

Underground Mechanical Top-Drive Drilling Rig

This mechanical top-drive head drilling rig is designed for underground applications. It features a robust hydraulic system for drilling operations, including raising and lowering the drill string.



ADDITIONAL IMAGES



Overview

Underground Drilling Solution

This mechanical top-drive drilling rig is engineered specifically for underground operations, offering versatile performance for core drilling, exploration, and geotechnical investigations. Its compact design allows for efficient maneuverability in confined spaces such as tunnels and mines. Equipped with a powerful electric motor and a robust mechanical top-drive system, it ensures consistent torque and speed control for diverse rock formations.

Drilling Capabilities

Theoretical Drilling Depth

200 m

50mm Pipe (65mm hole)

160 m

60mm Pipe (91mm hole)

120 m

73mm Pipe (115mm hole)

Compatible Drill Pipe

- 150mm
- 160mm
- 173mm

Drilling Technology

Diamond Drilling, PDC Rotary Drilling, DTH Hammer Drilling

Power and Performance

Torque and Rotation Speed

Direction	Torque (N-m)	Rotation Speed (r/min)
Forward	1376; 840; 507; 366; 287; 404; 315; 221	76; 152; 204; 257; 366; 401; 514; 732
Reverse	1450; 906	64; 129

Electric Motor	YD180L-8/4 (11kW at 750 r/min or 17kW at 1500 r/min)
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Rated Pressure	12 MPa
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Power Head Trip	1400 mm
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Forward/Pullback Speed	0~0.168 / 0~0.344 m/s
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Physical Dimensions

Mast Dimensions

- Mast upright: 1900 × 1510 × 2580 mm
- Mast level: 2555 × 1510 × 1110 mm

Machine Weight	1200 kg
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Drilling Angle	0° ~ 360°
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