

**Advantage:**

- >> Hole range:90-178mm
- >> 70Kw Yuchai engine,74Kw Cummins engine(Optional)
- >> Eaton hydraulic motor(USA brand)
- >> Korea Imported walking motor
- >> Italy Imported hydraulic valve
- >> Automatic rod handle



# JC900

## DTH ROCK DRILLING RIG

### 潜孔钻机

#### INTRODUCTION产品介绍

>> JC900 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. The new planetary gearboxhas a more compact structure, with a larger reduction ratio,higher torque transmission efficiency,andsmoother operation. It does not require additional components such as damping joints for shock absorption and has a lowerfailure rate,also can reduce daily maintenance costs. The unconsolidated layer is not easy to jam, and the holeformation rate is high.

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 and wear-free.

#### >> CHARACTERISTICS产品特点

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>> 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 ina 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.

>> The multi-angle, extended-function drill arm has awider range of drilling. It can drill horizontal holes, frontand rear angled holes, and lateral angled holes, whichis 20% more than the drilling sector of similar drillingrigs.



### 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.

### Specification 技术参数

Specification	Unit	JC900
<b>Drilling Specification</b>		
Rock Hardness		F=6-20
Hole Diameter	mm	90-178
Hole Depth	m	22/60
Drilling Rod	mm	76*3000
Drill rod tank		6+1
<b>Rotary Head</b>		
Rotation Torque	Nm	5600
Rotation Speed	rpm	0-92
<b>Feeding System</b>		
Max. Feed force	KN	16
Max. Lifting force	KN	20
Max. Feed Speed	M/min	15
Max. Lifting Speed	M/min	15
<b>Boom&amp;Guide</b>		
Max Swing of Boom	°	45° left / 45° right
Max Dump of Boom	°	Up23, Down55
Max Swing of Guide	°	90(L) / 31(R) or 31(L) / 90(R)
Max Dump of Guide	°	up55, Down 30
Mast Stroke	mm	4115
<b>Engine</b>		
Manufacturer		YUCHAI/CUMMINS(Optional)
Rated Horse power	Kw	70/74
Type		4Cylinder, water cooling
<b>Air Compressor demand</b>		
Air Consumption	M <sup>3</sup> /min	11-21m <sup>3</sup> /min(1.4-2.4 Mpa)
Compressor Type	Rotary Screw/Movable	
<b>General Specification</b>		
Max. Travel Speed	Km/h	2-3
Track width	mm	300
Underridge Floating Degree	°	±15
<b>General Specification</b>		
Gradeability	°	24
Net Weight	kg	9500
Shipping Dimension(L*W*H)	mm	7260*2210*3250
Ground Clearance	mm	252
Dust Collector		
Motor Speed	Rpm	3300
Filter Quantity		20



### 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

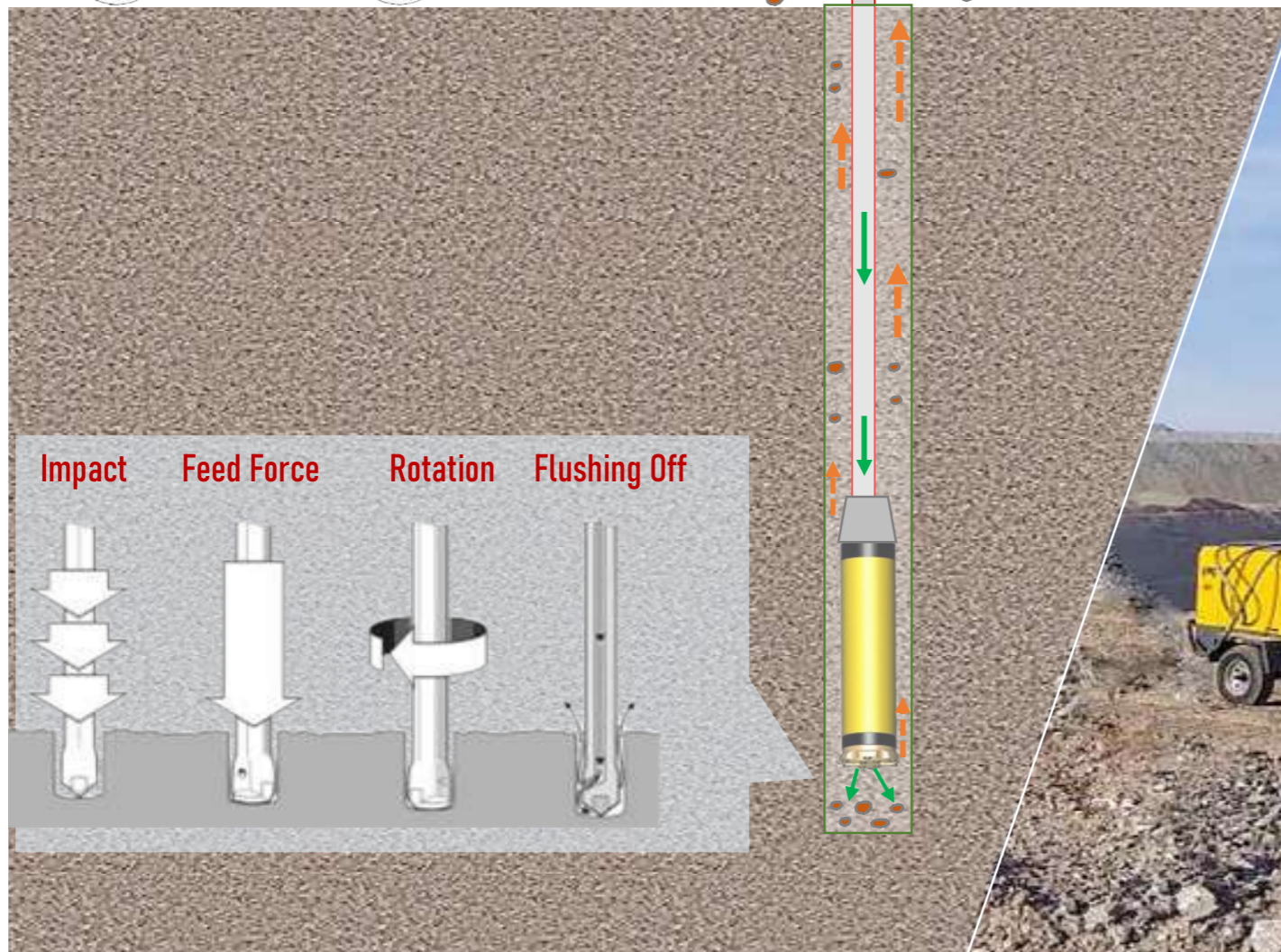
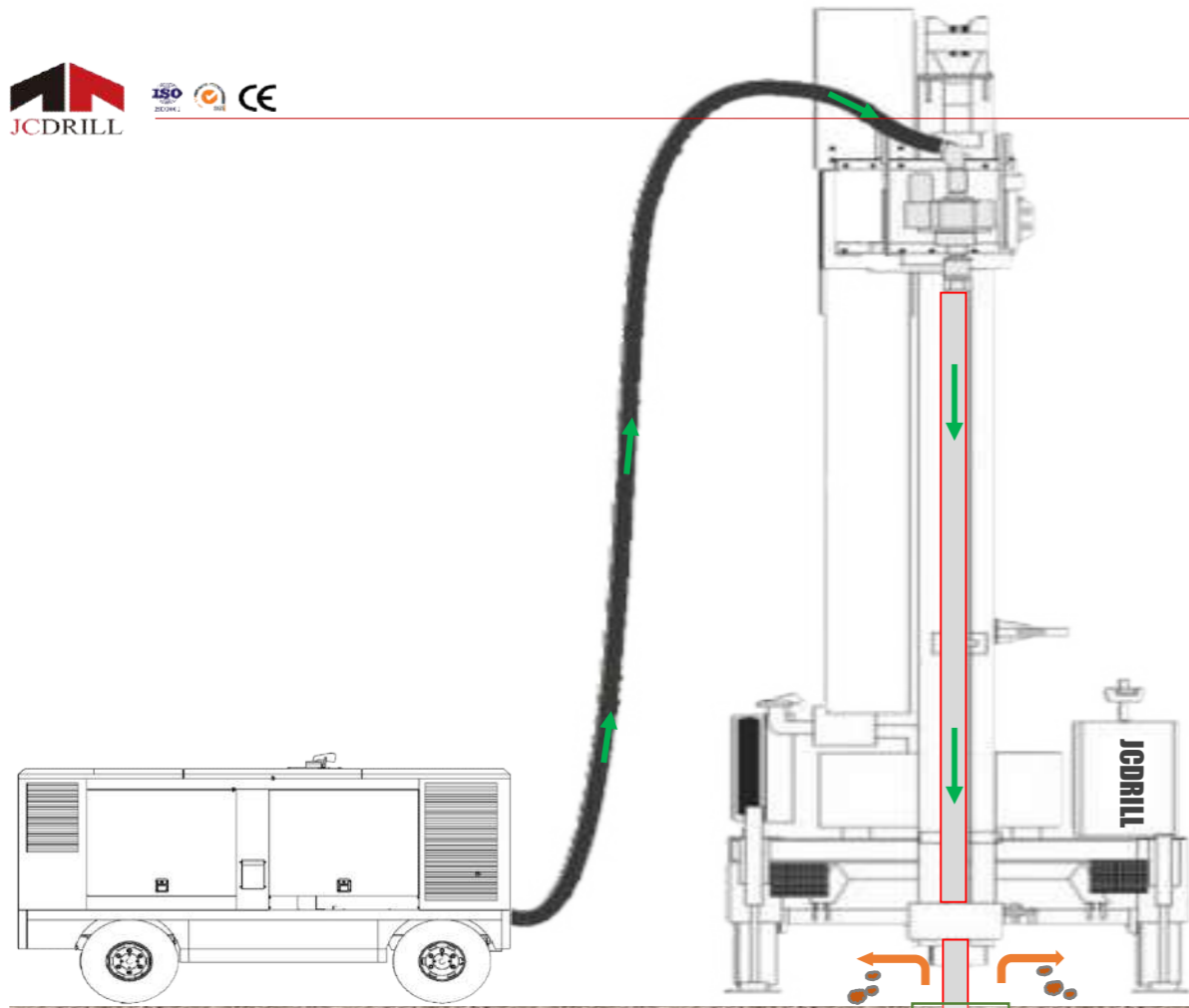
DTH drilling offers several advantages over top-hammer drilling for larger, deeper holes in medium-hard formations. Because the hammer is at the bottom of the hole, power loss is minimal as the hole deepens. That means energy is not lost in the drill string and penetration rates do not markedly decline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