

# KJ311型全液压掘进钻车 / KJ311 Hydraulic Tunneling Drilling Rig

## 用途及特点 / Application and Features

KJ311型全液压掘进钻车适用于12 – 35m<sup>2</sup>断面的硬岩矿山掘进作业。

KJ311 hydraulic tunneling drilling rig is suitably qualified for the drilling of hard rock mine whose section falls in the range of 12 – 35 square meters.

- 坚固的万向大臂具有最佳断面覆盖形状，推进梁360° 翻转和自动持平便于快速方便地实现钻孔定位；钻臂同时还可用于侧向开石门和锚杆钻孔作业；  
● The firm flexible boom is capable of optical coverage of the section; 360° rotation and self-leveling beam make drill positioning easy; It can also be used for the drilling of lateral cross-cut and rock bolt;
- 钻车布置确保司机视野良好；布置平衡，强劲有力的四轮驱动铰接底盘确保在狭窄巷道中能够灵活，快速，安全行驶；  
● The drill rig provides a good view for the operator; balanced layout and the articulated chassis of four-wheel drive ensure the flexible, fast and safe driving in the narrow tunnel;
- 高频冲击凿岩机采用梯级活塞优化了冲击波传递效率，提高钻进速度，降低钎具消耗并提高设备的完好率；  
● The stepped piston is used for the high-frequency impacting rock drill and this can improve the transmission efficiency of impact wave and drilling speed and reduce the consumption of drilling tools and make it in good condition;
- 宽敞的作业空间和一系列自动功能有助于司机集中精力安全、快速、准确地钻进；  
● Considerable space and automatic functions enable the driver to concentrate on drilling in a safe, fast and accurate manner;
- 各个维修保养部位均受到良好的保护，同时又易于维护保养；  
● All the relevant parts are kept in good protection, meanwhile maintenance easily.

## 技术参数 / Technical Parameters

外形尺寸与重量 / Dimensions and weight		风水路系统 / Air & water system					
长度 / Length	11300mm	空压机 /Air compressor	1 × JN4	润滑耗油量 Oil Consumption of lubrication	180–250g/h		
宽度 / Width	1750mm	排量 /Capacity of air compressor	0.5m³/min	水泵功率 Power of water pump	1.5kW	4kW	
高度 / Height	2000/3000 mm	压力 /Pressure	6–8bar	水泵排量 Capacity of water pump	3m³/h	6m³/h	
重量 / Weight	约12000 kg/Appr. 12000 kg	钎尾润滑装置 Device of shank lubrication	电磁脉冲润滑泵 Electronic pulse lubrication pump				
行驶速度 (水平) Tramming speed on flat ground	10km/h	润滑耗气量 Air consumption of lubrication	0.3 m³/min				
最大爬坡能力 Maximum climbing capacity	25%(14° )	底盘 / Chassis					
安全防护 / Safety protection		柴油机 Diesel engine	Cummins QSB3.9-C80-31 60kW, 2200rpm	轮胎 /Tires	11.00–20		
噪音水平 / Noise level	< 100dB(A)	尾气净化 Exhaust purification	尾气催化器 /Exhaust catalyst	转向机构 Steering mechanism	± 40° 较接转向 Articulated steering: ±40°		
可升降安全顶棚 Lifting safety roof	FOPS & ROPS认证	传动系统 Drive system	四轮驱动闭式行走系统 Closed hydraulic system for four-wheel driving	行走制动 Travelling braking	双回路液压制动器 Two-circuit hydraulic brake		
		摆动角 Swing angle	后桥摆动 ± 10° Swing of rear axle: ±10°	驻车制动 Parking braking	减速器多盘湿式制动器 Wet multidisc brake of reducer		
				燃油箱 Fuel tank	60L		
钻进系统 / Drilling system				电动液压泵站 / Electric hydraulic power unit			
凿岩机 /Rock drill	HC50	RD 18U/HC95SA	RD 22U/HC95LM	电动机/Motor	45kW	55kW	75kW
钎尾尺寸 /Rod size	R38	R38、T38	R38、T38	冲击/推进/钻臂 /Impact /Feed/ Positioning	轴向变量柱塞泵 Axial variable displacement piston pump		
冲击功率 /Impact power	13kW	18kW	22kW/21kW	回转 /Rotation	齿轮泵 /Gear pump		
频率 /Impact Frequency	62 Hz	57 Hz/ 62 Hz	53 Hz/ 62 Hz	过滤精度 /Filter fineness	10 μ		
孔径 /Hole diameter	Φ32–76mm	Φ35–102mm	Φ42–102mm	液压油箱 /Hydraulic oil tank	240L		
推进梁翻转 /Beam rotation	360°			液压冷却器 /Hydraulic cooler	水冷却器 /Water cooler		
推进梁补偿行程 /Feed extension	1600mm			工作电压/Working voltage	380V		
钻臂型号 /Model of drill boom	K 26F			频率 /Frequency	50Hz		
钻臂形式 /Form of drill boom	自动持平/Self-leveling			启动方式 /Starting method	星-三角 /Star-triangle		
钻臂伸缩 /Boom extension	1200mm			电缆规格/Cable specifications	3 × 35+3G6	3 × 50+3G6	