, etc. It has functions such as high-pressure air flow display, high-pressure water flow display, and mixed flow ratio adjustment of two media, meeting the requirements of atomization and dust reduction in drilling and the purpose of cooling the air motor.

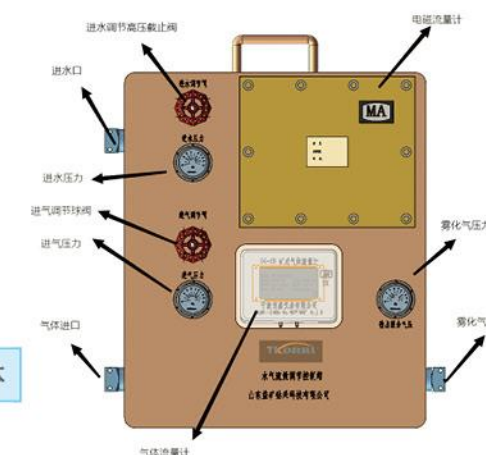
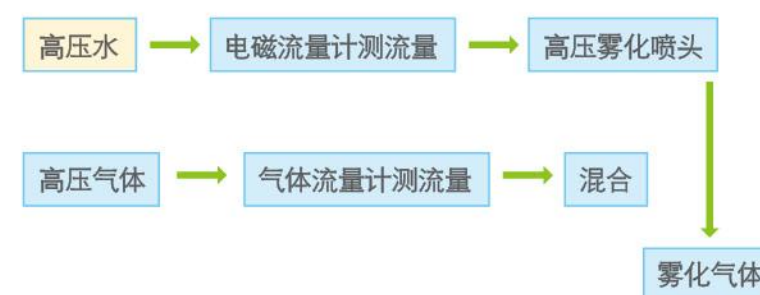
性能参数 Technical Parameters

1. 通水压力 Water pressure: 2MPa-16MPa;
2. 通气压力 Ventilation pressure: ≤ 2 MPa;
3. 工作电压 Working voltage: AC 127V;
4. 工作电流 Working current: ≤ 200 mA;
5. 适用管径 Applicable pipe diameter: DN25;
6. 最高流速 Maximum flow rate: 12m/s;
7. 输出信号制式 Output signal format: 4 ~ 20mA, RS485, 脉冲信号;
8. 最大负载电阻 Maximum load resistance: 500 Ω ;
9. 测量误差 Measurement error: $\pm 0.5\%$;
10. 重复性 Repeatability: $\leq 0.15\%$;
11. 测量方式 Measurement method: 管道式。
12. 流量计的型号规格及基本参数见下表 The model specifications and basic parameters of the flow meter are shown in the table below

规格型号	口径 DN(mm)	流量范围 m ³ /h(或 m ³ /min)33	壳体压力等级 (MPa)
CK-50	50	2-30(0.03-0.5)	2
		6-100 (1-1.67)	

工作原理:

原理示意图:





◎机械式煤层造穴泄压装置 / Mechanical coal seam caving pressure relief device

我公司最新研发的机械式煤层造穴泄压装置（专利号：ZL202010922779.8、专利号：ZL202010890623.6），广泛用于高瓦斯煤矿本煤层及穿层钻孔的扩孔造穴施工、冲击地压治理造穴施工，尤其是高瓦斯松软煤层瓦斯防治孔底造穴工程钻探领域。

Our company's latest research and development of mechanical coal seam cave making and pressure relief device (patent number: ZL202010922779.8, patent number: ZL202010890623.6) is widely used in the expansion and hole making construction of high gas coal seams and through layer drilling, as well as the construction of rock burst pressure control cave making, especially in the field of gas prevention and control hole bottom cave making engineering drilling in high gas loose and soft coal layers.

系列产品主要特点 Main features of the series of products

- 1、采用液压机械控制，无需高压泵站，大幅降低设备投入和高压安全风险；
- 2、造穴孔外机械控制，刀翼开合可视化主动控制，大大降低煤岩交替构造刀具损坏风险；
- 3、使用范围广，可满足上倾孔、水平孔、-15 度以内下倾孔、F4 以内的中硬及松软煤层大直径造穴，及 F8 以内小直径松软岩层造穴施工；
- 4、机械造穴工艺，用水量少，对煤层稳定性扰动低，显著提高扩孔造穴成孔率，效率是高压水力造穴的 2 倍以上。

1. Adopting hydraulic mechanical control without the need for high-pressure pumping stations, significantly reducing equipment investment and high-pressure safety risks;
2. Mechanical control outside the hole, visual active control of blade opening and closing, greatly reducing the risk of tool damage in coal rock alternating structures;
3. Widely used, it can meet the requirements of hole construction in upward inclined holes, horizontal holes, downward inclined holes within -15 degrees, large diameter hole construction in medium hard and soft coal seams within F4, and small diameter hole construction in soft rock layers within F8;
4. The mechanical hole making process requires less water and has low disturbance to the stability of coal seams, significantly improving the rate of hole expansion and hole formation, with an efficiency more than twice that of high-pressure hydraulic hole making.

技术参数 Technical Parameters

序号	装置型号	尺寸 (mm)	功率	适配钻机	适配钻杆	适配钻头	扩孔直径
1	KXJ-1450-400	800×500×840	2.2KW	1450N·m	Φ76mm Φ89mm 螺旋钻杆	Φ110mm Φ150mm 组合钻头	Φ200-400mm
2	KXJ-2300-400	800×500×840	2.2KW	2300N·m	Φ63.5mm	Φ94mm	Φ200-400mm
3	KXJ-3200-400	800×500×840	2.2KW	3200N·m	Φ73mm	Φ113mm	Φ200-500mm
4	KXJ-4500-400	800×500×840	2.2KW	4500N·m	Φ73mm	Φ113mm	Φ200-500mm
5	KXJ-5000-400	800×500×840	2.2KW	5000N·m	Φ73mm	Φ113mm	Φ200-500mm
6	KXJ-5500-400	800×500×840	2.2KW	5500N·m	Φ73mm	Φ113mm	Φ200-500mm
7	KXJ-6000-400	800×500×840	2.2KW	6000N·m	Φ73mm	Φ113mm	Φ200-500mm
8	KXJ-6500-400	800×500×840	2.2KW	6500N·m	Φ73mm Φ89mm	Φ113mm Φ133mm	Φ200-500mm
9	KXJ-7000-400	800×500×840	2.2KW	7000N·m	Φ73mm Φ89mm	Φ113mm Φ133mm	Φ200-500mm
10	KXJ-7500-400	800×500×840	2.2KW	7500N·m	Φ89mm	Φ133mm	Φ200-500mm
11	KXJ-8000-400	800×500×840	2.2KW	8000N·m	Φ89mm	Φ133mm	Φ200-500mm



技术参数 Technical Parameters

行号	规格型号				通水压力	钻杆螺旋	钢级
	钻杆直	长度	绝缘连接体电阻	信号传输导体电阻			
1	Φ70mm	1500-3000mm	≥ 500MΩ	0.5-1.5Ω	7-30Mpa	外平型、本体铰销型	G105、S135
2	Φ73mm	1500-3000mm	≥ 500MΩ	0.5-1.5Ω	7-30Mpa	外平型、本体铰销型	G105、S135
3	Φ89mm	1500-3000mm	≥ 500MΩ	0.5-1.5Ω	7-30Mpa	外平型、本体铰销型	G105、S135
4	Φ127mm	1500-3000mm	≥ 500MΩ	0.5-1.5Ω	7-30Mpa	外平型、螺旋缠绕型	G105、S135

◎中心通缆钻杆 / Central cable drill pipe

◎ 产品简介

中心通缆钻杆又称做定向钻杆或随钻测量钻杆，主要应用于千米定向钻机进行深孔定向钻进。是一种煤矿井下坑道定向钻进及地质受控定向钻探施工中的重要钻具，在煤矿井下煤层测量、瓦斯抽取施工中发挥重要作用。

定向钻进技术是目前世界上最先进的钻进方法之一，是利用钻孔自然弯曲规律或采用人工造斜工具使钻孔按设计要求延伸钻到预定目标的一种钻进方法，可以按照预先设计的钻进轨迹钻进至指定位置。

中心通缆钻杆是定向钻进所使用的信号传输装置，也是保证定向钻进顺利实施的重要组成部分。由于钻杆使用环境恶劣，对信号传输的质量和杆体性能稳定有着更高的要求。

◎ 产品优势

钻杆制造工艺分为接头加厚一体型和摩擦焊接型，接头采用特殊热处理工艺，具有较高的强度和硬度，螺纹采用特殊牙型，保证连接的安全可靠，钻杆体采用符合 API 标准的 G105、S135 石油管进行生产，通过整体调质处理，可提高整体力学性，延长使用寿命，通缆接头采用进口 PPR（100）级全新原料定制加工，模具精度高，密封效果高于同类产品，通信线缆为进口特殊导体铜合金线缆，可以应对各种极端使用环境。精准的选材不仅保证了品质的稳定还延长了钻杆的使用寿命。

◎ 应用范围

中心通缆钻杆一般要求在完整的煤层（ $f \geq 1$ ）或稳定的岩层（ $f \leq 6$ ）中施工；主要用于煤矿井下近水平长距离瓦斯抽放钻孔、探放水钻孔施工，也可用于地面和坑道近水平工程钻孔等定向钻孔施工。主要应用于煤矿井下定向钻进、煤矿井下回转钻进以及其他地质受控定向钻进工况，以及瓦斯抽放、煤气层开发、紧急救援、探测排放采空区积水及地质构造等。

◎ Product Introduction

The central cable drill pipe is also called directional drill pipe or measurement while drilling drill pipe, which is mainly used for deep hole directional drilling of kilometer directional drill rigs. It is an important drilling tool in coal mine underground tunnel directional drilling and geological controlled drilling. It plays an important role in coal mine underground coal seam measurement and gas extraction construction.

Directional drilling technology is one of the most advanced drilling methods in the world at present. It is a drilling method that uses the natural bending law of the drill hole or uses artificial deflection tools to extend the drill hole to the predetermined target according to the design requirements. The pre-designed drilling trajectory is drilled to the specified position.

The central cable drill rod is a signal transmission device used for directional drilling, and is also an important part of ensuring the smooth implementation of directional drilling. Due to the harsh environment of the drill pipe, there are higher requirements for the quality of the signal transmission and the stable performance of the rod body.

◎ product advantages

The manufacturing process of the drill rod is divided into a joint thickening type and a friction welding type. The joint adopts a special heat treatment process with high strength and hardness. The thread adopts a special tooth shape to ensure the safety and reliability of the link. The drill rod body adopts G105, S135 that meets the API standard. The production of oil pipes can improve the overall mechanical properties and extend the service life through the overall quenching and tempering treatment. The cable joints are customized and processed with imported PPR (100) grade new raw materials. The mold has high precision and the sealing effect is higher than similar products. Communication cables Imported special conductor copper alloy cables can cope with various extreme use environments. Accurate material selection not only ensures the stability of the quality but also extends the service life of the drill pipe.

◎ Application range

The central cable drill pipe generally requires construction in a complete coal seam（ $f \geq 1$ ）or a stable rock layer（ $f \leq 6$ ）; it is mainly used for near horizontal long-distance gas drainage drilling and water exploration drilling in coal mines. It can be used for directional drilling construction such as ground and tunnel near-level drilling. Mainly used in coal mine directional drilling, coal mine rotary drilling and other geologically controlled directional drilling conditions, as well as gas drainage, gas layer development, emergency rescue, detection and discharge of water accumulation in goafs and geological structures.

◎无磁钻具

◎产品简介

无磁钻具是定向钻进随钻测量的配套设备，具有减小外界对随钻测量装置的干扰、信号传输、输送孔底马达动力介质和钻机动力传递等作用，可分为上无磁钻杆、下无磁钻杆、无磁测量探管外管，是煤矿井下定向钻具的重要组成部分，材料为 P550 无磁钢，具有导磁率低、抗拉强度高和抗扭性能好的特性，为孔内测量系统提供不受钻具磁性干扰的无磁环境，探管处的磁场与附近的大地磁场几乎相等，因而能够准确分辨钻孔的地磁方向，确保测量系统的测量精度。

◎产品优势

- 1、无磁性：具有无磁的特性，在 20 奥斯特条件下，其磁导率为 1.00005-1.0001 H/m，在强磁场中也不会被磁化；
- 2、弹性模量低：铍铜的弹性模量为 1.35x105MPa，而此合金的弹性模量为 1.17x105 MPa，铍铜为此合金的 1.15 倍；
- 3、强度质量比高：此合金的屈服强度为 840MPa，其强度质量比为铍铜的 1.8 倍；
- 4、塑性好：断裂延伸率是铍铜的 2~5 倍，可达到 135 钢级的水平；
- 5、耐腐蚀：具有抗防腐性和井下环境适应性，可在硫化氢酸性高腐蚀环境里作业，其耐腐蚀性优于铍铜；
- 6、耐腐蚀疲劳：此合金不会发生腐蚀疲劳，其疲劳性能在钻井液环境中与空气中相同，其耐腐蚀疲劳性优于铍铜。

◎Product Introduction

Magnetic drilling utensils are supporting equipment that is measured with diamond measurement. It has the functions of reducing the interference of the external diamond measurement device, signal transmission, conveying the bottom of the motor medium of the carrier, and drilling motor power transfer. The rod, the lower magnetic drill rod, and the external pipe of the pipelineless measurement pipe are an important part of the drilling of the drilling utensils under the coal mine. For the non -magnetic environment that is not magnetized in the hole measurement system, the magnetic field of the Explorer Office is almost equal to the nearby land magnetic field. Therefore, it can accurately distinguish the geomagnetic direction of the drilling hole and ensure the measurement accuracy of the measurement system.

◎Product advantage

1. Magnetic: It has non-magnetic characteristics. Under the conditions of 20 Ost, its magnetic guidance rate is 1.00005-1.0001 H/m, which will not be magnetized in a strong magnetic field;
2. Low elastic modulus: The elastic modulus of copper is 1.35x105MPa, and the elastic modulus of this alloy is 1.17x105 mpa, and the copper is 1.15 times the alloy;
3. High strength and mass ratio: The yield strength of this alloy is 840MPa, and its strength and mass ratio is 1.8 times;
4. Good plasticity: 2 to 5 times the breakdown rate of the broken copper, which can reach the level of 135 steel levels;
5. Corrosion resistance: It has anti -anticorrosive and underground environment adaptability, and can operate in a highly corrosive environment of hydrogen sulfide, and its corrosion resistance is better than that of copper;
- 6, corrosion resistance fatigue: This alloy will not cause corrosion fatigue, its fatigue performance is the same as the air in the drilling liquid environment, and its corrosion resistance is better than that of copper.



技术参数 Technical Parameters

规格 (mm)	外径 (mm)	磁 导 率	抗拉强度 (MPa)	屈服强度 (MPa)
Φ70	70	≤ 1.005	≥ 1035	≥ 965
Φ76	76	≤ 1.005	≥ 1035	≥ 965
Φ89	89	≤ 1.005	≥ 1035	≥ 965
Φ91	91	≤ 1.005	≥ 1035	≥ 965
接受定制				

1、化学成分

P550 无磁钢的化学成分按照制造方化学成分执行，符合下表要求：

◎Chemical composition

The chemical composition of P550 non magnetic steel shall be executed according to the manufacturer's chemical composition, and shall meet the requirements of the following table:

牌号	C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
HRNM-3	≤ 0.06	≤ 0.60	18.00~22.00	≤ 0.030	≤ 0.020	16.00~19.00	1.20~2.00	0.50~0.80	≤ 0.30	0.50~0.80

2、无磁制品交货状态的机械性能符合下表要求：

◎The mechanical properties of non magnetic products in delivery state meet the requirements of the following table:

公称直径 /mm	屈服强度 (MPa)	抗拉强度 (MPa)	伸长率 %	夏比冲击功 J	布氏硬度 HB
≤ 177	≥ 965	≥ 1035	≥ 20	≥ 100	≥ 300~430
> 177-280	≥ 900	≥ 1035	≥ 20	≥ 100	≥ 300~430

3、磁性能：相对磁导率 $\mu_r < 1.005$, 磁感应强度梯度 $\leq 0.04 \mu T$

◎Magnetic properties: relative permeability $\mu R < 1.005$, magnetic induction intensity gradient $\leq 0.04 \mu T$

4、晶间腐蚀：无磁制品按 ASTM A262 E 法试验，试样无晶间腐蚀裂纹

◎Intergranular corrosion: Non magnetic products tested according to ASTM A262 E method, and the sample has no intergranular corrosion cracks

5、超声波探伤：按 ASTM E114 的标准进行 100% 的检测，验收标准符合 API7-1 中的规定。

◎Ultrasonic testing: Conduct 100% testing according to ASTM E114 standards, and the acceptance criteria comply with the provisions of API7-1.

6、晶粒度：钢材的晶粒度大于 5 级。

◎Grain size: The grain size of steel should be greater than level 5.





◎ 反循环煤粉取样装置 Reverse circulation pulverized coal sampling device

◎ 产品简介

反循环煤粉取样装置依照标准 GB/T23250 《煤层瓦斯含量井下直接测定方法》和《防治煤与瓦斯突出细则》规定的采样要求，采用先进的多级引射技术，实现随钻随取、不撤钻杆定点取样，可在 5 分钟内实现煤层 100m 或更大范围内任意点的快速定点取样。是目前国内理念先进、取样成功率较高的成套装备。此装备技术我公司已获得实用新型专利，此工艺主要用于对于粉尘监测过程中的取样，煤粉瓦斯含量及定点粉尘取样的前期钻进及后期反循环抽样。

◎ 使用说明

在正常打钻过程中，首选使用普通水辫进行钻进，此时钻杆的内管通道和外围环形通道同时通风，在打钻过程中，能有效防止钻头切削的煤渣通过内管通道进入钻杆内壁；打钻到指定位置时，更换为反循环粉尘取样水辫装置，外围环形通道持续供风，在双壁钻头周边三个通风通道将风排出，卷动孔底周边煤粉，在相对密闭空间内将煤粉通过钻头中间的通风孔回流至双壁钻杆的内管通道，通过持续供风，煤渣一直进行回流，直至通过水辫回流到积尘箱内，此时完成定点取样。

◎ Product Brief

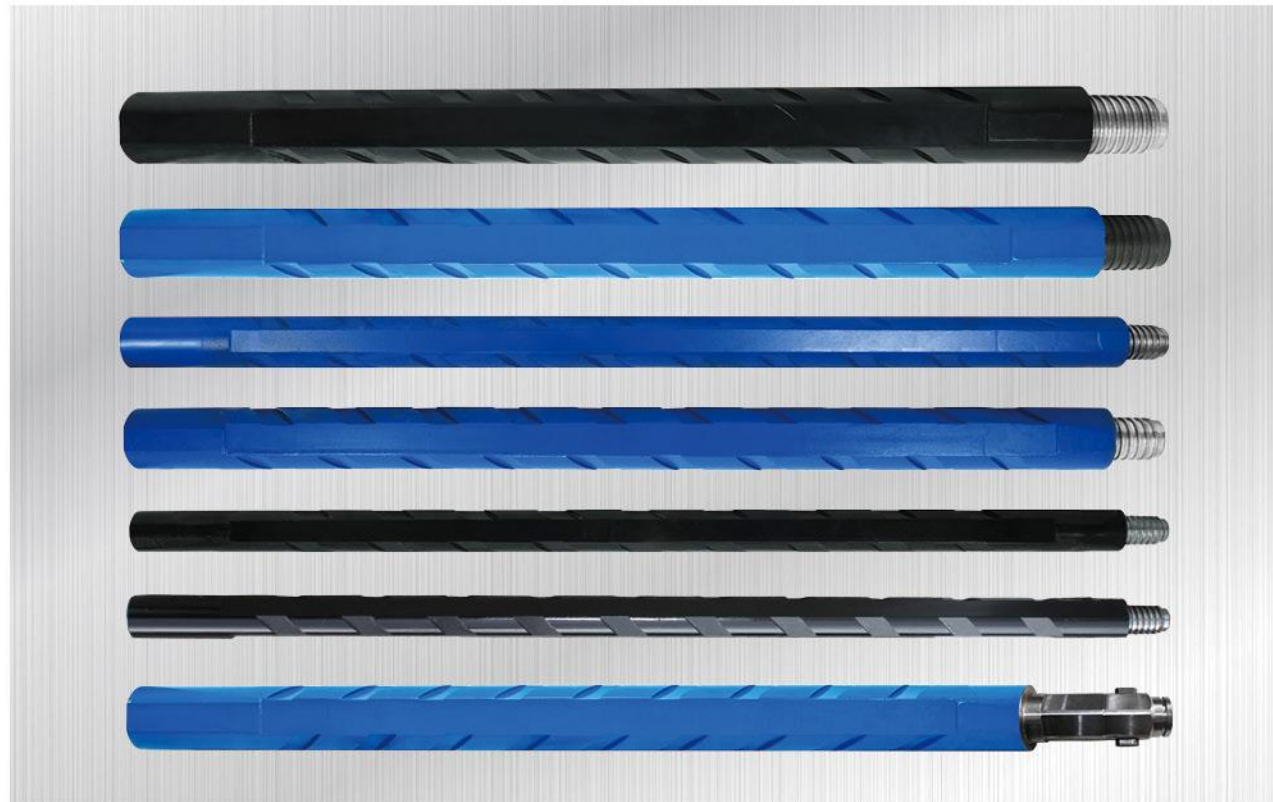
The reverse circulation dust sampling device is based on the sampling requirements specified in the standard GB/T23250 "Direct Measurement Method of Coal Mine Gas Content Underground" and "Detailed Rules for the Prevention of Coal and Gas Outburst", adopting advanced multi-stage ejection technology to achieve LWD while taking, without withdrawal The fixed sampling of drill pipe can realize the rapid fixed sampling of any point within 100m or more of coal seam within 5 minutes. It is a complete set of equipment with advanced domestic concepts and high sampling success rate. Our company has obtained a utility model patent for this equipment technology. This process is mainly used for pre-drilling and post-reverse sampling in the dust measurement process, coal powder gas content and fixed-point dust sampling.

◎ Instructions for use

In the normal drilling process, the common water braid is preferred for drilling. At this time, the inner pipe channel and the peripheral annular channel of the drill pipe are ventilated at the same time. During the drilling process, the slag cut by the drill bit can be effectively prevented from entering the drill through the inner pipe channel The inner wall of the rod; when drilling to the designated position, it is replaced with a reverse-circulation dust sampling water braid device. The peripheral annular channel continuously supplies air. The three ventilation channels around the double-wall drill bit discharge the wind and roll the coal powder around the bottom of the hole. In the confined space, the coal powder is returned to the inner pipe channel of the double-wall drill pipe through the ventilation hole in the middle of the drill bit. Through continuous air supply, the coal slag continues to return until it returns to the dust collection box through the water braid. At this time, the fixed point sampling is completed.

技术参数 Technical Parameters

序号	项 目	规格参数
1	钻 杆	直径 73mm、扭矩≥ 10000N·m
2	钻 头	直径 94mm、113mm
3	取样速度	>500g/min
4	额定工作风压	0.5-0.8Mpa
5	额定工作风量	8 ~ 10m³/min (标况)
6	额定取样深度	0 ~ 100m (地质条件不同有一定差别)
7	配套钻机	可夹持 Φ63.5mm、Φ73mm、Φ89mm 钻杆，后置随动型水辫



◎异型多棱刻槽钻杆 /Special-shaped grooved drill pipe

异型多棱刻槽钻杆，又称重型三棱刻槽钻杆或多棱刻槽推力排渣钻杆，是我公司最新研发的煤矿坑道钻探煤层瓦斯抽放钻杆，对煤层硬度系数适应性较为广泛的新型钻具产品。系我公司发明专利（发明专利号：ZL200910064973.0）广泛应用于高瓦斯煤层特别是松软煤层的深孔钻探施工。生产的分别有外三棱传动型刻槽钻杆、六方双销快接抗拉型刻槽钻杆、大通孔螺纹连接型刻槽钻杆、六方双销快接抗拉型地质螺旋钻杆等系列产品。其中六方双销快接抗拉型可进行钻具的反转功能，并能承受 350kN 拉拔力。在合理的钻头径差（10-15mm）设计条件下，在三棱刮抹搅拌护孔的基础上，增加了螺旋槽推力排渣结构。选用优质的接头与杆体材料经摩擦焊接、加工中心数控机床精加工而成，具有高扭矩、高耐磨、适应高转速钻进的性能特点，综合对比，异型多棱刻槽钻杆，具备护孔、泄压、扶正、降温四重功效。

Special-shaped multi-edge grooved drill pipe, also named as heavy-duty triangular grooved drill pipe or multi-edge grooved thrust slagging drill pipe, it is the latest research and development of our company's coal mine tunnel drilling pipe for gas drainage in the coal seam. It is adapted to the hardness coefficient of the coal seam. It is a new type of drilling tool with a wide range of properties. It is our company's invention patent (invention patent number: ZL200910064973.0), which is widely used in deep hole drilling in high gas coal seams, especially soft coal seams. The productions include external triangular transmission type grooved drill pipe, hexagonal double pin quick-connect tensile grooved drill pipe, large inner hole threaded connection type grooved drill pipe, hexagonal double-pin quick connection tensile type geological spiral drill pipe, etc. Series products. Among them, the hexagonal double-pin quick-connect tension-resistant type can perform the reversal function of the drilling tool and can withstand 350kN drawing force. Under the reasonable design condition of the drill bit diameter difference (10-15mm), the spiral groove thrust slag discharge structure is added on the basis of the three-sided greasy smearing and stirring hole protection. It is made of high-quality joint and rod body materials by friction welding and machining center CNC machine tools. It has the performance characteristics of high torque, high wear resistance, and high speed drilling. Comprehensive comparison, special-shaped multi-edge grooved drill pipe, with protection Four functions of hole, pressure relief, righting and cooling.



技术参数 Technical Parameters

行号	规格型号				建议钻孔深度	扭矩	适配钻机
	钻杆直径	长度	接头形式	壁厚			
1	Φ42mm	800-1500mm	锥、平螺纹	10mm	150m	3500N·m	ZQJC 气动钻机系列 ZDY 液压钻机系列
2	Φ50mm	800-1500mm	锥、平螺纹	10mm	200m	5200N·m	
3	Φ63.5mm	800-1500mm	锥、平螺纹 六方传动	12mm	250m	8000N·m	ZDY 液压钻机系列 CMS 主轴传动钻机
4	Φ73mm	800-1500mm	锥、平螺纹 六方传动	12mm 16mm	300m	10000N·m	
5	Φ89mm	800-1500mm	锥、平螺纹 六方传动	16mm	≥ 400m	12000N·m	



◎地质勘探钻杆 /Geological drill pipe

地质勘探钻杆是用于煤矿探水、探瓦斯及地质勘探用钻孔施工工具。我公司生产的地质勘探钻杆，又称仿英钻杆、圆钻杆、外平钻杆、地质合金钻杆和煤矿坑道常规钻杆，包含石油钻探用直径 89mm 以下的勘探钻杆和矿山凿岩开采用潜孔钻杆、水井钻杆。钻杆杆体选用优质地质专用合金钢管，钻杆接头选用优质合金结构钢，经真空调质处理，大大提高了抗疲劳强度和抗剪切强度。采用先进的摩擦焊焊接工艺生产加工，钻杆具有抗弯强度高，焊接牢固等特点。生产设备完全采用先进的数控加工设备，具有生产效率高质量稳定的特点。能够保证深孔钻进时对直线度的要求，该产品具有较高的抗疲劳强度和较长的使用寿命。

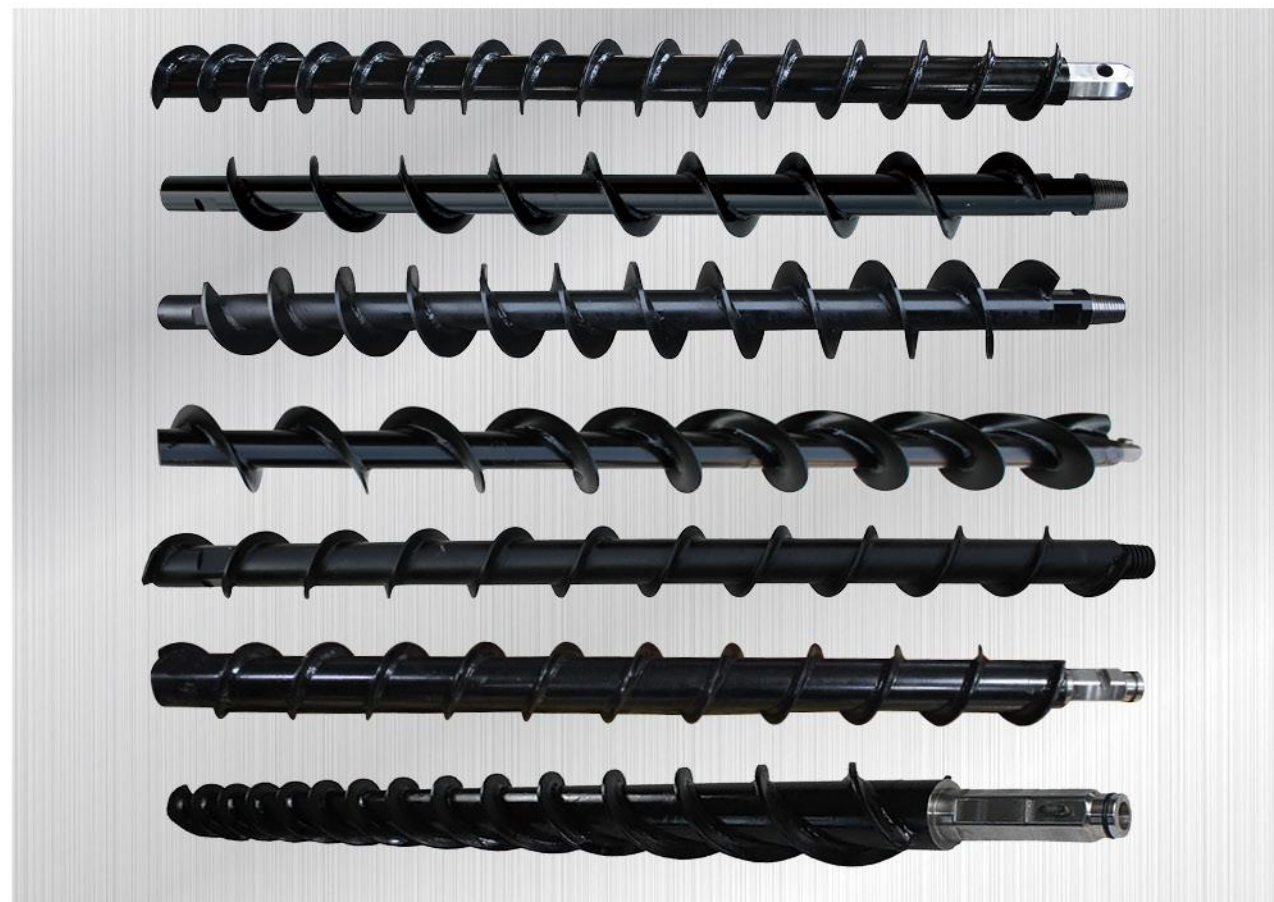
Geological exploration drill pipe is used in coal mine for water,gas and geological exploration drilling .Geological exploration drill pipe made in our company, also called outer flat drill pipe or round drill pipe, geological alloy pipe and coal tunnel conventional drill pipe, contains oil exploration drill pipe with the diameter below 89 mm and DTH drill pipe and water well drill pipe. Drill rod body selects high quality alloy steel, and the joint selects high quality alloy structural steel. Thermal refining in vacuum greatly improves fatigue strength and shear strength. By advanced friction welding craft, drill pipe has high bending strength,welding firm,etc.Production equipment adopts advanced CNC processing equipment, ensuring high efficiency stable quality.To meet the requirements of deep hole drilling on straightness,the product has high fatigue strength and longer service life.



技术参数 Technical Parameters

序 号	直 径	壁 厚	钢 级	钻杆扭矩	参考钻深	接头硬度 (洛氏)	执行标准
1	Φ33.5mm	5mm	DZ50	2000N·m	100m	HRC28-32	MT/T-521-2006
2	Φ42mm	6.2mm	DZ50	3000N·m	100m	HRC28-32	MT/T-521-2006
3	Φ50mm	6.5mm	DZ50	5000N·m	100m	HRC28-32	MT/T-521-2006
4	Φ63.5mm	7.1mm	R780	8000N·m	200m	HRC28-32	MT/T-521-2006
5	Φ73mm	7.8mm	R780	10000N·m	200m	HRC28-32	MT/T-521-2006
6	Φ89mm	9.5mm	R780	12000N·m	300m	HRC28-32	MT/T-521-2006
7	Φ102mm	9.5mm	R780	12000N·m	300m	HRC28-32	GB-T13344-2010
8	Φ114mm	9.5mm	R780	15000N·m	300m	HRC28-32	GB-T13344-2010
9	Φ127mm	9.5mm	R780	20000N·m	300m	HRC28-32	GB-T13344-2010

NO.	Diameter	Thickness	Steel products	Torque	Depth	Joint hardness	Implementation of standards
1	Φ33.5mm	5mm	DZ50	2000N·m	100m	HRC28-32	MT/T-521-2006
2	Φ42mm	6.2mm	DZ50	3000N·m	100m	HRC28-32	MT/T-521-2006
3	Φ50mm	6.5mm	DZ50	5000N·m	100m	HRC28-32	MT/T-521-2006
4	Φ63.5mm	7.1mm	R780	8000N·m	200m	HRC28-32	MT/T-521-2006
5	Φ73mm	7.8mm	R780	10000N·m	200m	HRC28-32	MT/T-521-2006
6	Φ89mm	9.5mm	R780	12000N·m	300m	HRC28-32	MT/T-521-2006
7	Φ102mm	9.5mm	R780	12000N·m	300m	HRC28-32	GB-T13344-2010
8	Φ114mm	9.5mm	R780	15000N·m	300m	HRC28-32	GB-T13344-2010
9	Φ127mm	9.5mm	R780	20000N·m	300m	HRC28-32	GB-T13344-2010



◎地质螺旋钻杆 /Spiral geological drill rod

地质螺旋钻杆是我公司在地质钻杆高扭矩性能的基础上，采用单螺旋叶片或双螺旋叶片，经预应力缠绕，全自动焊接而成。钻杆杆体采用高等级地质钻探专用合金钢管，钻杆接头选用优质合金结构钢，经高压成型、真空调质处理，经摩擦焊接精工制造而成，具有抗弯强度高、焊接牢固、排渣效率高的特点。与同类产品相比，大大提高了抗疲劳强度和抗剪切强度。地质螺旋钻杆主要适用于中硬以上地质条件的深孔钻探施工，大大提高了钻探施工的生产效率，是煤矿高效钻探施工、节能降耗的首选产品。

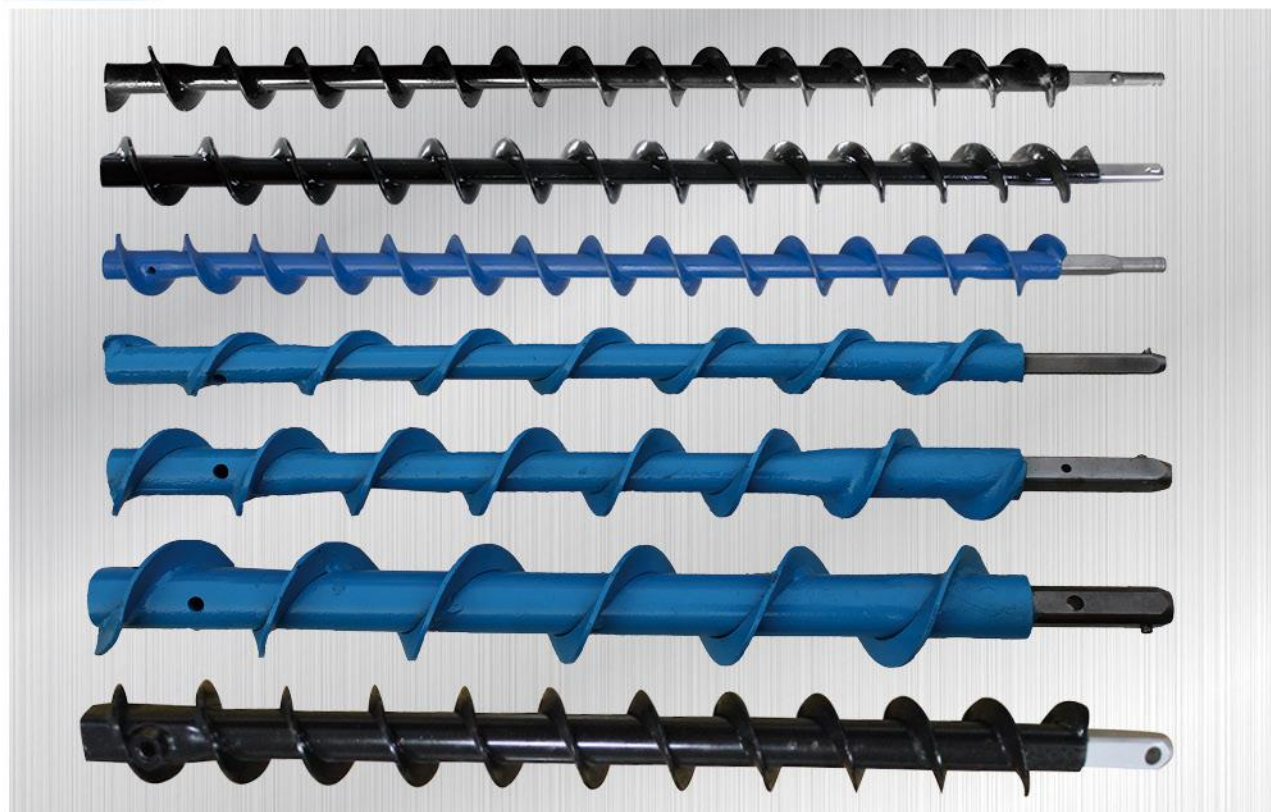
采用了最新研制的高强楔形抗拉弹簧销，连接使用时弹簧销自动锁合，取回拆卸钻杆时只需轻按弹簧销钻杆即可取出，克服了圆柱弹簧销体积小经常发生起拔钻杆折断，发生钻杆丢失损耗的现象。在松软煤层和高瓦斯煤层中使用，优势更为显著。

The spiral geological drill pipe is produced on the basis of high torque performance of geological drill pipe, using single screw blades or double helical blade, by the craft of prestressed winding welding. High grade geological drilling special alloy steel tube is used for the drill rod and pipe joint selects high quality alloy structural steel, molded under high-pressure, with quenching and tempering treatment in vacuum. The friction welding ensures characteristics of high bending strength, firmness, high efficiency deslagging . Compared with similar products, the fatigue strength and shear strength are greatly improved. Geological spiral drill pipe is mainly suitable for deep hole drilling under medium hard and above geological conditions construction, greatly improving the production efficiency of drilling, is the first choice for high efficiency drilling construction, energy saving and consumption reduction.



技术参数 Technical Parameters

序号	杆体直径	螺旋直径	钢 级	钻杆扭矩	参考钻深	搭配钻机	钻头直径	接头硬度
1	φ34mm	50-80mm	DZ50	2000N·m	100m	ZDY-400、540、650、1200	65-113mm	HRC28-32
2	φ42 mm	50-100mm	DZ50	3000N·m	100 m		65-146mm	HRC28-32
3	φ50 mm	73-150mm	DZ50	5000N·m	100 m		94-200mm	HRC28-32
4	φ60 mm	73-170mm	R780	7000N·m	150 m	ZDY-1500、1900、4000、6000	94-250mm	HRC28-32
5	φ63.5 mm	73-200mm	R780	8000N·m	200 m		94-250mm	HRC28-32
6	φ73 mm	89-250mm	R780	10000N·m	200 m		108-300mm	HRC28-32
7	φ89 mm	100-300mm	R780	12000N·m	300 m		108-350mm	HRC28-32
No.	Diameter	Spiral diameter	Grade	Torque	Depth	Matching rig	Bit diameter	Joint hardness
1	φ34mm	50-80mm	DZ50	2000N·m	100m	ZDY-400、540、650、1200	65-113mm	HRC28-32
2	φ42 mm	50-100mm	DZ50	3000N·m	100 m		65-146mm	HRC28-32
3	φ50 mm	73-150mm	DZ50	5000N·m	100 m		94-200mm	HRC28-32
4	φ60 mm	73-170mm	R780	7000N·m	150 m	ZDY-1500、1900、4000、6000	94-250mm	HRC28-32
5	φ63.5 mm	73-200mm	R780	8000N·m	200 m		94-250mm	HRC28-32
6	φ73 mm	89-250mm	R780	10000N·m	200 m		108-300mm	HRC28-32
7	φ89 mm	100-300mm	R780	12000N·m	300 m		108-350mm	HRC28-32



◎高效螺旋钻杆 /High efficiency spiral drill rod

高效螺旋钻杆是以四方或六方进行首尾连接，采用弹簧销自动锁合或半圆销、直插销、U 型销、长圆楔型销进行连接定位，可以快速连接的螺旋钻杆。连接方便快捷，具有重量轻、弹性高、不易弯曲的特点，与其它钻杆相比，具有操作方便，钻进速度快的明显优势，因此称为高效螺旋钻杆。

高效螺旋钻杆广泛应用于煤层及近煤层地质条件下的钻探、煤矿的探水和瓦斯排放钻孔施工，也可用于物探和水利建设工程的锚固、钻探施工等领域，分为通水型和不通水型。

The drill pipe body is in a square or hexagonal shape and connected from head to tail. The spring pin automatically locks together and the U-shape retainer pin could bind together so you can quickly connect drill pipe. With the characteristics of quick connection, light weight, high flexibility, hard to bend, compared with other drill pipes, it has the advantages of easy operation, high speed drilling, and that's why it's called high efficient drill pipe. High efficiency drill pipe is widely used in drilling in the coal seam or similar geological conditions, for exploring the water and gas drainage borehole construction, and it can also be used for anchorage, drilling construction in the field of geophysical prospecting and construction of water conservancy projects. This kind of drill pipe can be divided into hole.



技术参数 Technical Parameters

序号	螺旋直径	杆体直径	接头	理论扭矩	参考钻深	适配机型	钻头直径
1	Φ28mm	Φ18mm	F12 M16	150-200N·m	1-10m		Φ43mm
2	Φ30mm	Φ18mm	F12 M18	150-200N·m	1-15m	ZQSJ-50/1.6	Φ43mm
3	Φ38mm	Φ21mm	F14 Tr16	150-350N·m	5-30m	ZQSJ-65/2.5	Φ43mm
4	Φ40mm	Φ22mm	F14 Tr16	150-350N·m	5-30m	ZQSJ-90/2.4	Φ43mm
5	Φ67mm	Φ27mm	F18 F24	250-350N·m	10-120m	ZQSJ-100/2.5	Φ76mm
6	Φ69mm	Φ27mm	F18 F24	250-350N·m	10-120m	ZQSJ-140/4.1	Φ76mm
7	Φ72mm	Φ32mm	F24 F26	350-450N·m	50-120m	ZQJC-160/4.6	Φ82、84mm
8	Φ75mm	Φ34mm	F24 F26	350-450N·m	50-120m		Φ89、94mm
9	Φ89mm	Φ50mm	F24 F32	350-450N·m	50-150m	ZDY-1200	Φ110mm
10	Φ98mm	Φ73mm	B41 B45	10000-12000N·m	100-300m	ZDY-1500	Φ110、120mm
11	Φ100mm	Φ60mm	B41 B45	8000-12000N·m	100-220m	ZDY-1900	Φ113、125mm
12	Φ113mm	Φ73mm	B41 B45	8000-12000N·m	100-300m	ZDY-4000	Φ133、146mm
No.	Spiral diameter	Diameter	Joint	Torque	Depth	Grouped equipment	Bit diameter
1	Φ28mm	Φ18mm	F12 M16	150-200N·m	1-10m		Φ43mm
2	Φ30mm	Φ18mm	F12 M18	150-200N·m	1-15m	ZQSJ-50/1.6	Φ43mm
3	Φ38mm	Φ21mm	F14 Tr16	150-350N·m	5-30m	ZQSJ-65/2.5	Φ43mm
4	Φ40mm	Φ22mm	F14 Tr16	150-350N·m	5-30m	ZQSJ-90/2.4	Φ43mm
5	Φ67mm	Φ27mm	F18 F24	250-350N·m	10-120m	ZQSJ-100/2.5	Φ76mm
6	Φ69mm	Φ27mm	F18 F24	250-350N·m	10-120m	ZQSJ-140/4.1	Φ76mm
7	Φ72mm	Φ32mm	F24 F26	350-450N·m	50-120m	ZQJC-160/4.6	Φ82、84mm
8	Φ75mm	Φ34mm	F24 F26	350-450N·m	50-120m		Φ89、94mm
9	Φ89mm	Φ50mm	F24 F32	350-450N·m	50-150m	ZDY-1200	Φ110mm
10	Φ98mm	Φ73mm	B41 B45	10000-12000N·m	100-300m	ZDY-1500	Φ110、120mm
11	Φ100mm	Φ60mm	B41 B45	8000-12000N·m	100-220m	ZDY-1900	Φ113、125mm
12	Φ113mm	Φ73mm	B41 B45	8000-12000N·m	100-300m	ZDY-4000	Φ133、146mm



◎三棱钻杆 /Prismatic drill rod

三棱钻杆是指煤矿巷道钻探用三棱锥型钻杆，简称三棱钻杆、三角钻杆、防塌孔钻杆、防抱死钻杆；是以带有锥型过渡的三棱圆弧钢管为钻杆杆体，与螺纹形式或三角、四方、六方等连接形式的钻杆接头，进行摩擦焊接制造而成的煤矿钻探用钻杆。三棱钻杆广泛应用于煤层及近煤层地质条件下的钻探、煤矿的探水和瓦斯排放的钻孔施工，也可用于物探和水利建设工程的锚固、钻探施工领域。

三棱钻杆系列产品是我公司近年来相继研发的具有自主知识产权的专利产品，分别获得多项国家专利，分别是：一种煤矿巷道钻探用三棱锥型钻杆（ZL201120359764.1）、一种煤矿坑道钻探用三棱六方快接钻杆装置（ZL201320193491.7）、一种煤矿坑道钻探用推力排渣螺旋钻杆（ZL201320493681.0）。

Prismatic drill rod refers to prismatic tapered drill pipe used for coal tunnel exploration, also called triangular drill pipe, anti sloughing hole drill pipe, ABS pipe. With prismatic steel pipe as rod body and thread or hex or square joint as connection type, it is manufactured by the friction welding craft. Prismatic drill rod pipe is widely used in the coal seam and similar geological conditions for coal mine water exploration and gas drainage borehole construction, and can also be used in anchorage and drilling in the field of geophysical prospecting and construction of water conservancy engineering.

Prismatic drill rod is a patented product by our company in recent years, and won a number of national patents, respectively is: a triangular pyramid type drill pipe (ZL201120359764.1) Coal Mine Roadway Drilling, a coal mine tunnel drilling triangular hexagonal fast connecting rod device (ZL201320193491.7), a coal mine tunnel drilling thrust slag spiral drill pipe (ZL201320493681.0).



技术参数 Technical Parameters

序 号	规 格	材 质	理论扭矩	参考钻深	适配机型	钻孔直径
1	Φ34mm	DZ50	2000N·m	100m	ZQJC-160 ~ 1000 ZDY-400 ZDY-650 液压钻机	55mm
2	Φ42mm	DZ50	3000N·m	150m		65mm、75mm
3	Φ50mm	DZ50	5000N·m	150m		75mm
4	Φ63.5mm	R780	8000N·m	200m	ZDY-1900 ZDY-3200 ZDY-4000	94mm
5	Φ73mm (73 扣)	R780	10000N·m	200m		94mm
6	Φ89mm	R780	12000N·m	300m		108mm
No.	Specifications	material	Torque	Depth	Drilling rig	Borehole diameter
1	Φ34mm	DZ50	2000N·m	100m	ZQJC-160 ~ 1000 ZDY-400 ZDY-650	55mm
2	Φ42mm	DZ50	3000N·m	150m		65mm、75mm
3	Φ50mm	DZ50	5000N·m	150m		75mm
4	Φ63.5mm	R780	8000N·m	200m	ZDY-1900 ZDY-3200 ZDY-4000	94mm
5	Φ73mm (73 扣)	R780	10000N·m	200m		94mm
6	Φ89mm	R780	12000N·m	300m		108mm



◎ (本体) 肋骨钻杆 /Thick spiral drill pipe/Groove drill rod

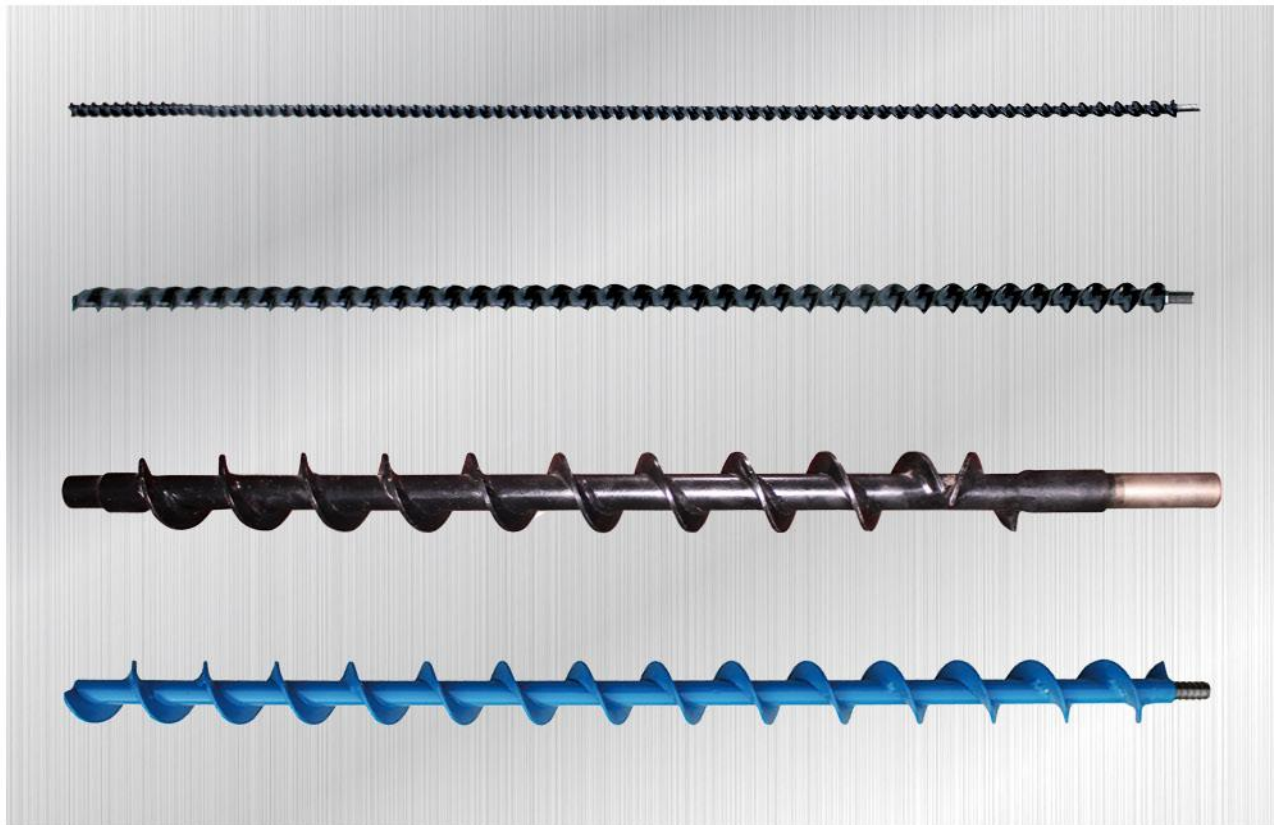
肋骨钻杆是在地质钻杆的基础上，采用高耐磨平面螺旋叶片，经预应力缠绕全自动焊接而成。钻杆杆体采用优质地质钻探专用合金钢管，钻杆接头采用优质合金结构钢，经高压成型、真空调质处理、摩擦焊接等先进生产工艺加工而成；肋骨钻杆在松软煤层和冲击地压条件下大大降低了钻杆抱死、钻具损坏丢失现象。另外，由于肋骨钻杆较宽的螺旋叶片，使得肋骨钻杆在钻孔施工中不会切削钻孔的孔壁，不会造成孔壁的偏斜而影响钻孔效果。刻槽钻杆也称为本体肋骨钻杆、凹槽钻杆、本体式宽翼片螺旋钻杆，是在加厚优质合金钢管的基础上，利用先进的数控加工工艺，进行管体铣槽，相对于肋骨钻杆而言，刻槽钻杆具备了肋骨钻杆排渣速度快，旋转阻力小的优势，同时在进行深孔钻探时，由于一体式的设计工艺及其壁厚的优势，其耐磨性能更好，使用寿命更长。

Based on the geological drill pipe, this drill pipe is made of high abrasion resistant plane helical blade, and is welded with prestressed winding and fully automatic welding. High-quality geological drilling special alloy steel tube is used for the drill rod, drill pipe joints using high quality alloy structural steel, by high pressure molding, quenching and tempering treatment in vacuum, friction welding; groove drill pipe in soft coal seam and the rockburst conditions greatly reduces the drill rod locking, drill damaged and lost phenomenon. In addition, because of the wide helical blade of the rod, it can avoid cutting the hole wall, and will not cause the deviation of the hole wall. Groove drill pipe, is based on high-quality thick alloy steel, using advanced CNC machining process for tube body slot milling, compared to the thick spiral drill rod, groove drill pipe have high deslagging speed and small rotational resistance advantage. Also in the deep hole drilling, due to the advantages of integrated design process and the wall thickness, groove drill pipe behaves better in wear resistance using longer life.



技术参数 Technical Parameters

序号	杆体直径	螺旋直径	钢 级	钻杆扭矩	参考钻深	适配机型	钻头直径
1	Φ42mm	Φ50mm	DZ50	3000N·m	100m	ZDY-450 540 650 1200	Φ75、84mm
2	Φ50mm	Φ63.5mm	DZ50	7000N·m	150m		Φ84、94mm
3	Φ63.5mm	Φ73mm	R780	8000N·m	200m	ZDY-1900	Φ94、113mm
4	Φ73mm	Φ89mm	R780	10000N·m	200m	3200 4000 6000	Φ113、127mm
5	Φ73mm	Φ98mm	R780	10000N·m	200m		Φ113、146mm
6	Φ50mm	/	DZ50	6000N·m	200m	ZDY-1900	Φ75mm
7	Φ63.5	刻槽尺寸 22*2*4mm	R780	7500N·m	250m	ZDY-3200 4000 6000	Φ94mm
8	Φ73		R780	10000N·m	300m		Φ94、113mm
No.	Diameter	Spiral diameter	Steel products	Torque	Depth	Grouped equipment	Bit diameter
1	Φ42mm	Φ50mm	DZ50	3000N·m	100m	ZDY-450 540 650 1200	Φ75、84mm
2	Φ50mm	Φ63.5mm	DZ50	7000N·m	150m		Φ84、94mm
3	Φ63.5mm	Φ73mm	R780	8000N·m	200m	ZDY-1900	Φ94、113mm
4	Φ73mm	Φ89mm	R780	10000N·m	200m	3200 4000 6000	Φ113、127mm
5	Φ73mm	Φ98mm	R780	10000N·m	200m		Φ113、146mm
6	Φ50mm	/	DZ50	6000N·m	200m	ZDY-1900	Φ75mm
7	Φ63.5	22*2*4mm	R780	7500N·m	250m	ZDY-3200 4000 6000	Φ94mm
8	Φ73		R780	10000N·m	300m		Φ94、113mm



◎新型煤（麻花）钻杆 /New type (spiral) coal drill rod

新型煤钻杆是在原有老式麻花煤钻杆的基础上，采用优质钢管和 T 型钢带焊接结构，经先进的预应力缠绕焊接工艺制造而成。新型煤钻杆具有重量轻（比老式麻花钻杆轻 45%），进尺快、粉尘小，垂直向下钻孔不留岩屑，成孔清晰。新型煤钻杆杆体可与钻尾分离倒头使用，延长了使用寿命。弹簧销或螺纹连接，方便快捷。新型煤钻杆分为单螺旋叶片、复式螺旋叶片和通水型与干式型。

On the basis of original spiral coal drill pipe, the high quality steel and T type steel welded structure, the advanced prestressed winding welding manufacturing process and model coal drill pipe. New coal drill pipe has the advantages of light weight (45% lighter than the old spiral drill pipe), quick footage , small dust, vertical drilling down without leaving the cuttings, clean pore forming. The new coal drill rod can be separated from the tail in usage to be recycled, prolonging the life. Spring pin or screw connection, convenient and quick. The new coal drill pipe is divided into single screw blade, double helical blade and water type and dry type.



■ 技术参数 Technical Parameters

序号 No.	规格型号 Specification				理论扭矩 Rated Torque	连接方式 Connect type
	螺旋直径 Diameter of Spiral	杆体直径 Diameter of body	长度 length	接头尺寸 Joint Dimension		
1	Φ26mm	Φ16mm	500-3000mm	M16×1.5	100-150N·m	螺纹连接
2	Φ28mm	Φ16-18mm	500-3000mm	F12/M18×1.5	100-150N·m	四方 / 螺纹
3	Φ30mm	Φ16-18mm	500-3000mm	F12/M18×1.5	100-150N·m	四方 / 螺纹
4	Φ32mm	Φ18-22mm	500-3000mm	F12/M16×1.5	100-250N·m	四方 / 螺纹
5	Φ38mm	Φ21-22mm	500-3000mm	F14/Tr16	150-350N·m	四方 / 螺纹
6	Φ40mm	Φ21-22mm	500-3000mm	F14/Tr16	150-350N·m	四方 / 螺纹
7	Φ42mm	Φ21-22mm	500-3000mm	F14/Tr16	150-350N·m	四方 / 螺纹
8	Φ45mm	Φ25-27mm	500-3000mm	F18/Tr19	350-450N·m	四方 / 螺纹
9	Φ55mm	Φ25-27mm	500-3000mm	F18/Tr19	350-450N·m	四方 / 螺纹
10	Φ65mm	Φ25-27mm	500-3000mm	F24/Tr19	350-450N·m	四方 / 螺纹



◎锚索钻杆 / 风钻杆 (成品杆)

Anchor drill rod / Rock drill rod (Integral drill rod)

我公司生产的锚索钻杆、锚索螺旋钻杆、风钻杆等系列产品，杆体采用 55SiMnMo 优质六方中空合金钢为原料，产品经高压锻制，真空整体调质热处理。应用数控自动化设备加工成型，保证了稳定可靠的产品质量。本系列产品广泛应用于矿山巷道支护钻孔、矿山凿岩开采、煤矿岩巷、桥梁隧道的掘进等工程施工。

Our company produces the anchor cable drill pipe, rock drilling drill rod and other products. The rod body uses 55SiMnMo high quality hex hollow alloy steel, forged under high pressure, with heat treatment in vacuum. The application of numerical control automation equipment processing ensures the stability and reliability of the product quality. This series of products are widely used in mine roadway support drilling, mining drilling, bridge and tunnel drilling engineering construction.



技术参数 Technical Parameters

序号 No.	Specifications/ 规格型号			主要用途 Use	备注 Remarks
	直径 Diameter	长度 Length	螺纹规格 Thread		
1	B19mm	500-3000mm	T16×6 — M14	钻锚杆孔	单根使用
2	B19mm	500-3000mm	T16×6 — T16	钻锚索孔	连接器连接
3	B19mm	500-3000mm	T18×6 — T18	钻锚索孔	连接器连接
4	B22mm	500-6000mm	T19×6 — M16	钻锚杆孔	单根使用
5	B22mm	500-6000mm	T19×6 — T19	钻锚索孔	连接器连接
6	B22mm	500-6000mm	T20×6 — T20	钻锚索孔	连接器连接
7	B25mm	500-6000mm	T22×6 — M18	钻锚杆孔	单根使用
8	B25mm	500-6000mm	T22×6 — T22	钻锚索孔	连接器连接
9	B25mm	500-6000mm	T24×6 — T24	钻锚索孔	连接器连接



◎重型凿岩钎杆 /Heavy drill rod

重型凿岩钎杆采用波形螺纹与连接套相连，或者一头外螺纹一头内螺纹，实现了钻杆与钻头、钻杆、钎尾的快速连接。通常有 R25、R28、R32 等螺纹类型，钻具的应用目的就是为了将凿岩机产生的能量传递到岩石，从而完成凿岩和钻孔的工作。

适用范围：矿山、采石场、高速公路等工程钻凿爆破孔、护栏孔、山体加固，锚固等工程孔，地热空调孔、水井孔等领域。

Heavy drill rod or a connecting sleeve is connected outside the head thread thread Refled realizes the drill rod and the drill bit, drill pipe, drill tail quickly and directly connected with R25, R28 and R32 are other types of thread using waveform thread, the application purpose of drill drilling machine is to generate energy transmitted to the rock, so as to complete the drilling and drilling work.

Scope of application: mines, quarries, highways and other engineering drilling holes, guardrail holes, mountain reinforcement, anchoring and other enginee



技术参数 Technical Parameters

六方台车掘进钎杆 Six Party drifting and tunneling

规格型号 Specification	直径 diameter (mm)	长度 length (mm)	螺纹形式
H25-R25/R32Y	H25	2100 ~ 3700	R
H28-R28/R32Y	H28	2400 ~ 4920	R
H32-R28/R38Y	H32	2900 ~ 4310	R
H32-R28/R32Y	H32	3090/3700	R
H32-R28/R32N	H32	3090 ~ 4310	R
H32-R32/T38(R38)	H32	2400 ~ 5530	R/T
H35-R32/T38(R38)	H35	3090 ~ 6100	R/T
H25-R25	H25	915 ~ 3050	R
H28-R28	H28	3050	R

深孔螺纹钎具 deep hole thread brazing tool

规格型号 Specification	直径 diameter (mm)	长度 length (mm)	螺纹形式
R32-R32B	R32	915 ~ 3660	R
R39-T38B	R39	1220 ~ 6095	T
R39-T38/2T38B	R39	3050/3660	T
R46-T45B	R46	1830 ~ 6095	T
R52-T51B	R52	3050 ~ 6095	T



◎ 锚杆钻头
◎ PDC anchor drill bit



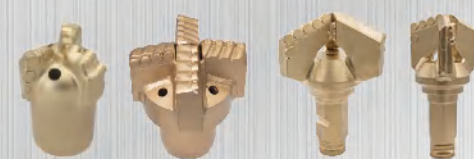
◎ 无芯钻头
◎ PDC non-core drill bit



◎ 取芯钻头
◎ Core drill bit



◎ 扩孔钻头
◎ PDC reamer drill bit



◎ 刮刀钻头
◎ PDC drag drill bit



◎ 烧结体钻头
◎ Sintered drill



◎ 金刚石钻头
◎ Diamond core drill



◎ 金刚石定向钻头
◎ Diamond Directional Drill

◎ 金刚石钻头 / Diamond bit

金刚石钻头按照用途区分可分为全面钻进钻头和取芯钻头，按齿镶装方式可分为孕镶式钻头、表镶式钻头、潜铸式钻头，按基体材料和制造方法和分为胎体式钻头和钢体式钻头，按切削齿材料可分为天然金刚石（ND）钻头、人造聚晶金刚石片（PDC）钻头、热稳定聚晶金刚石（TSP）钻头。

金刚石复合片（PDC）是在高温条件下，由人造金刚石与硬质合金一次性合成的特殊超硬材料，它不但具有金刚石硬度高、耐磨等优点，同时还具备了硬质合金抗冲击性强、出刃大等特点，用它做钻头的刀翼可大大提高钻头的工作效率，是钻进中硬岩层和坚硬岩层的理想钻头；我公司生产的金刚石复合片钻头主要类别有：金刚石复合片锚杆钻头、金刚石复合片无芯钻头、金刚石复合片取芯钻头、金刚石复合片扩孔钻头、金刚石复合片刮刀钻头、金刚石烧结体钻头。

当前，我公司生产的金刚石钻头、金刚石复合片钻头、绳索取芯钻头、遍布全国煤田、石油钻探、地质勘探、水利水电、铁路公路、隧道建设等行业。

There are comprehensive diamond drill bit and diamond coring drill bit according to the use of distinction, there are impregnated diamond drill bit, surface diamond drill bit, submerged diamond drill bit as tooth install manufacture method, there are Matrix body and steel body drill bit according to material of body and manufacture method, there are natural diamond (ND) drill bit, artificial polycrystalline diamond (PDC) bit, heat stabilized polycrystalline diamond (TSP) drill bit according to the cutting tooth material.

Polycrystalline diamond compacts (PDC) is a special super hard material synthesized by artificial diamond and cemented carbide under high temperature. It not only has the advantages of high hardness and wear resistance of diamond, and also has the impact resistance of cemented carbide Strong, cutting edge and other characteristics, it can be used to do the drill bit can greatly improve the efficiency of the drill bit, it's the ideal drill bit for drilling medium hard rock and hard rock layer ; we produce the main types of PDC drill bit: PDC anchor drill bit, PDC no coring drill bit, PDC core drill bit, PDC reamer drill bit, PDC drag drill bit and PDC sintered Drill Bit .

At present, we produce the diamond drill bit, PDC drill bit ,impregnated diamond drill bit, all over the national coal field, oil drilling, geological exploration, water conservancy and hydro power, railway roads, tunnel construction and other fields.

性能参数 Technical Parameters

No 序号	Specifi- cations 规格	Drilling procedure 钻进规程参数					Drilling layer / 适应岩层		
		Pressure 钻压	Speed 转速	Capacity/ 泵 量 (1/min)	wear ratio / 磨损比 (*10000)	Impact resistance/ 抗冲击性 (J)	普通型 Normal	加强型 Medium	超强型 Extremely
1	Φ28mm	300-700Kg	300-350rpm	150-200	>80	>43	F6-F8	F8-F10	F10 以上
2	Φ30mm	300-700Kg	300-350rpm	150-200	>80	>43	F6-F8	F8-F10	F10 以上
3	Φ32mm	300-700Kg	300-350rpm	150-200	>80	>43	F6-F8	F8-F10	F10 以上
4	Φ48mm	300-700Kg	300-350rpm	120-160	>80	>43	F6-F8	F8-F10	F10 以上
5	Φ55mm	320-800Kg	250-350rpm	130-180	>100	>45	F8-F10	F10-F12	F12 以上
6	Φ65mm	480-1200Kg	200-300rpm	130-180	>100	>43	F8-F10	F10-F12	F12 以上
7	Φ75mm	480-1200Kg	200-300rpm	150-200	>100	>43	F8-F10	F10-F12	F12 以上
8	Φ94mm	640-1600Kg	150-250rpm	200-250	>100	>43	F8-F10	F10-F12	F12 以上
9	Φ113mm	880-2200Kg	120-200rpm	200-300	>120	>60	F8-F10	F10-F12	F12 以上
10	Φ133mm	1500-3000Kg	100-200rpm	500-850	>120	>60	F8-F10	F10-F12	F12 以上
11	Φ153mm	1500-3000Kg	100-200rpm	500-850	>120	>60	F8-F10	F10-F12	F12 以上
12	Φ173mm	1800-4000Kg	100-200rpm	600-1200	>120	>60	F8-F10	F10-F12	F12 以上
13	Φ193mm	1800-4000Kg	100-200rpm	600-1200	>120	>60	F8-F10	F10-F12	F12 以上
14	Φ250mm	2200-4500Kg	100-200rpm	750-1400	>120	>60	F8-F10	F10-F12	F12 以上
15	Φ300mm	2400-5000Kg	100-200rpm	1000-1500	>120	>60	F8-F10	F10-F12	F12 以上



◎硬质合金煤岩钻头 /Tungsten carbide drill bit

我公司生产的硬质合金煤岩钻头,品种齐全,主要有: 探水钻头、煤钻头、软岩钻头、组合钻头、扩孔钻头,钻头体采用精铸、精锻和中碳合金钢切削加工等多种生产加工工艺,适应不同的钻头类型和不同钻孔作业条件的需求。本产品广泛应用于煤矿、石膏矿等软岩的钻孔、扩孔作业。

My company produces a variety of tungsten carbide drill bits, mainly: water exploration drill bit, coal mining drill bit, soft rock drill bit, composed drill bit and reaming drill bit. Drill bits are manufactured by casting, precision forging and medium carbon alloy steel machining, and can adapt to different drilling conditions. This product is widely used in coal, gypsum mine and other soft rock drilling and reaming.



技术参数 Technical Parameters

序号 No.	规 格 型 号 /Specifications and Size			刀翼形式 Cutters	结 构 Structures
	直径 /Dia	常规连接尺寸 /Connetcing size			
1	Φ27mm	M12×1.75mm	M14×1.5mm	2	整体型 /Integral
2	Φ28mm	M12×1.75mm	F12×12mm	2	整体型 /Integral
3	Φ30mm	M12×1.75mm	F12×12mm	2	整体型 /Integral
4	Φ32mm	M14×1.5mm	F12×12mm	2	整体型 /Integral
5	Φ34mm	M14×1.5mm	F12×12mm	2	整体型 /Integral
6	Φ36mm	M14×1.5mm	F12×12mm	2	整体型 /Integral
7	Φ38mm	T24×5mm	F14×14mm	2－3	整体型 /Integral
8	Φ42mm	T24×5mm	F13－14mm	2－3	整体型 /Integral
9	Φ45mm	T24×5mm	F13－18mm	2－3	整体型 /Integral
10	Φ55mm	T24×5mm	F13－18mm	4	两级组合 /Two-stage
11	Φ65mm	T24×5mm	F13－18mm	4－5	两级组合 /Two-stage
12	Φ75mm	T33×4.23mm	F13－18mm	4－5	两级组合 /Two-stage
13	Φ76mm	T33×4.23mm	F18－24mm	4－5	两级组合 /Two-stage
14	Φ82mm	T42×5.08mm	F18－24mm	4－5	两级组合 /Two-stage
15	Φ85mm	T42×5.08mm	F18－24mm	4－5	两级组合 /Two-stage
16	Φ89mm	T42×5.08mm	F24－32mm	5－7	三级组合 /Three-stage
17	Φ95mm	T55×5.08mm	F24－32mm	5－7	三级组合 /Three-stage
18	Φ110mm	T55×5.08mm	B35－45mm	5－7	三级组合 /Three-stage
19	Φ125mm	T55×5.08mm	B35－45mm	5－12	四级组合 /Four-stage
20	Φ135mm	T55×5.08mm	B35－45mm	5－12	四级组合 /Four-stage



◎风钻头 /Rock drill bit

风钻头又称硬质合金钎头，是矿山采掘工程中冲击式凿岩的主要工具，我公司生产的硬质合金钎头主要有一字、十字、三刃、球齿型钎头、钻车钎具等系列产品。钎头体选用优质合金钢精锻而成，根据岩石条件选用不同的合金牌号和产品类型，适用各种等级的岩石，可用于石灰岩、花岗岩、大理石；铁矿、金矿等的凿岩钻进工程。

Rock drilling bit is also called Tungsten Carbide Drill Bit. which is the main tool of mining engineering in percussive drilling. Our company production of hard alloy drill bit mainly contains:chisel, cross, three-blade, and button drill bit. The drill bit selects high quality forged alloy. Please select different grades of alloy and the types of products according to rock conditions. This product is suitable for various grades of rock, such as limestone, granite, marble, iron ore, gold rock drilling engineering.

技术参数 Technical Parameters

产品名称 Name of Produce	钎头直径 Dia.	合金 /Tip Size	尾孔锥度 Taper	重量 Weight
		高 × 厚 /H×W		
一字型钎头 Normal chisel bit	26mm	12×6mm	7	0.19Kg
	28mm	12×8mm	7	0.20Kg
	32mm	14×8mm	7	0.22Kg
	34mm	14×8mm	7	0.27Kg
	36mm	15×10mm	7	0.33Kg
	38mm	15×10mm	7	0.36Kg
		18×10mm	7	0.36Kg
		14×9mm	7	0.36Kg
		14×8mm	7	0.36Kg
	40mm	15×10mm	7	0.38Kg
		18×10mm	7	0.38Kg
		14×9mm	7	0.38Kg
		14×8mm	7	0.38Kg
	43mm	15×10mm	7	0.40Kg
		18×10mm	7	0.40Kg
十字型钎头 Cross bits	32mm	12×8mm	7	0.30Kg
	34mm	12×8mm	7	0.35Kg
	36mm	12×8mm	7	0.37Kg
	38mm	12×8mm	7	0.39Kg
	40mm	12×8mm	7	0.40Kg
	42mm	14×8mm	7	0.41Kg
	45mm	14×8mm	7	0.47Kg
球齿型钎头 Button bit	28mm	4×7mm	12	0.22Kg
	32mm	4×8mm	12	0.27Kg
	35mm	5×8mm	12	0.35Kg
	38mm	4×9mm	12	0.37Kg
	40mm	4×10mm	12	0.40Kg
	41mm	5×9mm	12	0.45Kg
	43mm	3×10mm	12	0.41Kg



◎潜孔钻头 /DTH drill bit

潜孔钎头，产品分为高风压、低风压两大系列潜孔钎具。采用优质的原材料、通过先进的生产工艺，生产出高质量的系列潜孔钎具。我公司生产的各型号的高风压冲击器、潜孔钻头可以和 SANDVIK ATLAS COPCO 和 Ingersoll-Rand 等世界著名公司生产的产品配套，产品广泛用于土石方工程、矿山开采、水井钻探、建筑工程等。公司的系列潜孔钎具产品批量出口到澳大利亚、加拿大、美国、法国等 20 多个国家和地区，并享有盛誉。

DTH drill bit , there are high pressure, low pressure two series . The material are adapted high-quality raw materials, through advanced production technology, to produce high-quality DTH drill bit . We produced the various models of high pressure hammer, DTH drill bit can match with SANDVIK ATLAS COPCO and Ingersoll-Rand and other world-renowned companies products, our DTH drill tools are widely used in earth and stone engineering, mining, water drilling, construction, etc. Our series of DTH drill bit were exported to Australia, Canada, the United States, France, more than 20 countries and regions, and have good reputation.

技术参数 Technical Parameters

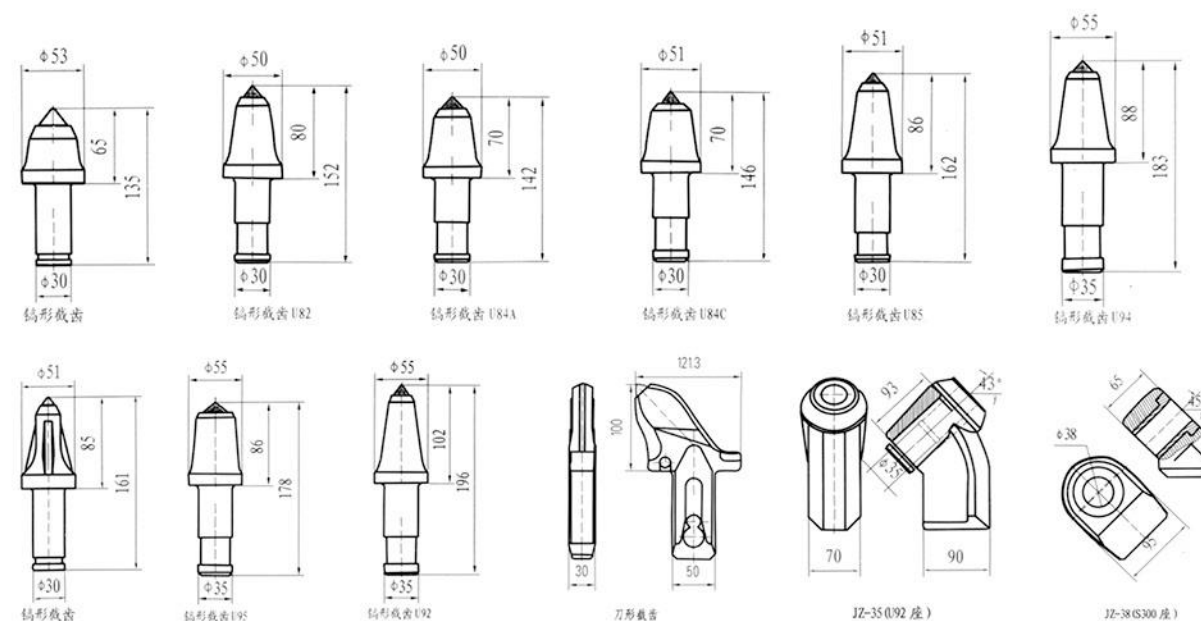
产品序号 NO.	直径 Dia.	顶端尺寸 /Tip Size		花键 Spline	重量 Weight
		边齿 /Gauge	芯齿 /Front		
1	76mm	5×12mm	3×11mm	45×4	2.5Kg
2	90mm	6×14mm	4×12mm		3.5Kg
3	95mm	6×14mm	2×12mm		3.6Kg
4	90mm	6×14mm	4×12mm	50×6	3.5Kg
5	93mm	6×14mm	2×14mm 4×12mm		3.5Kg
6	90mm	6×14mm	2×14mm 4×12mm		3.5Kg
7	95mm	6×14mm	4×12mm	54×6	3.7Kg
8	100mm	6×14mm	3×14mm 2×14mm		4.8Kg
9	105mm	6×14mm	3×14mm 3×12mm		5.1Kg
10	110mm	6×14mm	3×14mm 3×12mm	56×4	5.3Kg
11	115mm	6×14mm	3×14mm 3×14mm		5.6Kg
12	120mm	6×14mm	3×14mm 4×14mm		5.9Kg
13	110mm	6×14mm	3×14mm 4×12mm	60×4	5.5Kg
14	110mm	6×14mm	4×12mm		5.3Kg



◎截齿工程刀具 /Cutting Pick

山东益矿钻采科技有限公司生产的截齿种类齐全，齿体采用首钢优质 35CrMo、42CrMo 钢制成，强度和硬度比同类产品更高。大型冷压机成型、采用真空热处理工艺，硬度达到 40-45 度，表面无氧化。截齿合金焊缝饱满周围融覆有耐磨层，硬度达 60 度，有效保护了合金头不易脱落。硬质合金采用国内先进生产的 YG11C，抗弯强度和硬度都较稳，使产品性能大大提高。可根据用户的实际需求进行个性化订制生产加工。公司拥有健全的质量检测手段与控制体系。目前，我公司生产的截齿产品已系列化，覆盖采煤机截齿、掘进机截齿、旋挖截齿。

Shandong Yikuang Drilling Technology Co., Ltd. produces a wide range of cutter picks, and the tip is made of high quality 35CrMo and 42CrMo steel, and the strength and hardness are higher than those of the same kind. Molded by large cold press machine and subjected to heat treatment in vacuum, it has the hardness reaching 40-45 degrees, without oxidation on the surface. The carbide tip is fully welded, and the surrounding layer is covered with a wear-resistant layer with a hardness of 60 degrees, which effectively protects the alloy head from falling off easily. Cemented carbide is made of YG11C which is made in China, and its bending strength and hardness are relatively stable, which greatly improves the performance of the product. According to the actual needs of users, we are able to customized production and processing. Our company has a sound quality testing means and control system. At present, our company has a series of cutting pick products, covering shearer picks, roadheader picks, and rotary cutting picks.





◎三牙轮钻头 /Tricone Drill Bit

矿用三牙轮钻头主要适用于大型露天矿开采，如露天煤矿、铁矿以及铜矿、铝矿等各种有色金属矿山，其特点是钻孔效率高、成本低，可适用于软到极硬的不同地层。



根据各矿山的岩石特性和客户需求，采用科学的矿用钻头轴承计算方法设计轴承尺寸和配合间隙，从布齿方式、齿数、齿型和齿材方面进行切削结构调整，针对钻头轴承结构、切削结构、保径和排屑系统进行改进，使合金齿更适应地层变化，提高切削稳定性和切削效率，提高了轴承的承载能力和使用寿命。

Mining tricone drill bits are mainly suitable for large-scale open-pit mining, such as open-pit coal mines, iron ores, copper mines, molybdenum mines and other non-ferrous metal mines. They are characterized by high drilling efficiency and low cost, and can be applied to soft to extremely hard materials. Different strata. According to the rock characteristics of each mine and customer needs, scientific mining drill bit bearing calculation methods are used to design the bearing size and fitting clearance, and the cutting structure is adjusted in terms of tooth arrangement, tooth number, tooth shape and tooth material. According to the drill bit bearing structure, cutting The structure, diameter protection and chip removal system have been improved to make the alloy teeth more adaptable to formation changes, improve cutting stability and cutting efficiency, and increase the load-bearing capacity and service life of the bearings.

钻头尺寸 (Bit Size)		钻头型号 (Bit Type)
英寸 (in)	毫米 (mm)	
4 1/4	107.9	FW131C FW321C
4 5/8	117.5	FW241C
4 3/4	120.6	FW241C
5 5/8	142.9	FW121 FW241 FW321
6	152.4	FW211
6 1/4	158.7	FW121 FW241 FW321
6 3/4	171.4	FW121 FW241 FW321
7 1/2	190.5	FW121
7 7/8	200.0	FW121 FW131 FW241 FW321
9 7/8	250.8	FW121 FW211 FW241 FW321
12 1/4	311.2	FW211

技术参数 Technical Parameters

IADC	钻压 WOB(kN/mm)	转速 RPM (r/min)	适用地层 Applicable Formations
111	0.3~0.75	200~80	非常软的地层，具有低抗压强度和高可钻性，如粘土、泥岩、白垩等。
121	0.3~0.85	200~80	抗压强度低、可钻性高的软地层，如泥岩、石膏、岩盐、软页岩、软石灰岩等。
131	0.3~0.95	180~80	抗压强度低、可钻性的软至中软地层，如中软页岩、硬石膏、中软石灰岩、中软砂岩、夹较硬层的软地层等。
211	0.35~0.95	180~80	抗压强度较高的中等地层，如中软页岩、硬石膏、中软石灰岩、中软砂岩、夹较硬层的软地层等。
241	0.35~0.95	180~70	具有高抗压强度的中硬地层，例如磨蚀性页岩、石灰岩、砂岩、白云岩、硬石膏、大理石等。
321	0.4~1.0	150~70	高抗压强度的硬质半磨料地层，如磨料页岩、石灰岩、砂岩、白云石、硬石膏、大理石等。



◎连接器 / 岩心接头 / 配件 /Connector,Jonit, Adapror

我公司生产的连接器、岩心接头、配件类产品，采用优质低碳合金钢为原料，经高压成型，真空调质处理，机械性能高。主要分为地质钻杆接头、锚索钻杆连接器，手持式气动钻机接头，各种钻杆变径接头和岩芯套管变径接头等系列产品。

My company production of connectors, connector products, uses high quality low carbon steel as raw material, molded under high pressure, heat treatment in vacuum, with high mechanical properties. Mainly divided into geological drill pipe joints, anchor drill pipe connector, and handheld gas dynamic drill joint and different kinds of drill pipe diameter joint and core casing diameter joint, series products.



技术参数 Technical Parameters

产品名称	规格型号	用途
锚索钻杆连接器	T16*6/M14*1.5mm	钻杆与钻头连接
锚索钻杆连接套	T16*6mm	钻杆与钻杆连接
钻杆接头	42*220mm	钻杆与钻杆连接
钻杆接头	50*220mm	钻杆与钻杆连接
钻杆接头	63.5*220mm	钻杆与钻杆连接
钻杆接头	73*220mm	钻杆与钻杆连接
变径接头	73*150mm	岩芯管螺纹变换用
变径接头	89*150mm	岩芯管螺纹变换用
变径接头	63-73mm	岩芯管螺纹变换用
变径接头	73-89mm	岩芯管螺纹变换用
Product name	Model	Use
Anchor rod connector	T16*6/M14*1.5mm	Connecting rod and drill pipe
Anchor rod connecting sleeve	T16*6mm	Connecting rod and drill pipe
Drill pipe joint	42*220mm	Connecting rod and drill pipe
Drill pipe joint	50*220mm	Connecting rod and drill pipe
Drill pipe joint	63.5*220mm	Connecting rod and drill pipe
Drill pipe joint	73*220mm	Connecting rod and drill pipe
Adjustable joint	73*150mm	Core pipe thread transformation
Adjustable joint	89*150mm	Core pipe thread transformation
Adjustable joint	63-73mm	Core pipe thread transformation
Adjustable joint	73-89mm	Core pipe thread transformation



◎注水器 /Water swivel

注水器又称为供水器，供风器或水便、水龙头。是矿山开采、煤矿钻探钻孔作业时与钻杆连接进行注水、供风的必备工具。我公司生产的注水器系列产品，结构设计紧凑合理，采用高耐磨密封件，不漏水，耐高压，选用终身免维护冶金支架，运转更加平稳，使用寿命更长。本产品根据传动形式分为前置传动型和后置随动型。在使用时可根据不同的钻机钻杆类型选用。

Water swivel is also called water feeder. It is the necessary tools to supply water or wind after the drilling rig and drill rod are connected. Our water swivel is reasonably designed and adopts high wear-resistant seals, which guarantees that the water swivel will not leak and can bear high pressure. Besides, the metal support, which will be free of maintenance for life, guarantees the smooth operation and long working life of the water swivel.

Types: front drive type and back slave type. Users could choose according to the type of drilling machine and drill rod.



技术参数 Technical Parameters

序号	规格型号 /Model			载荷形式 Load form	用途 Use
	螺纹规格 Thread	外直径 Outer diameter	长度 Length		
1	M12×1.75mm	Φ42mm	210mm	前置传动	普通煤电钻
2	M12 1/2mm	Φ42mm	210mm	前置传动	普通煤电钻
3	M14×1.5mm	Φ42mm	210mm	前置传动	普通煤电钻
4	M14×2mm	Φ42mm	210mm	前置传动	普通煤电钻
5	M16×1.5mm	Φ42mm	210mm	前置传动	普通煤电钻
6	M18×1.5mm	Φ42mm	210mm	前置传动	普通煤电钻
7	F13×85mm	Φ42mm	220mm	前置传动	手持式气动钻机
8	F14×55mm	Φ42mm	220mm	前置传动	手持式气动钻机
9	F18×85mm	Φ42mm	220mm	前置传动	手持式气动钻机
10	F24×85mm	Φ55mm	220mm	前置传动	手持式气动钻机
11	1: 8/4.233mm	Φ50mm	200mm	后置随动	坑道液压钻机
12	1: 8/4.233mm	Φ64mm	300mm	后置随动	坑道液压钻机
13	1: 8/5.080mm	Φ65mm	250mm	后置随动	坑道液压钻机
14	1: 10/5.08mm	Φ75mm	350mm	后置随动	坑道液压钻机



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产品质保承诺书

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一、质量保证

1. 我公司提供的产品质量原则上按购货方规定的技术标准执行。在购货方没有规定的技术标准时，我公司将按照行业标准执行，经购货方同意后向购货方提供产品，并保证产品质量的稳定和逐步提高。

2. 我公司所销售的产品是采用先进的生产工艺和合格的材料制造而成，销售的产品及其组件是全新、未使用过的合格产品，并完全符合商务合同所规定的质量、规格、性能和技术标准要求。我公司对由于工艺或材料的问题而导致产品的任何缺陷负责。

3. 我公司保证在质量保证期内发现产品缺陷时在约定的时间内及时到达现场进行免费维修或鉴定后退回工厂更换新品，并承担货物往来的物流运输费用。

二、售后响应时效

1. 国内用户在售后需求提交当天回复售后解决方案，自确认售后方案之日起 24 小时到达施工现场。

2. 国外客户遵照合同约定，在规定的期限内到达施工现场进行技术服务和售后指导。

三、质保期限

质量保质期限为：自出厂之日起设备类为一年，钻杆钻头及配件类为三个月，另有质保期限约定的，遵照约定执行。

四、免责条款

1. 在质保期限内钻具产品在使用过程中磨损严重，产品的生产批号和公司 LOGO 不完整清晰的；

2. 钻具产品在使用过程中遇有高研磨性地层磨损严重，钻具直径磨损或表面损伤大于 0.5mm 的；

3. 因产品与其他厂家混用或保养操作不当，致使螺纹连接类钻具螺纹丝扣损伤、锁死的。

五、技术支持

在产品的全生命周期内，我公司 24 小时免费提供技术指导和技术服务。质保期届满提供有偿维修服务。



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