



## UNDERGROUND CORE DRILLING RIG 坑道岩芯钻机

**Hole Depth**  
150-1200m

**Hole Size**  
AQ,BQ,NQ,HQ,PQ

**Rotation Torque**  
660-1300Nm

**Power range**



### INTRODUCTION 产品介绍

>> The JKD series tunnel core drilling rig has the characteristics of comprehensive drilling construction in all fields, all directions, and all angles, and is suitable for various purposes such as surface drilling, tunnel drilling, tunnel construction, and advanced prediction.

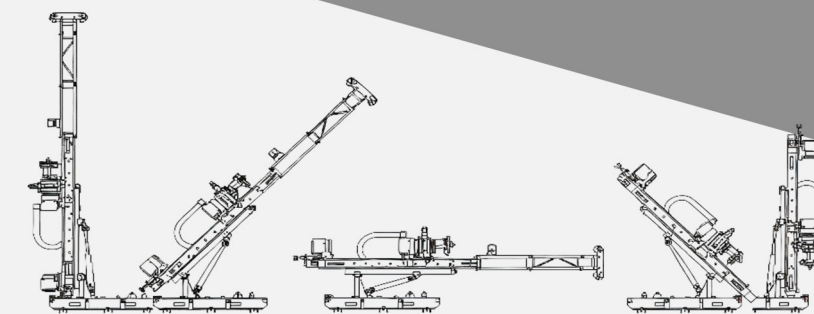
The JKD series drilling rig adopts internationally advanced intelligent control technology, which can achieve multiple functional extensions such as energy efficiency and safety control, automation management, etc. According to different needs, electric or diesel power units can be selected (single group or conversion, multi group).

- >> Hydraulic automatic positioning system, quickly and accurately adjusting drilling posture, easily achieving 360 degree drilling.
- >> Optimized design, clever structure, compact layout, maximum adaptability to narrow working spaces, convenient for construction.
- >> Advanced production technology, excellent manufacturing, and outstanding performance.

>> The power head adopts the classic design, with a through-hole chuck and rotating unit as a whole structure, fully ensuring the functionality and reliability of the drilling rig. Gear transmission and variable speed mechanism, with continuously adjustable speed. The power head is equipped with an independent lubrication system to ensure sufficient lubrication and improve the service life of components.

# JKD Series

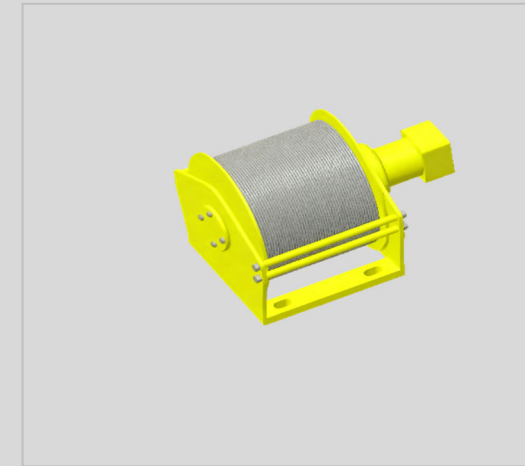
先进勘探技术合作伙伴  
Partner of advanced Drilling Solutions





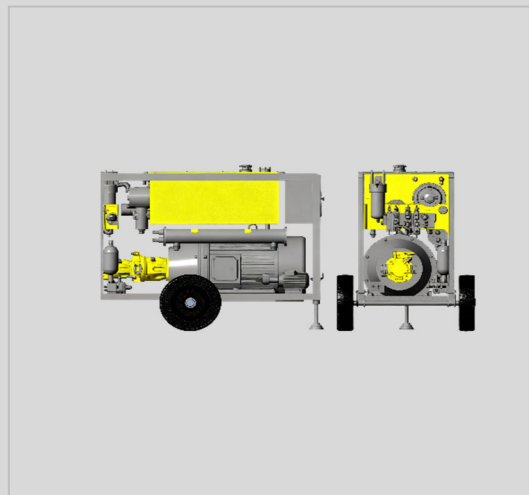
### >> Control System

- >> Intelligent hydraulic control system, component action to achieve logic control.
- >> The pilot hydraulic system, with accurate and flexible equipment control, is easy and free, comfortable and safe.
- >> Load sensitive variable hydraulic system, high energy efficiency coefficient, balanced and stable power distribution.
- >> Customized hydraulic components of global first-line brands have excellent performance and high reliability.



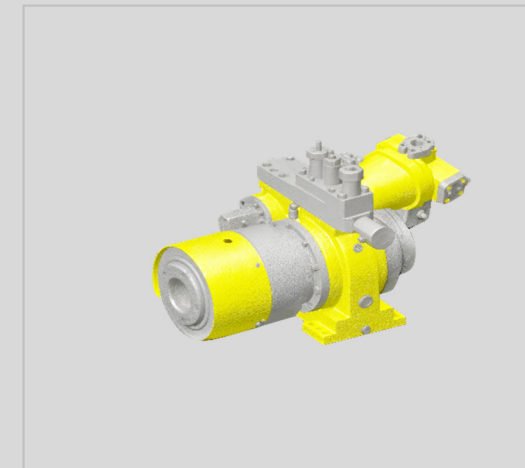
### >> Control System

- >> Strong power and good controllability.
- >> High safety and reliability,featuring dual braking design and overload pressure relief protection.
- >> Adaptation to harsh working conditions:sealed, dustproof,vibration-resistant,and moisture-resistant design.
- >> It can be linked with the main control system of the drill rig to achieve coordinated movements.
- >> Optimize the design for the narrow space of tunnels,ensuring a compact and light weight structure.



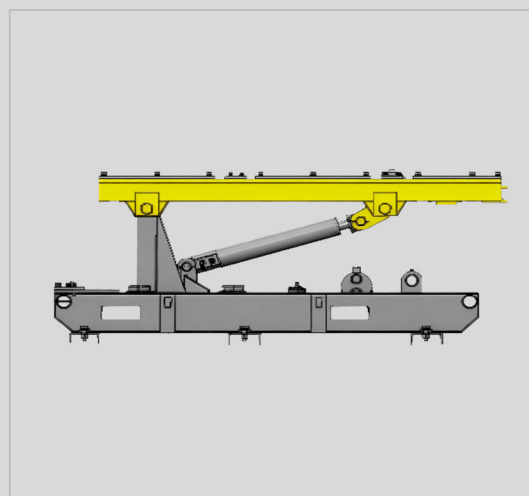
### >> Power System

- >> The electric motor is equipped with a dual variable displacement pump, a 230L oil tank, as well as suction and return oil filters. The hydraulic oil is cooled using a water-cooled cooler, and an electric fuel pump is also equipped.
- >> With an IP66 protection level, it is suitable for harsh working environments with high temperatures, high humidity, and high corrosion.
- >> Danfoss main pump and auxiliary pump, variable hydraulic system, load-sensing control.



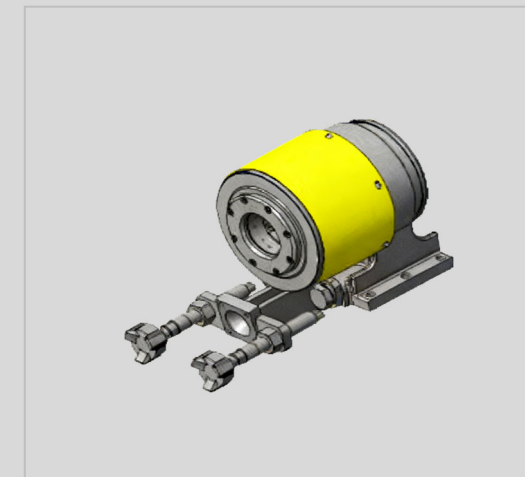
### >> Rotary Head

- >> Through hole chuck design, compact structure, customized production in Canada.
- >> HQ through hole capability, mechanical. clamping, hydraulic control opening, stable, flexible and accurate action.
- >> The unique external connection mode is adopted to connect with the power head, which is convenient for quick disassembly and maintenance.



### >> Mast Seat

- >> Made of high-strength alloy steel or high-quality carbon steel welded together,the structure is mechanically optimized,with stable support and strong load-bearing capacity.
- >> The mating surface between the bracket and the slide is precision machined, with precise guidance to ensure the quality of drilling.
- >> Wide adaptability, flexible adaptation to complex working conditions
- >> Safe and reliable, adaptable to harsh environments
- >> Easy installation and maintenance,High work efficiency.

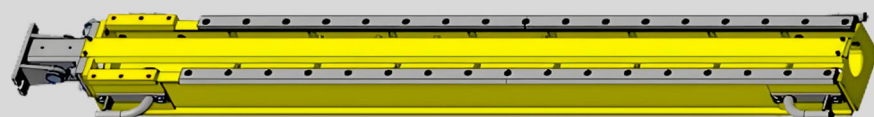


### >> Pipe Clamp

- >> The normally closed drill rod gripper adopts mold spring clamping and hydraulic opening.
- >> When the hydraulic system loses pressure, it can quickly and automatically close,clamping the drill rod safely and reliably.
- >> High automation level, outstanding operational efficiency,capable of linking with the main control system of the drill to achieve automatic control of clamping and releasing actions.
- >> Precise guidance to ensure drilling quality.



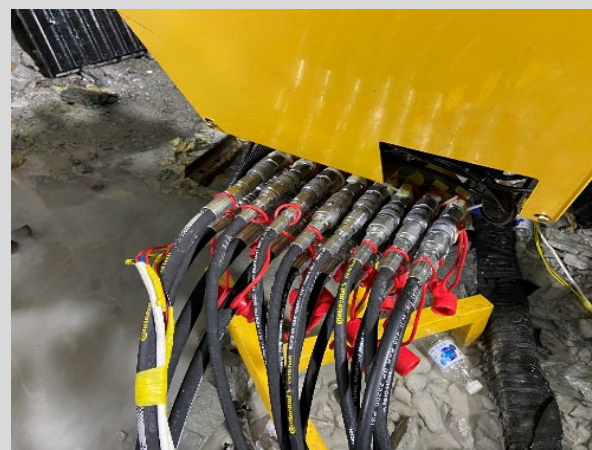
>> Mast 滑架



- >> High feed accuracy ensures drilling quality. The slide is equipped with high-precision quenched guide rails and wear-resistant sliders, and the feed positioning accuracy can reach 0.03mm/m level
- >> Strong load-bearing and impact resistance, made of high-strength alloy materials such as Q355, with a mechanically optimized structure (such as reinforced rib layout), capable of stably carrying heavy-duty drilling tools of different specifications
- >> Smooth movement and high homework efficiency

>> Hydraulic pipeline 液压管路

- >> Continental hydraulic pipeline;
- >> CEJN (Sweden) quick change connector;
- >> Quick and convenient connection of parts and pipelines;
- >> Effectively prevent external steam, corrosive substances and pollutants from entering the hydraulic system.



>> Advantage 技术优势

- >> International high technology products, comparable to world famous brands
- >> Modular design, compact and flexible structure;
- >> Intelligent logic control, easy to operate, accurate and safe
- >> Excellent reliability and production efficiency;
- >> Flexible setting, 360 degree full angle free drilling;
- >> Provide customized services according to specific working conditions.



### >> Characteristics 产品特点

>>The drill rod gripper is opened by hydraulic pressure and clamped by a nitrogen spring, with a rapid response and ensuring safety.

>>The logic control function realizes synchronous linkage between the power head chuck and the gripper, preventing accident risks, while achieving automated control of drill pipe operations, reducing the workload of operators.

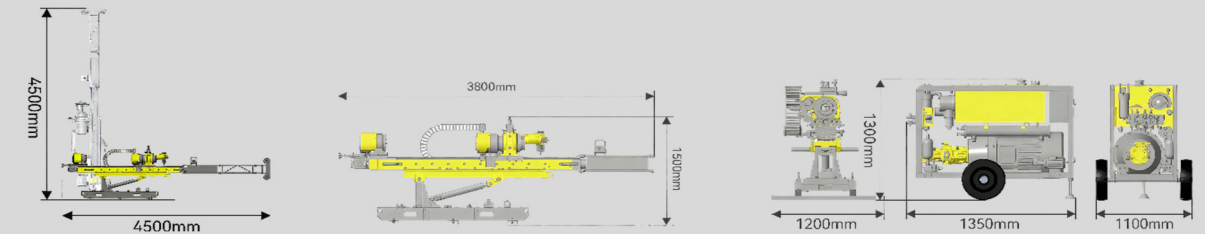
>>The work bench adopts hydraulic pilot (PHC system interface friendly, smooth operation, precise control, high comfort, safe and reliable).

### >> Specification 技术参数

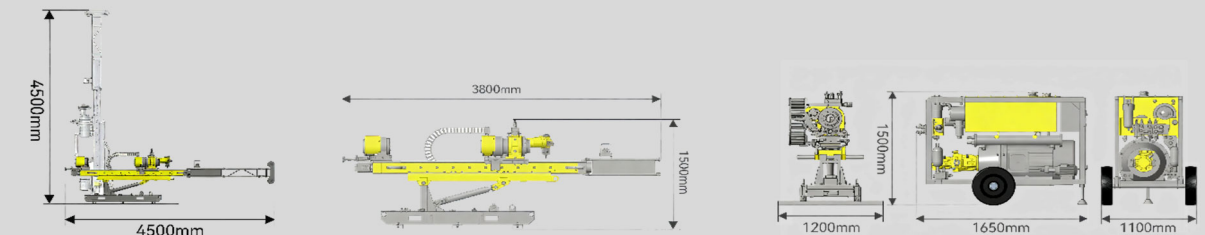
Technical parameter	JKD45			JKD55			JKD75			JKD90		
	D ↓	H ⇔	U ↑	D ↓	H ⇔	U ↑	D ↓	H ⇔	U ↑	D ↓	H ⇔	U ↑
95(HQ)				350m	300m	200m	450m	400m	200m	600m	500m	200m
75(NQ)	400m	300m	150m	500m	400m	300m	700m	500m	300m	1000m	600m	300m
59(BQ)	450m	350m	200m	700m	550m	350m	900m	650m	400m	1200m	800m	400m
46(AQ)	500m	400m	300m									
<b>Power System</b>												
Rated power	45KW			55KW			75KW			90KW		
Maximum flow of main pump	100L/mim			100L/mim			140L/mim			140L/mim		
Maximum pressure of main pump	20MPa			45MPa			25MPa			30MPa		
Maximum flow of auxiliary pump	40L/min			40L/min			40L/min			40L/min		
Maximum pressure of auxiliary pump	20MPa			20MPa			20MPa			20MPa		
<b>Rotary head</b>												
Max.Rotation speed	1000rpm			1000rpm			1000rpm			1000rpm		
Maximum torque	660Nm			700Nm			1000Nm			1300Nm		
Inner diameter of spindle	97mm			97mm			97mm			97mm		
Axial clamping force	90KN			90KN			90KN			110KN		
<b>Mast</b>												
Feed length	1600mm			1600mm			1600mm			1600mm		
Length of feed beam	2900 mm			2900 mm			2900 mm			2900 mm		
Push Down capacity	65KN			65KN			65KN			65KN		
Pull back capacity	65KN			90KN			120KN			120KN		
Feed Speed	0.5m/s			0.5m/s			0.5m/s			0.5m/s		
<b>Hydraulic clamp</b>												
Through hole	97mm			97mm			97mm			97mm		
Axial clamping force	90KN			90KN			90KN			110KN		
<b>Rope winch</b>												
Load Capacity(KN)	2.5-6			2.5-6			2.5-6			2.5-6		
Rope capacity (m)	25			25			25			25		
Rope speed	95			95			95			95		
Wire rope diameter	φ6mm			φ6mm			φ6mm			φ6mm		
Work pressure difference	10Mpa			10Mpa			10Mpa			15Mpa		
Brake opening pressure	2.5 ~ 2.8Mpa			2.5 ~ 2.8Mpa			2.5 ~ 2.8Mpa			2.5 ~ 2.8Mpa		
maximum flow	80L/min			80L/min			80L/min			140L/min		
Motor model	R2K-80			R2K-80			R2K-80			HMT315		
reduction ratio	1:4.5			1:4.5			1:4.5			1:4.5		
<b>Weight</b>												
Overall weight	2100 KG			2300 KG			2370 KG			2750 KG		
Mast weight: (including base)	1120KG			1320KG			1240KG			1350KG		
Power system weight:	900KG			1000KG			1050KG			1320KG		
Operating table weight:	80KG			80KG			80KG			85KG		

### >> Dimension 设备尺寸

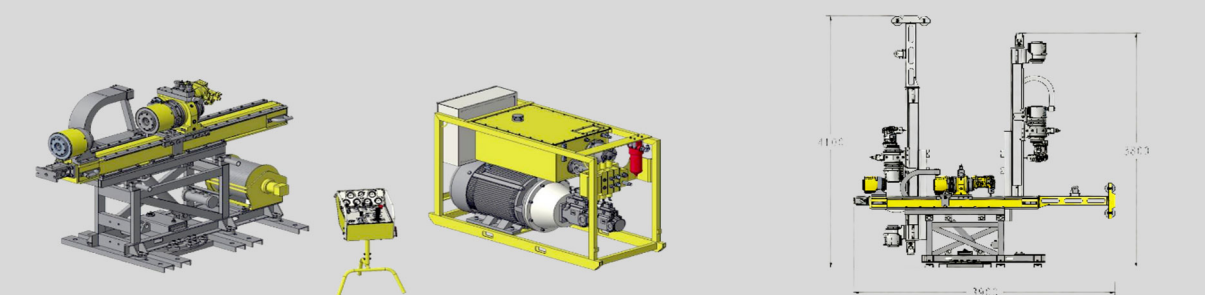
#### JKD45,JKD55



#### JKD75



#### JKD90



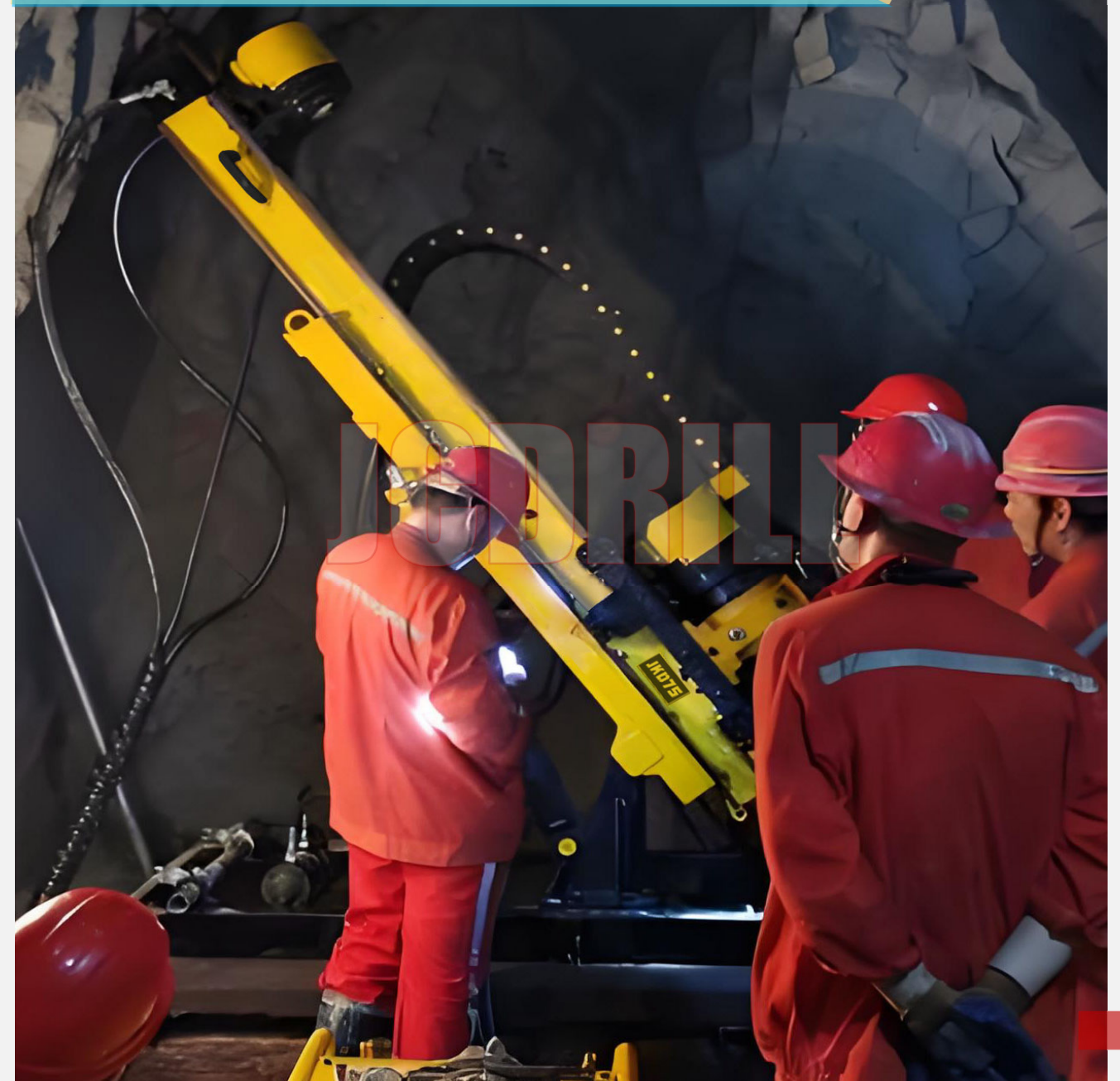


Testing 检测



- >> Geological exploration: obtaining rock cores and ore samples, identifying underground structures and resource distribution
- >> Gas control: drilling gas drainage holes to reduce the risk of underground explosions
- >> Prevention and control of water hazards: construction of water exploration and drainage holes to prevent water seepage accidents
- >> Engineering support: drilling anchor holes and grouting holes to reinforce the surrounding rock of the roadway
- >> Other applications: ventilation holes, coal seam water injection, tunnel advance prediction, etc

**APPLICATION**



Contact Us 联系我们

BEIJING JINCHENG MINING TECHNOLOGY CO., LTD

Add: Rm1407, Building A, NO. 13 Beiyuan Road, Chaoyang, Beijing, China  
Mob: 0086 13810203890

Tel: 0086 10 5368 1788  
Fax: 0086 10 51617069  
Email: sales@jcdrill.com  
Web: www.jcdrill.com  
WhatsApp/Viber/Wechat: +8613810203890



WECHAT



WHATS

