

无论您在哪，黎明钻具在您身后  
No matter where you are, Dawn Drill is behind you

请立即登录黎明官网：[www.dawndrill.com](http://www.dawndrill.com)



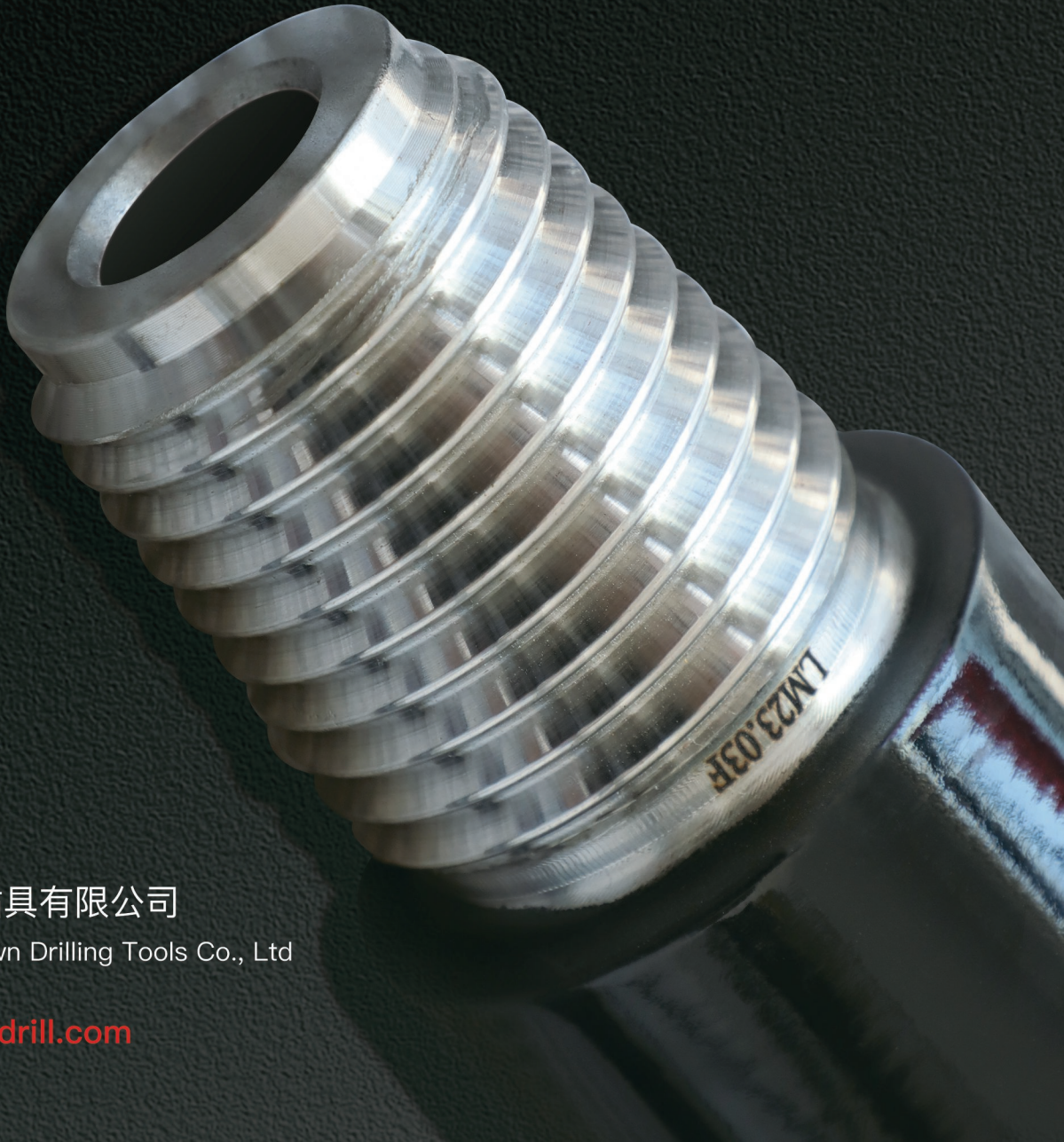
扬州黎明钻具有限公司  
Yangzhou Dawn Drilling Tools Co., Ltd

Address: No. 58, Zhongjiang Road, Yizheng City, Yangzhou City, Jiangsu Province  
地址：江苏省扬州市仪征市中江路58号  
电话：+86 15252770101 王经理  
+86 13358140646 俞经理  
网址：[www.dawndrill.com](http://www.dawndrill.com)  
邮箱：[dawndrill@163.com](mailto:dawndrill@163.com)

黎明品质·源于专业  
Dawn Quality · Derived from Professionalism



黎明钻具



扬州黎明钻具有限公司  
Yangzhou Dawn Drilling Tools Co., Ltd

[www.dawndrill.com](http://www.dawndrill.com)



# COMPANY PROFILE

## 公司简介

扬州黎明钻具有限公司是一家全球领先的非开挖钻具、传动机械制造集团化公司，公司由仪征工厂与徐州工厂组成，目前仪征工厂（扬州黎明钻具有限公司）主要负责  $\varnothing 52$ – $\varnothing 114$  钻杆，非开挖主机齿轮及非开挖配件的生产与制造，徐州工厂（徐州润达钻探工具有限公司）负责  $\varnothing 127$ – $\varnothing 194$  钻杆的生产与制造。



Company Introduction – Yangzhou Dawn Drilling Tools Co., Ltd. is a leading global conglomerate for the manufacturing of non excavation drilling tools and transmission machinery. The company is composed of Yizheng Factory and Xuzhou Factory. Currently, Yizheng Factory (Yangzhou dawn Drilling Tools Co., Ltd.) is mainly responsible for the production and manufacturing of  $\varnothing 52$ – $\varnothing 114$  drill rod, non excavation host gears, and non excavation accessories, while Xuzhou Factory (Xuzhou Runda Drilling Tools Co., Ltd.) is responsible for the production and manufacturing of  $\varnothing 127$ – $\varnothing 194$  drill rod.



仪征工厂成立于2010年,现有扬州仪征市非开挖整体钻杆制造基地、扬州高新区齿轮传动制造基地。仪征工厂占地50亩，主要由整体钻杆车间，齿轮及配件车间，实验室等组成，仪征工厂秉承着“造完美产品做优质服务 尽社会责任”的企业理念,在2011年至2021年的十年中先后获得“江苏省高新技术企业”等等表彰。客户满意、员工如意始终是我公司最根本的目标和最极致的追求。愿以后发展的道路上与您携手同行共创美好未来。

Established in 2010, Yizheng Factory now has a trenchless integral drill pipe manufacturing base in Yizheng and a gear transmission manufacturing base in Yangzhou High tech Zone. The Yizheng factory covers an area of 50 acres and is mainly composed of an overall drill rod workshop, gear and accessory workshop, laboratory, etc. Yizheng factory adheres to the corporate philosophy of "making perfect products, providing high-quality services, and fulfilling social responsibility". In the ten years from 2011 to 2021, it has been awarded "Jiangsu Province High tech Enterprise" and other awards. Customer satisfaction and employee satisfaction have always been the fundamental goals and ultimate pursuit of our company. We are willing to work together with you on the road of future development to create a better future.



徐州润达钻探工具有限公司成立于2020年，经过一年多的厂房建设和设备安装工作于2022年初正式投入生产运营。我公司目前主要聚焦于非开挖大型定向穿越钻杆的市场领域，产品涵盖 $\varnothing 127$ 、 $\varnothing 140$ 、 $\varnothing 168$ 、 $\varnothing 194$ 、 $\varnothing 219$ 、 $\varnothing 254$ 等大直径摩擦焊接钻杆，满足配套钻机型号从**100吨**到**1500吨**。

我公司的产品投入市场后经过各大超高难度穿越工程考验，获得了国内很多大型定向钻施工单位和业主单位的肯定。作为一家有担当、负责任、敢作为的钻杆专业生产厂家，我们期待通过与您的深入合作助力您的施工顺利。



## COMPANY PROFILE 目录

### HORIZONTAL DIRECTIONAL DRILLING TOOLS MANUFACTURESUPPLIER PIONEER IN THE WORLD

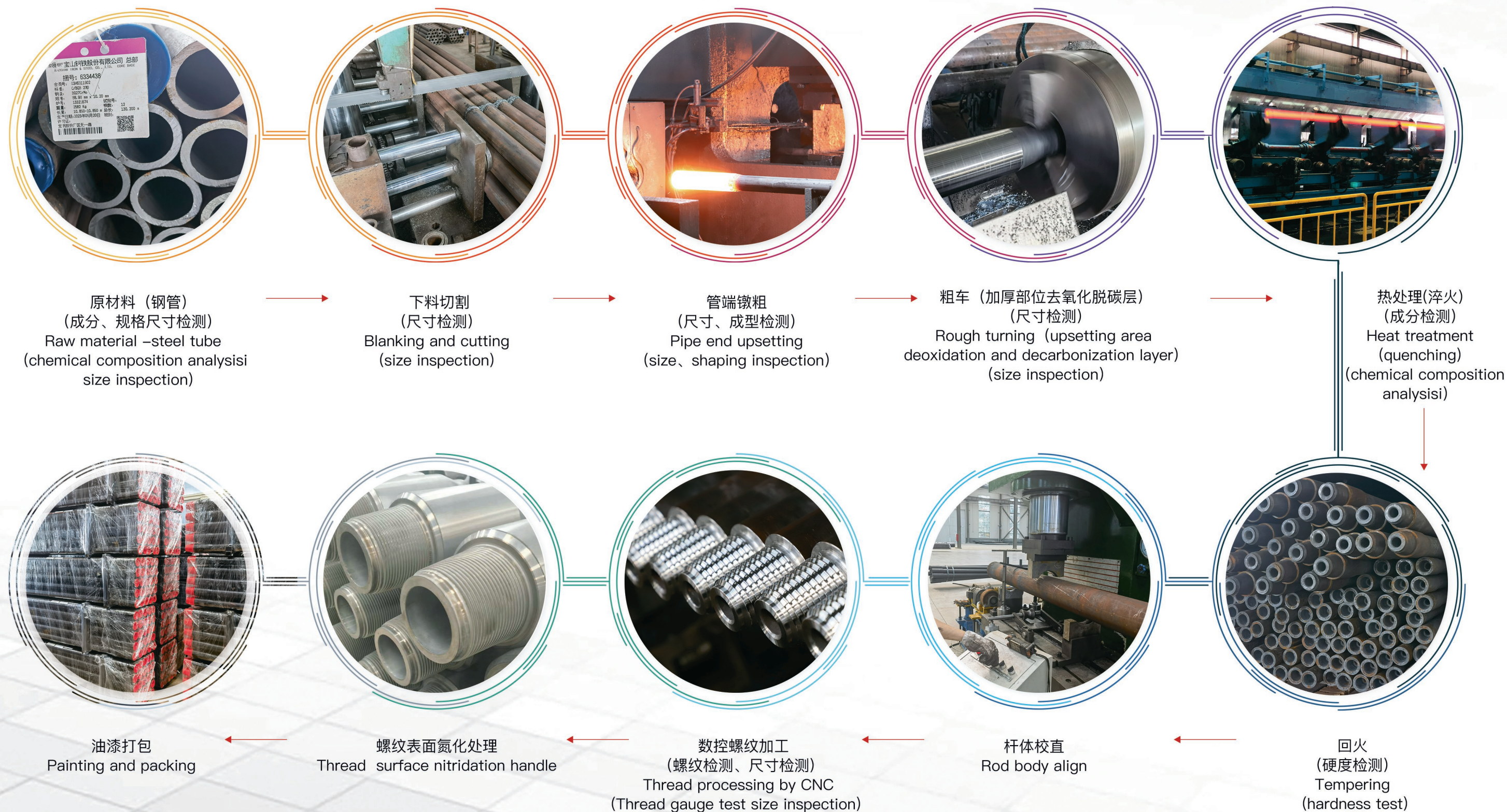
Xuzhou Runda Drilling Tools Co., Ltd. was established in 2020 and officially put into production and operation in early 2022 after more than a year of factory construction and equipment installation work. Our company currently mainly focuses on the market field of non excavation large directional crossing drill rod, with products covering large diameter friction welded drill rod with diameters of  $\varnothing 127$ ,  $\varnothing 140$ ,  $\varnothing 168$ ,  $\varnothing 194$ ,  $\varnothing 219$ ,  $\varnothing 254$ , etc., meeting the requirements of supporting drilling machine models ranging from 100 tons to 1500 tons. After being put into the market, our company's products have undergone various ultra high difficulty engineering tests and have been recognized by many large directional drilling construction units and owners in China. As a responsible, and daring professional manufacturer of drill pipes, we look forward to working closely with you to help your construction progress smoothly.

整体钻杆的生产过程	02
摩擦焊钻杆的生产过程	04
整体钻杆	06
摩擦焊钻杆	08
配件车间	09
黎明扩孔器	10
黎明导向头	11
黎明分动器	12
钻机主轴 齿轮	13
其他配件	14
品质控制	18



# FORGEN-ONE-PIECE DRILL ROD PRODUCTIVE PROCESS

## 整体钻杆的生产过程





# FRICION WELDED DRILL ROD PRODUCTIVE PROCESS

## 摩擦焊钻杆的生产过程

热处理 (成分检测)  
Heat treatment (chemical composition analysis)



原材料 (钢管)  
(成分、规格尺寸检测)  
Raw material (steel tube)  
chemical composition analysis size inspection



下料切割  
(尺寸检测)  
Blanking and cutting  
(size inspection)



管端镦粗  
(尺寸、成型检测)  
Pipe end thickening  
(size, shaping inspection)



接头生产 (尺寸、硬度检测)  
Joint production (size and hardness testing)



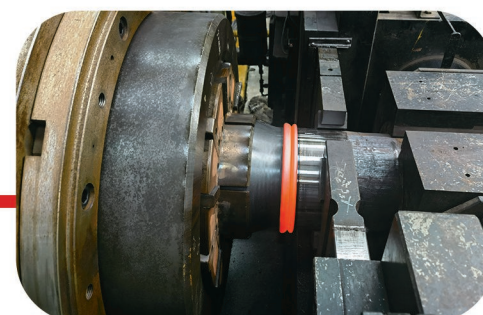
杆体校直  
Rod body align



焊接处加工 (去除焊接挤压残骸)  
Welding processing  
(Remove welding extrusion debris)



焊接处外圈回火  
Welding outer ring tempering



杆体与接头摩擦焊处理  
Friction welding of joints and steel pipes



粗车  
(加厚部位去除氧化脱碳层)  
Rough turning  
(Remove oxidation decarburization layer from thickened parts)



焊接处淬火  
Welding quenching



焊接处回火 (硬度检测、无损检测)  
Welding tempering  
(hardness test, non-destructive test)



钻杆内修磨  
Drill pipe inside polish



钻杆外修磨 (光洁度检测)  
Drill pipe outside polish  
(smoothness testing)



油漆打包  
Painting and packing



FORGEN-ONE-PIECE DRILL ROD

整体钻杆

进入21世纪以来，非开挖工程面临着施工成本高，地下管网复杂，工程利润低等问题，在施工过程中如因钻杆断裂导致工程失败就会造成无法挽回的损失，因此钻杆的品质在非开挖工程中乃是重中之重。我公司研制的钻杆从原料到生产工艺都进行严格把控，精选国内知名厂家的S135级钢材，后续生产步骤都进行了数据化监控，确保了产品的可追溯性。公司自有的实验室，不断的进行着数据的采集与反馈，保证了生产的科学性，严密性。其中钻杆采用的双顶结构的设计，能更好的保护钻杆的公母扣，大大的增加钻杆的使用寿命。

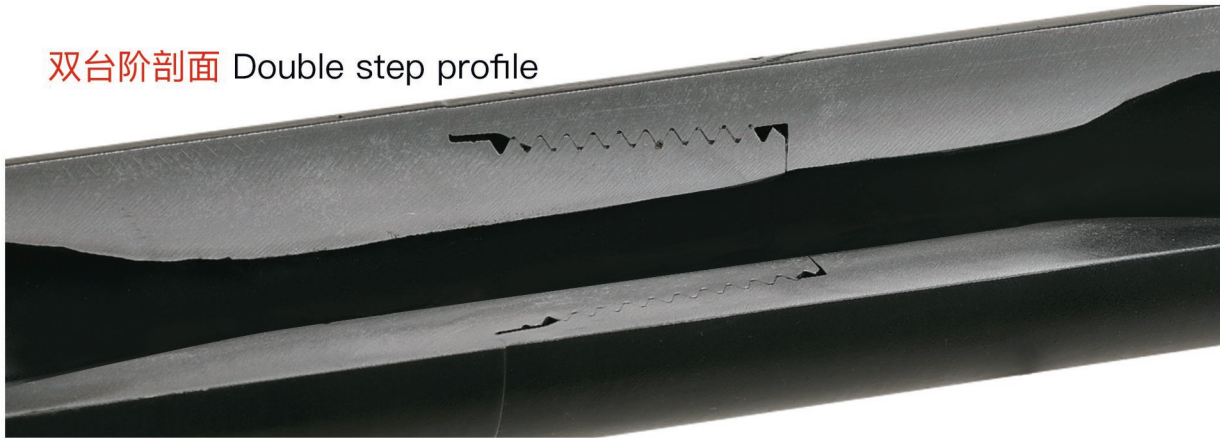
Since the beginning of the 21st century, non excavation engineering has faced problems such as high construction costs, complex underground pipeline networks, and low engineering profits. If the project fails due to drill pipe breakage during the construction process, irreparable losses will be caused. Therefore, the quality of drill pipes is of utmost importance in non excavation engineering. The drill pipes developed by our company are strictly controlled from raw materials to production processes, selecting S135 grade steel from well-known domestic manufacturers. Subsequent production steps are monitored data-driven to ensure product traceability. The company's own laboratory continuously collects and provides feedback on data, ensuring the scientific and rigorous production. The double top structure design adopted by the drill pipe can better protect the male and female buckles of the drill pipe, greatly increasing the service life of the drill pipe.

整体钻杆详细参数

规格型号 (Model)	钻杆长度	螺纹型号	管壁壁厚	螺纹长度	接头外径	公钳区长度	母钳区长度	参考重量	扭矩	最小弯曲半径	最大弯曲角度	钢级
	Length	Thread Type	Wall Thickness Of The Tube	Pin Length	OD Of The Joint	Pin Clamp Length	Box Clamp Length	Weight	Torque	Minimum Bending Radius	Max Angle	Grade
	m	API	mm	mm	mm	mm	mm	kg	N.m	m	°	S
Ø 52	1.8	LM20	6.8	63.5	57	110	170	16	4800	32	3.5	S135
Ø 60	2.5	LM60	7.1	65	68	120	170	29	8200	40	4.3	S135
Ø 60	3.048	LM24	7.1	63.5	68	120	170	35	8500	40	4.3	S135
Ø 60	3	LM60	7.1	65	68	120	170	34	8500	40	4.3	S135
Ø 73	3	NC23	8	76.2/85	82	120	180	45	15000	48	3.5	S135
Ø 76	3	NC26	10	85	88	125	180	54	18000	48	3.5	S135
Ø 83	3	LM80	9.19	88.9	92	130	190	59	21000	55	3.1	S135
Ø 89	3	NC31	10	88.9	105	170	200	77	32000	59	3.5	S135
Ø 89	4.5	NC31	10	88.9	105	170	200	102	32000	59	4.4	S135



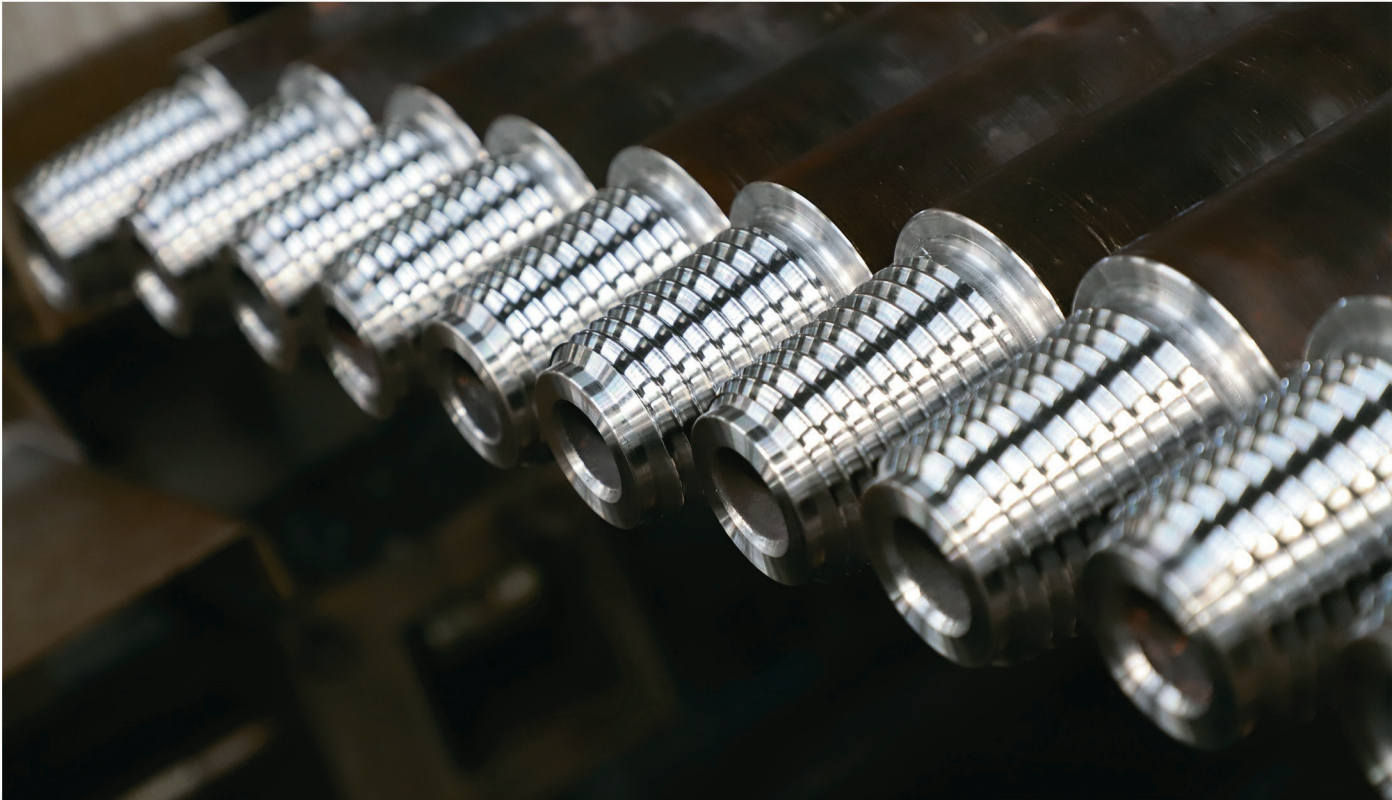
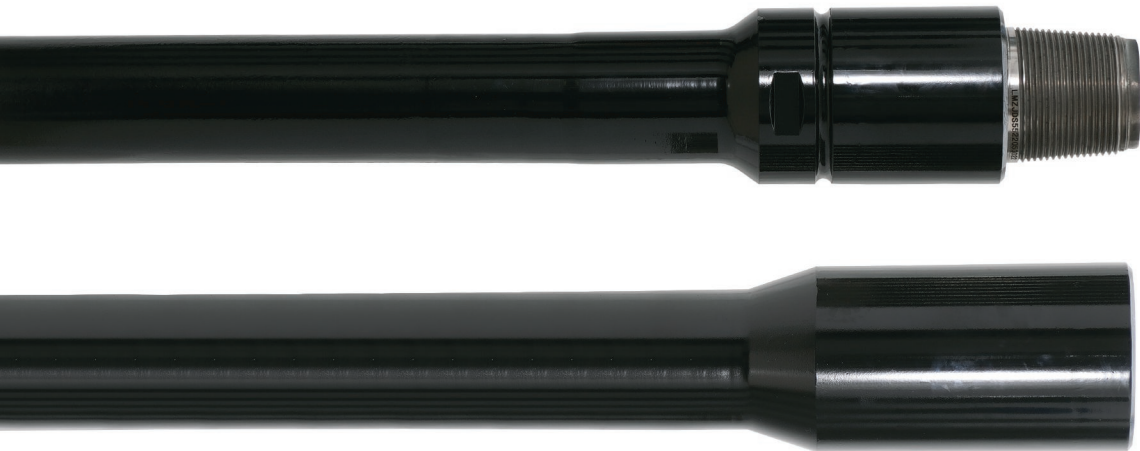
双台阶剖面 Double step profile





FRICION WELDED DRILL ROD

摩擦焊钻杆



摩擦焊钻杆详细的参数

规格型号 (Model)	钻杆长度	螺纹型号	管体壁厚	螺纹长度	接头外径	公钳区长度	母钳区长度	参考重量	扭矩	最小曲率半径	最大弯曲角度	钢级
	Length	Thread Type	Wall Thickness Of The Tube	Pin Length	OD Of The Joint	Pin Clamp Length	Box Clamp Length	Weight	Torque	Minimum Bending Radius	Max Angle	Grade
	m	API	mm	mm	mm	mm	mm	kg	N.m	m	°	S
Ø 102	4.5	NC38	9.19	110	127	215	300	122	54000	67	5.1	S135
Ø 102	6	NC38	9.19	110	127	215	300	168	54000	67	5.5	S135
Ø 114	4.5	NC38	9.19	110	127	215	300	146	54000	75	4.5	S135
Ø 114	6	NC38	9.19	110	127	215	300	182	54000	75	4.5	S135
Ø 114	6	NC40	10.54	125	139.7	240	271	210	69000	75	4.5	S135
Ø 114	6	NC46	9.19	126.3	158.8	230	305	196	95000	75	4.5	S135
Ø 127	6	NC50	9.19	125	168.3	230	305	241	120000	84	4.2	S135
Ø 127	9.6	NC50	9.19	125	168.3	230	305	335	120000	84	6.5	S135
Ø 140	9.6	5 1/2FH"	10.54	138	190.5	254	305	433	125000	92	5.9	S135
Ø 168	9.6	6 5/8FH"	10.54	138	215.9	254	330	535	145000	111	4.9	S135
Ø 168	9.6	6 5/8FH"	12.7	138	215.9	254	330	590	165000	142	4.7	S135
Ø 194	9.6	NC70	12.7	190	230	281	400	730	220000	156	4.5	S135
Ø 194	9.6	NC70	14.5	190	230	281	400	775	235000	170	4.3	S135
Ø 194	9.6	NC70	16.8	190	230	281	400	880	239000	175	4	S135



## ACCESSORIES WORKSHOP

### 配件车间

扬州黎明钻具有限公司拥有丰富的齿轮，非开挖配件的生产经验，车间内配备了磨齿机，插齿机，加工中心等先进设备，在过去的10年里，先后为国内各大钻机厂家供应了大量的配件。公司已经通过了ISO9001质量体系认证，14001环境管理体系，我公司产品由于价格合理，质量过硬、销售方式灵活、服务热情周到而深受广大用户好评，国内外市场都收获了良好的口碑。

Yangzhou Dawn Drilling Tools Co., Ltd. has rich experience in the production of gears and non excavation accessories. The workshop is equipped with advanced equipment such as gear grinding machines, gear shapers, and machining centers. In the past 10 years, it has supplied a large number of accessories to drilling rig factories. The company has passed the ISO9001 quality system certification and 14001 environmental management system. Our products are highly praised by users due to their reasonable prices, excellent quality, flexible sales methods, and enthusiastic and thoughtful services. We have gained good reputation in both domestic and foreign markets.



## 黎明牌扩孔器 (根据不同的施工情况建议您选择不同的扩孔器!)

We suggest that you choose different reamers based on different construction situations



挤扩式扩孔器 Barrel reamer

适用普通软土层，使用普遍，成孔好 Suitable for ordinary soft soil layers, widely used, with good pore formation



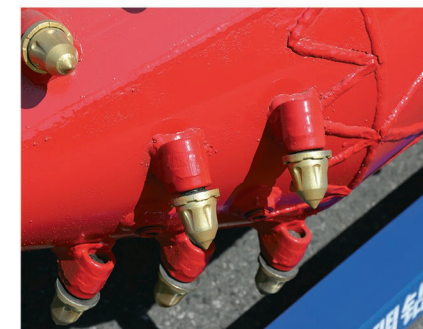
铸钢流道式扩孔器 Fluted reamer

适用砂土层，非常耐磨，利于排土 Suitable for sandy soil layers, very wear-resistant, and conducive to soil removal



切削式扩孔器 Cutter reamer

适用硬土层，高效率扩孔 Suitable for hard soil layers, efficient hole expansion



桶式扩孔器 Bucket reamer

适用于长距离、大管径穿越，可用于正扩、反扩 Suitable for long-distance, large-diameter crossings, and can be used for bidirectional hole expansion



GUIDE HEAD

导向头



导向头参数

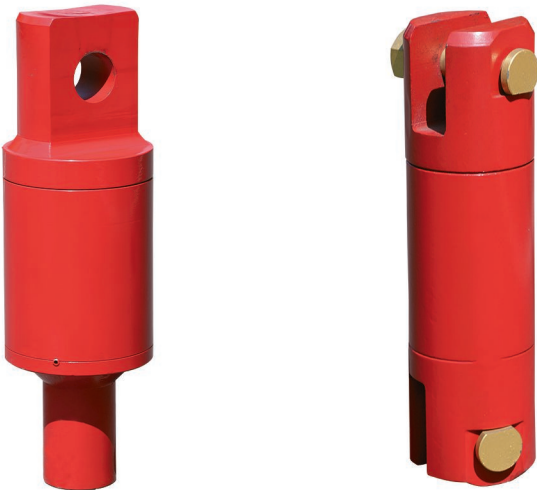
适配钻杆型号	连接形式	探棒仓长度 (mm)	探棒装卸方式
Ø 60	直连 / 八方	380	侧装 / 后装
Ø 73	直连 / 八方	380	侧装 / 后装
Ø 76	直连 / 八方	380	侧装 / 后装
Ø 83	直连 / 八方	380	侧装 / 后装
Ø 89	直连 / 八方	480	侧装 / 后装
Ø 102	直连	480	侧装 / 后装
Ø 114	直连	480	侧装 / 后装
Ø 127	直连	可定制长度	侧装 / 后装
Ø 140	直连	可定制长度	侧装 / 后装
Ø 168	直连	可定制长度	侧装 / 后装
Ø 194	直连	可定制长度	侧装 / 后装

DAWN PULLING SWIVEL

黎明分动器

我公司生产的分动器，全部采用机油作为润滑油，免维护装配方案，让您更省心，全系列最大安全系数1.5，产品从5t到800t不等，适配所有标准U型环。

All the Pulling Swivel produced by our company use engine oil as lubricating oil. The maintenance free assembly scheme makes you more worry free. The maximum Factor of safety of the whole series is 1.5, and the products range from 5t to 800t. They are suitable for all standard U-rings.



黎明牌分动器参数

分动器型号	适配钻杆	连接形式	美标弓形卸扣型号
5 吨	Ø 52	双耳	2t
10 吨	Ø 52/Ø 60	双耳	8.5t
20 吨	Ø 60	双耳	12t
30 吨 /35 吨	Ø 73	双耳	17t
40 吨 /50 吨	Ø 83	双耳	25t
60 吨	Ø 89	双耳 / 单耳	55t
80 吨	Ø 102	单耳	55t
100 吨	Ø 102/Ø 114	单耳	85t
150 吨	Ø 127	单耳	123t
200 吨	Ø 127	单耳	150t
350 吨	Ø 140	单耳	200t
500 吨	Ø 168	单耳	300t
600 吨	Ø 168/Ø 194	单耳	300t/500t
800 吨	Ø 194	单耳	500t/800t



## DRILL SPINDLE GEAR

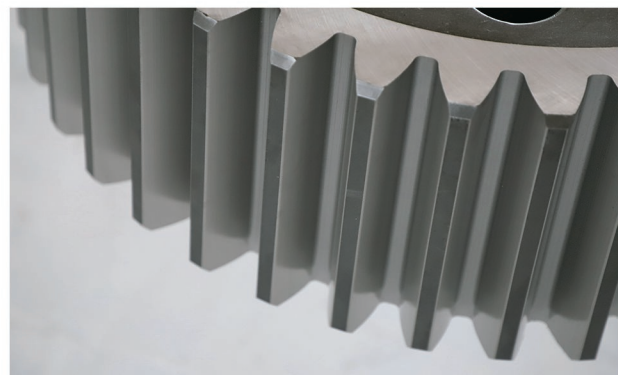
### 钻机主轴 齿轮

为了满足各大钻机生产厂家的一站式采购需求，我公司凭借着丰富的机械加工生产经验为各大钻机厂家生产各种钻机主轴、齿轮等高要求产品。

In order to meet the one-stop procurement needs of major drilling rig manufacturers, our company combines rich experience in mechanical processing and production to produce various high demand products such as drilling rig spindles and gears for each major drilling rig manufacturer.



浮动芯轴



大齿轮



## OTHER ACCESSORIES

### 其他配件

我公司生产的保护短接、拉头、扭矩套连接杆等配件均采用高性能合金材质制作，配件全部使用辉光离子氮化炉氮化处理，耐磨性高，是市场上普通配件的三倍使用寿命。

The protective protect joint, pull buck joint, torque cover connect and other accessories produced by our company are all made of high-performance alloy materials. All accessories are treated with glow ion nitriding furnace nitriding, with high wear resistance, which is three times the service life of ordinary accessories on the market.







按照API标准进行冲击数据的收集  
Collect impact data according to API standards

## **QUALITY CONTROL**

### 品质控制



通过金相组织分析数据，更好的改善生产工艺  
Improve production processes through metallographic analysis of data



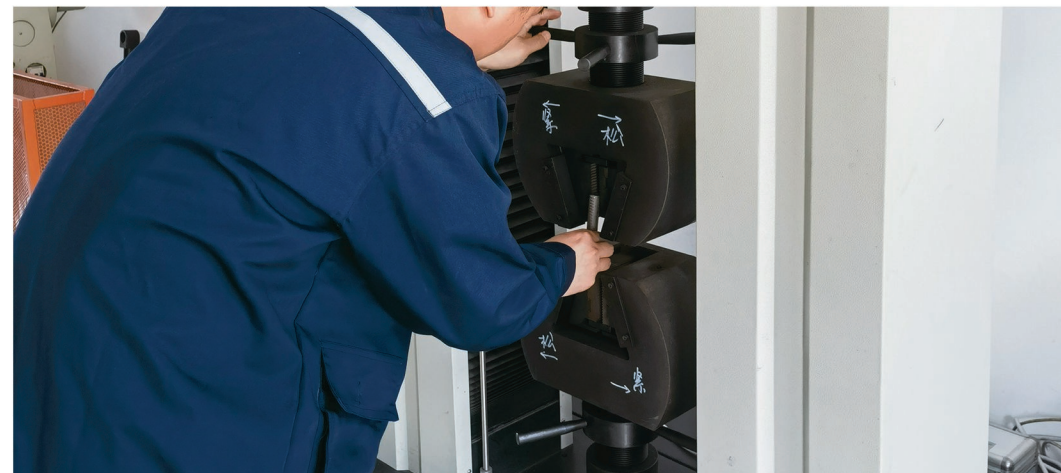
成品上取样，等待检测  
Take samples from the finished product and wait for testing



对产品的硬度测试，收集数据  
Conduct hardness testing on products and collect data



测试品存档，以备查验  
Archive test samples for inspection



测试样品的拉力性能  
Test the tensile performance of the sample



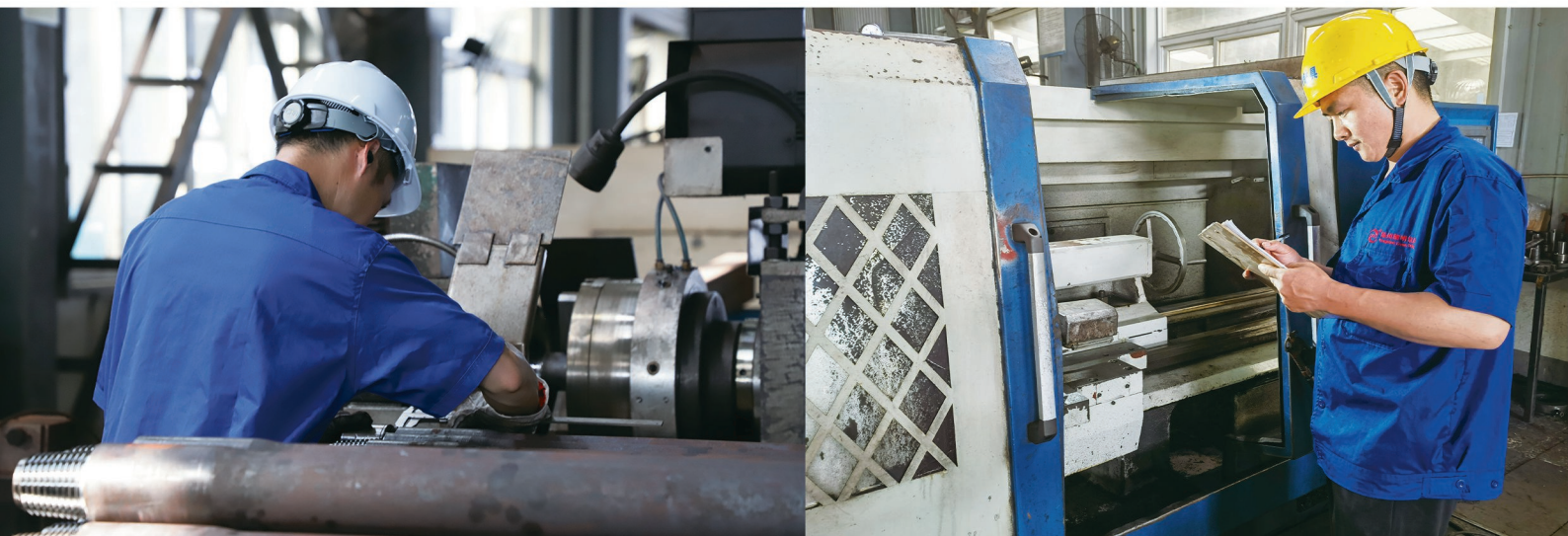


生产人员对每一根钻杆进行校直与检测  
Production personnel straighten and inspect each drill pipe



利用仪器进行无损检测  
Using instruments for non-destructive testing

## QUALITY CONTROL 品质控制



每件产品都需通过检测才能进入下一个生产工序  
Each product needs to pass testing before entering the next production process

生产人员现场记录每个工件的数据  
Production personnel record data for each workpiece on site



每一件合格的产品，都会通过激光刻字进行标识，确保了产品的可追溯性  
Every qualified product is identified through laser engraving, ensuring product traceability



定期进行工艺检查，确保生产的可靠性  
Regularly conduct process inspections to ensure the reliability of production