

### Advantage

- >> 200m depth drilling capacity  
Pull back force:94000N
- >> 105-305mm hole range  
Rotation torque:5500N.M
- >> 70Kw Yuchai engine  
74Kw Cummins engine(Optional)
- >> Eaton hydraulic motor(USA brand)
- >> Permco hydraulic motor(USA brand)
- >> Korea Imported walking motor
- >> Italy Imported hydraulic valve

### Optional:

- Hydraulic Dry dust collector
- Hydraulic Clip

# JC980

## DEPTH HOLE DTH DRILLING RIG

### 深孔潜孔钻机

#### INTRODUCTION产品介绍

- >> JC980,hydraulic down-the-hole drilling rig has better performance than the previous generation: fully optimized structure, lower drilling footagecost,more user-friendly design. The diesel engine (electricmotor)-hydraulic oil pump set is used as the power unit, and the hydraulic motor realizes the auxiliary movenents such as drilling,feeding, lifting, walking and hydraulic cylinder positioning.
- >> The rotating torque is large,JC980 can drill medium and large holes with ease to meet the need of increasing diameter. Additionally, the versatile JC980 is very cost-effective as it has the ability of drilling deep holes to suit customer needs from different fields (Photovoltaics, blasting, goaf management, hydropower construction).
- >> Equipped two hydraulic rotary motor,the Rotary Head Assembly speed reduced by two planetary gear,the output torque is 5600N/m,rotary speed 0-85rp/m, Rotary withimpact cushioning capacity,with the ability to reduce the impact of drilling reaction forces transmitted to the rotary motor, to reduce parts wastage.

#### >> CHARACTERISTICS产品特点

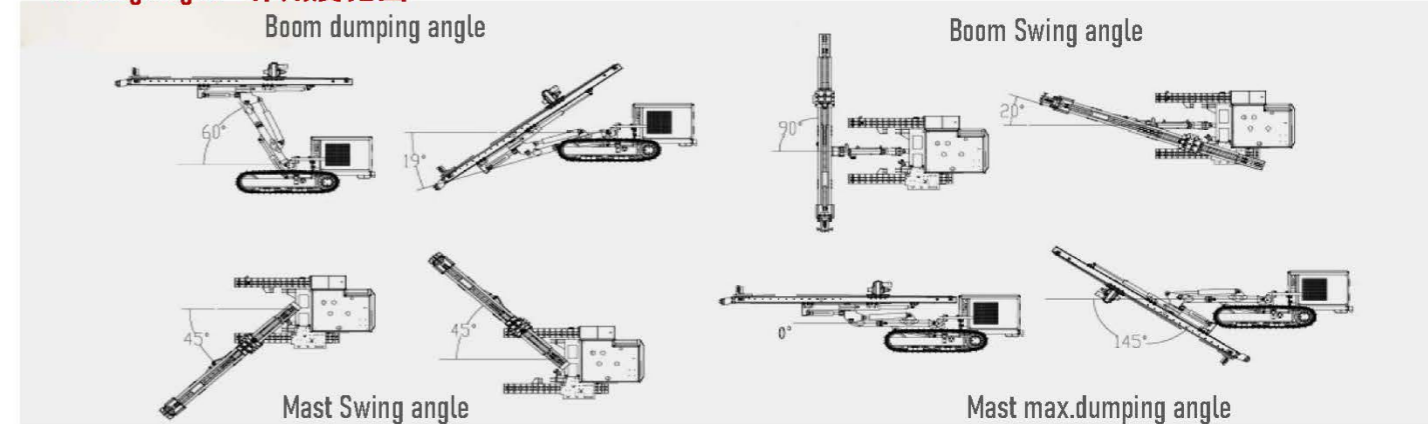
- >> Imported rotary seals have good sealing performance andlong life.The polymer liner is wear-resistant, does not need to belubricated, and is more convenient.Manganese steel guide rail,the frame is firm andwear-free.
- >> Permco brand hydraulic oil pump has high pressureresistance,large displacement,more reliable qualityand long life.
- >> Yuchai 70KW supercharged engine (Cummins 74kw optional), powerful, easy to maintain.
- >> The two-stage air filter device ensures that theengine sucks in clean air, which is safe and reliable.
- >> The oil-water integrated radiator ensures thenormal operation of the engine and hydraulic system in a high temperature environment.
- >> The original imported walking motor has strongclimbing ability and can tow the air compressor.Two-speed walking system, fast walking savesshift time.
- >> Maintenance-free support rollers, no oil filling.Install track guards to prevent track derailment.It can be equipped with unpowered unlockingwalking motor.

**Characteristics**
**产品特点**

- >> Operating System: Operating System equipped in the back of rig, easy drill operator observe and centralized control the machinery and hydraulic system, the pneumatic operating system is convenient and safety, could be one-handed control while traveling. The original imported control valve has more reliable performance.
- >> The hydraulic and mechanical double lock not only ensures the stable output of the large torque of the hydraulic motor, but also greatly improves the service life than the worm and gear.
- >> Traveling System: Each crawler were all powered by imported high power hydraulic motor, driven by a closed-end reducing gear, brake through the spring brake system, air clutch, same power of positive and negative direction, the gradeability arrives 35° while drag a compressor.
- >> The multi-angle, extended-function drill arm has a wider range of drilling. It can drill horizontal holes, front and rear angled holes, and lateral angled holes, which is 20% more than the drilling sector of similar drilling rigs.

**Specification 技术参数**

Specification	Unit	JC980
<b>General</b>		
Rock Hardness		F=6-20
Hole Diameter	mm	90-305
Hole Depth	DTH Drilling	200m
Hole Depth	Overburden Drilling	50m
<b>Rotary Head</b>		
Rotation Torque	Nm	5600
Rotation Speed	rpm	0-85
<b>Feed System</b>		
Max. Feed force	N	40000
Max. Lifting force	N	94000
Max. Feed Speed	M/min	15
Max. Lifting Speed	M/min	15
Feed Stroke	mm	3800
Mast Extension	mm	1200
<b>Engine</b>		
Manufacturer		YUCHAI
Rated Horse power	Kw	70
Type		4 cylinder, water cooling
<b>Hydraulic Clip(Optional)</b>		
Clamping Force	KN	157
Clamping Rod Diameter	mm	76-219
<b>Air Consumption</b>		
Air Consumption	M <sup>3</sup> /min	11-25
Compressor Pressure Required	Mpa	1.2-2.4
<b>Dimension</b>		
Max. Travel Speed	Km/h	2
Gradeability	°	25
Net Weight	kg	6600
Shipping Dimension	mm	7500*2200*2500
Ground Clearance	mm	252
<b>Dust Collector(Optional)</b>		
Dry Dust Collector		Optional


**Working angle 工作角度范围**

**Main Structure 主要结构**


## DTH Drilling Know How

Down-the-hole drilling (DTH) essentially involves a drilling hammer at the bottom of a drill string. It relies on three elements for drilling holes: bit loading (weight), rotation and air. These active elements combine to be efficient at crushing rock. As the drill string slowly rotates, the drilling hammer is forced into the rock repeatedly. Striking power is provided by compressed air driving a piston inside the hammer.

### Where is it used?

DTH drilling is often used in the mining industry (blast hole drilling), on construction sites, drilling water wells, and in the oil and gas industry.

### DTH advantages

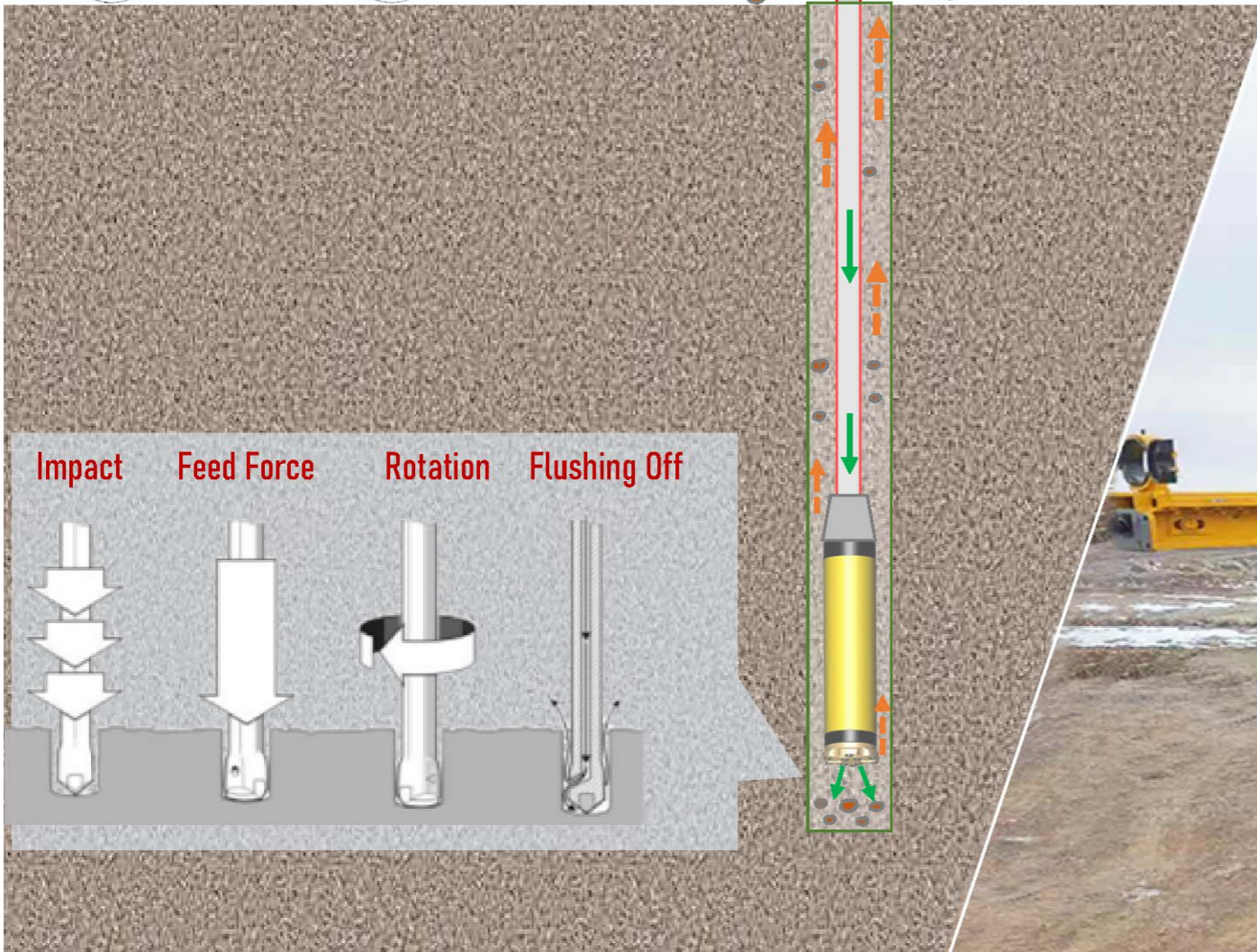
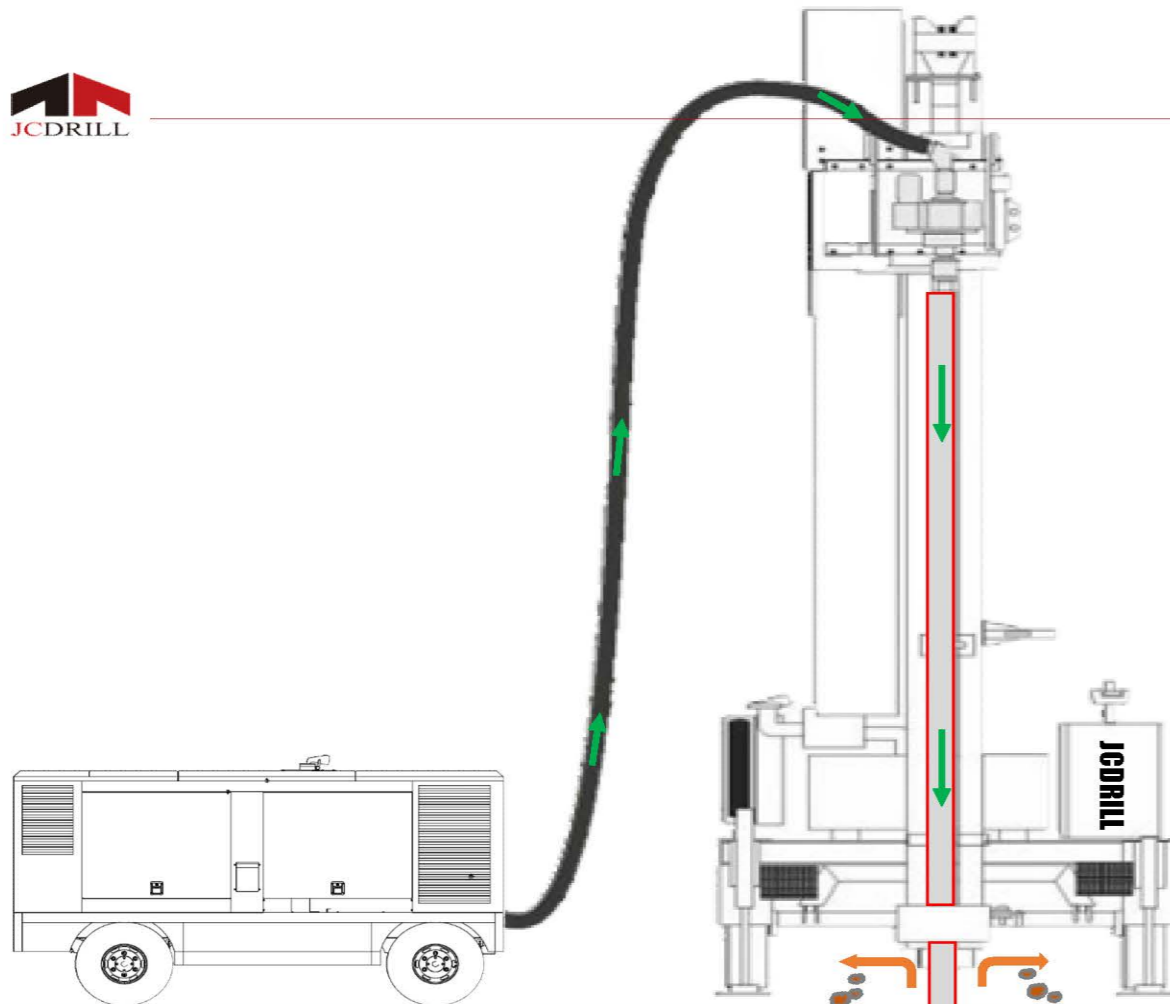
DTH drilling offers several advantages over top-hammer drilling for larger, deeper holes in medium-hard formations. Because the hammer is at the bottom of the hole, power loss is minimal as the hole deepens. That means energy is not lost in the drill string and penetration rates do not markedly decline with depth—provided that back pressure does not rise significantly in the borehole.

### Compressed air power

The DTH hammer is pneumatically powered, with the compressed air propelling it forward to impact and fracture rock. Compressed air also travels through the drill bit into the hole (air exhaust), which blows the chips and dust out of the hole.

### Quieter drilling

From environmental and social perspectives, DTH is a good option because it produces much less noise and vibration than many other drilling methods.



Shipping 运输



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WECHAT



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