Technical DATA

ZDFJ76A1 Drilling Jumbo

ZDFJ76A1 is a single boom electro-hydraulic drilling jumbo for fast and accurate drilling for small-vein underground mining and tunneling and construction applications. The jumbo is suitable for tunnel with coverage area max. up 6.0-meter x 6.1 meters with 15 degree gradeability at maximum load on four drive wheels. Drilling hole diameter range from 32mm to 76mm. The drill boom can rotate 360 degrees and is equipped with automatic anti-jamming function. It has a compact structure, stable performance, and strong climbing ability. It is suitable for drilling operations on working faces, roofs, side panels and bottom plates with a section of 8-45m2. Not only it can drill blast holes, but also drill bolts very conveniently. The Jumbo is equipped with new model ZDG550 hydraulic rock drill, the impact frequency is 50-68Hz higher than other similar brand.





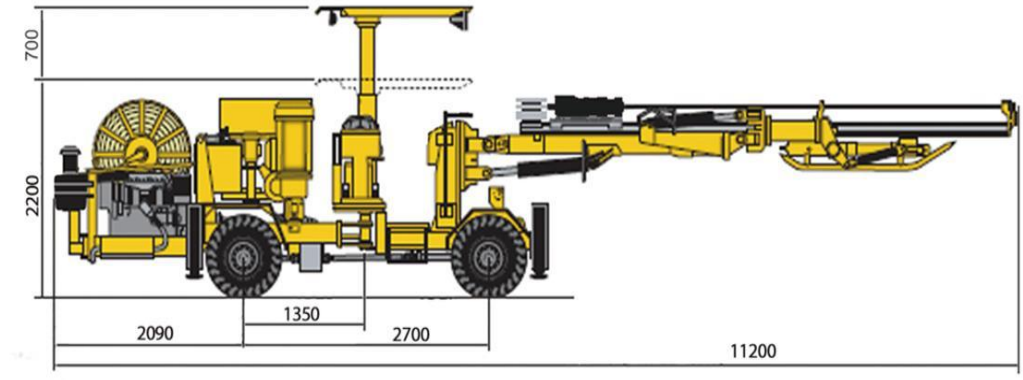


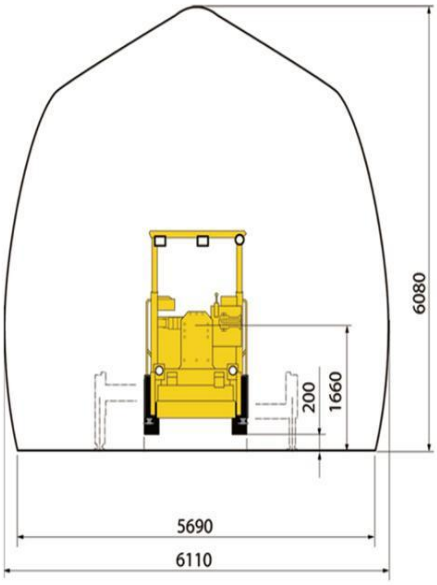


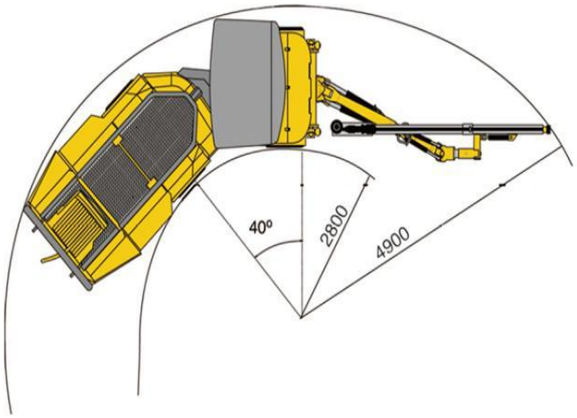
1. Main Features of ZDFJ76A1 Drilling Jumbo

• Main parts are imported top brand, including Deutz 5-cylinder diesel engine and DANA axles, guarantee the quality.	•主要部件采用进口大品牌，道依茨 发动机、德纳 驱动桥， 保证了质量；
• Best drilling tool cost: ZDG550 hydraulic rock drill is a high frequency model, it has double buffer shock absorption system and the best drill tool life. The impact power reaches 24Kw, self-lubrication material is applied in the rock drills and so the maintenance period is longer.	•最佳的钻具成本：HYG 系列高频液 压凿岩机， 带有双缓冲减震系统的，具有最佳的钻具使用寿命。功率高至 24KW，自动润滑材料的应 用保证 了更长的维修周期和稳定性；
• Simple operation and maintenance: The ergonomically designed cab provides an ideal working environment for the operator. Remote control operation, PLC control throughout the working process, making work safer, more flexible, and efficient. It also has good maintenance convenience, and all service parts are easy to maintain.	•简单的操作和维护：符合人机工程 学设计的驾驶室为操作者提供理想 的作业环境。遥控控制操 作，工作 过程全程 PLC 控制，使工作更安 全灵 活、高效。还具有良好的维修 便捷性，所有服务 部位便于维修。
• Hydraulic horizontal drilling boom can keep the propelling beam parallel in all directions, which can be directly, quickly and accurately positioned. It can drill parallel holes without manual calibration, supply simple operation and excellent control of the hole-to- hole spacing and parallelism.	•液压平动钻臂可使推进梁全方位保 持平行，可直接、快捷、准确定位。钻出孔与孔之间相对平行、 无需人工校准、操作简单、能极好的 控制孔与孔 间距及平行度。
• Optional: The original double-layer propelling beam has two upper and lower layers, which can be expanded and contracted, and the drilling depth can be adjusted. When bolt holes are drilled, the propelling beam can be contracted to reduce the overall length of the propelling beam, and the shorter propeller can be erected and swayed in the limited space of the roadway to meet the requirements of roof and side bolt hole drilling. "One machine with two uses" reduces costs and improves work efficiency.	•可以选配：独创的双层推进梁为上 下两层，可伸缩、钻孔深度可调节，掘进时可钻较深孔。打锚杆孔时，可以将推进梁缩回，减少 2 推 进梁整体长 度，能使较短的推进器 在巷道有限空间内竖立、 横摆，满 足顶板、侧帮打锚杆孔工作。"一机 两 用" 降低成本、提高工作效率。

2. General Dimensions







3. Main Configuration and Technical Parameters

Chassis Diesel engine: Deutz D914L04 Power rating at 2300rpm: 58Kw Torque at 1550rpm: 328Nm Fixed seat for tramming: Yes Fuel oil tank volume: 60L Articulated Steering: ± 41° Travelling speed: 12Km/h Gradeability: 15° Horn beacon and reverse: Yes Four-wheel drive: Yes FOPS cabin: Yes Hydrostatic power steering: Yes Hydrostatic transmission: Yes Front axle: Dana 112 Rear axle: Dana 112+311 Clearance outside axles: 15° Hydraulic jacks, front: 2 extendable Hydraulic jacks, rear: 2 extendable Service brakes: 2 separate circuits Emergency & parking brakes: SHAR Electric system: 24V Batteries: 2x12V, 70Ah	**Dimensions** Width: 1910mm Height roof (up/down): 2200/2900mm Length: 11200 mm Weight: 11500Kg **Rock Drill** Model: ZDG550 Shank adapter: R32, R38, T38, T45 Impact power: 24Kw Impact rate: 60-75Hz Impact pressure: 17-21Mpa Feed impact force: ≤425 J Hydraulic Pressure max: 130bar Rotation system: Separate rotation Rotation speed: 0-300 rpm Rotation torque, max.: 980Nm Water consumption: 50L/min Lub. Air consumption: 5L/s Hole diameter: 32mm-76mm Length without shank: 600mm Height over drill center: Weight: 88mm Sound Level: <110 dB(A)
Boom Model: HYZB4 Parallel holding: Complete Boom extension: 1250mm Feed roll-over: ±180° Max. Lifting angle: +65°/-30° Max. Swinging angle: ±35° Weight, boom only: 1750kg	**Feed** Model: HYT650 Total length: 5850mm Feed extension: 1250mm Drill rod length: 3700mm Hole depth: 3500mm Feed force, max.: 15KN
Water System Pump type: Booster pump Water pressure: 8-12 bar Max. Capacity: 80L/min Water pump power: 7.5Kw	**Air System** Air compressor: Yes Working pressure:2-8 bar Working flow: 10L/s (6 bar) Air pressure gauge: Yes

Hydraulic System Hydraulic pump group: 1 set Pumps unloaded at start: Yes System pressure, max: 200 bar Oil tank, max.: 165L Refueling filtration accuracy: 10 um	Oil temperature gauge on oil tank: Yes Manual oil filing pump: Yes Oil filter indicator: Yes Water cooled oil: Yes Filtration: Yes
Electric System Motor model: ABB YX3 250M-4 Power rating: 55 Kw Voltage: 220-1000 V Frequency: 50-60Hz Start type: Triangle/Star/Direct start Thermal overload protection: Yes Shock timer: Yes	Digital voltage/current meter: Yes Phase sequence indicator: Yes Leakage indicator: Yes Battery charger: Yes Transformer capacity: 1.5Kva Cable coil (inner/outer diameter): 660/1195 mm

4. Introduction of Main Parts

4.1 Rock drill- saving costs for the miners

Best drilling tool cost:

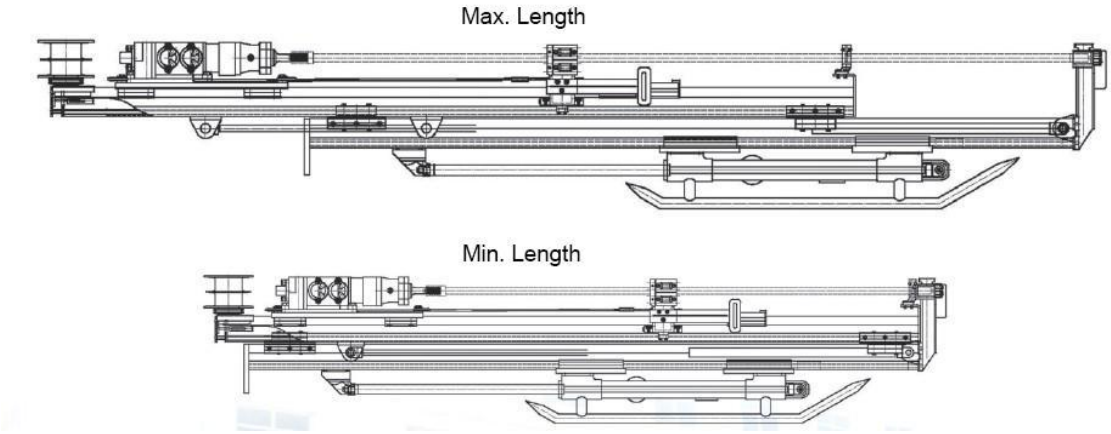
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4.2 ZDT 650 Hydraulic boom & Feed

ZDT adaptable feed for bolt hole drilling, face drilling, and cross cuttings in a limited space where both long and short rods have to be used. The design of the feeds aims at simplicity of structure and ease of maintenance.

The beams are made of special aluminum profile with sliding surfaces faced with stainless steel strips. The drill rod centralizers are equipped with hardened steel wear pieces for optimum visibility and durability.



4.3 Deutz Engine and Dana Axles

4.3.1 Powered by a strong and 5-cylinder Deutz diesel engine with exhaust system;



4.3.2 Sturdy, articulated carrier with four-wheel drive - Dana Axle from Germany

Four jacks for stable set up;

Four stable Jack cylinders;

Signal Reverse and forward;



4.3.3 Control system -PLC system and Anti-jamming system

PLC control system makes the further mining equipment;

Anti-jamming system with the rotation pressure control feed saves the miners on the costs of drilling rods;

Center fire extinguishing system and ANSUL Check fire system installed;

Locking system for stop working;

4.3.4 General - Best quality guaranteed

Firm steel protective FOPS proofed roof for the maximum safety;

Automatic hydraulic -driven cable reel for customer requirements;

Electrically driven compressor;

Michelin tyres from France and spare wheel with tires assembled;

Orange Flashing light;





Remarks: We can choose different parts according to different condition of your mining or requirement, we will make the best proposal with reasonable price.

Pls contact us and supply detailed information to get a quote.