

KJ310型全液压掘进钻车 / KJ310 Hydraulic Tunneling Drilling Rig

用途及特点 / Application and Features

KJ310型全液压掘进钻车专为大坡度斜巷而设计，最大适用坡度25°，可适用于12-35m²断面的硬岩矿山掘进作业。

KJ310 hydraulic tunneling drilling rig is specially designed for the extremely inclined tunnel, with the maximum slope standing at 25°. It is suitably qualified for the drilling of hard rock mine whose section falls in the range of 12-35 square meters.

- 坚固可靠的方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 boom make drill positioning easy; The boom can also be used for the drilling of lateral cross-cut and rock bolting;
- 钻车的推进梁平动、终孔自动停推停冲、孔底吹渣、电子脉冲润滑等功能，减少操作，提高工作效率；
- The drill rig is capable of the advancing beam's translation, automatic suspension of drilling of end hole, slag blowing at the hole bottom and electronic impulse lubrication, thus leading to few operations and improve drilling efficiency;
- 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;
- 钻车布置确保司机视野良好，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；
- The drill rig provides a good view for the operator; 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 | 10700mm | 空压机 /Air compressor | 1 × JN4 | 润滑耗油量 Oil Consumption of lubrication | 180-250g/h | | |
| 宽度 / Width | 1650mm | 排量 /Capacity of air compressor | 0.5m ³ /min | 水泵功率 Power of water pump | 1.5kW | 4kW | |
| 高度 / Height | 1900/2500 mm | 压力 /Pressure | 6-8bar | 水泵排量 Capacity of water pump | 3m ³ /h | 6m ³ /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 | 2.5km/h | 润滑耗气量 Air consumption of lubrication | 0.3 m ³ /min | | | | |
| 最大爬坡能力 Maximum climbing capacity | 25° | 底盘 / Chassis | | | | | |
| 安全防护 / Safety protection | | 柴油机 Diesel engine | Cummins QSB3.9-C80-31 60KW, 2200rpm | 行走制动 Travelling braking | 多盘湿式制动器 Wet multidisc brake | | |
| 噪音水平 / Noise level | < 100dB(A) | 尾气净化 Exhaust purification | 尾气催化器 /Exhaust catalyst | 驻车制动 Parking braking | 多盘湿式制动器 Wet multidisc brake | | |
| 可升降安全顶棚 Lifting safety roof | FOPS & ROPS认证 | 传动系统 Drive system | 双速马达驱动履带行走 Track travelling driven by double-speed motor | 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 | |