

RBR300VF

POWERFUL SHAFT BORING



Raise Boring Rig RBR300VF

- › For long raises and large reaming diameters
- › Robust and powerful design
- › Mechanized rod handling for improved work safety
- › Highly efficient variable frequency drive

**PIONEERING
UNDERGROUND
TECHNOLOGIES**



Raise Boring Rig RBR300VF

Technical specifications

The **Raise Boring Rig (RBR)** developed by Herrenknecht is designed for the construction of shafts in rock down to 2,000 meters in depth. Thanks to its compact design, it offers high flexibility even under space constraints and is therefore suitable for various applications in the mining industry. It has proven its worth with its modular design and its efficient center-free drive. Connection shafts for mining or penstocks for pump storage power plants can be constructed quickly and safely.



Transport system



Pipe handling



Control cabin

RBR300VF

- › Reaming torque: 250 kNm (184,000 lbf.ft)
- › Max. static torque: 350 kNm (258,000 lbf.ft)
- › Thrust force: 4,500 kN (1,011,000 lbf)
- › Inclination (from vertical): 0°–45°

Dimensions

- › Height (extended/retracted):
6.84 m / 4.12 m (22.44 ft / 13.54 ft)
- › Width: 1.87 m (6.14 ft)
- › Depth: 2.4 m (7.87 ft)

Weight

- › Rig: 23.5t (51,808 lb)

Hoist unit

- › Stroke: 2.3 m (7.55 ft)

Modular design for high degree of flexibility.

PIPE HANDLER

- › Load: 800 kg (1,763 lb)
- › Handling system: mechanized
- › Optional: axial drill rod adjustment

WRENCH SYSTEM

- › Handling system: fully hydraulically operated

Mechanized drill rod handling and wrench system for safe and easy handling.

MAIN DRIVE

- › Drive: electric (VF)
- › Number of motors: 1
- › Installed power: 250 kW (335 hp)
- › Rotational speed (pilot drilling): 0 rpm–50 rpm
- › Rotational speed (reaming): 0 rpm–15 rpm
- › Hydraulic drive system: on request

Variable speed and torque limiting control.

DRIVEHEAD

- › Float: 60 mm (2.36 inch)
- › Swivel: ±1°

Drivehead with swivel and float function saves drill rod threads.

DRILL ROD

- › Diameter: 11 ¼ inch
- › Optional diameter: 12 ½ inch
- › Length, s/s: 1.524 m (60 inch)
- › Other sizes: on request

HYDRAULIC POWER PACK

- › Power: 75 kW (100 hp)
- › Cooling: water-cooled

ELECTRIC POWER PACK

- › Input voltage: 400 V
- › Frequency: 50 Hz/60 Hz

CONTROL CABIN

- › Controls: touch screen and control panel

OPTIONAL EQUIPMENT

Tools

- › Digital Drilling Report
- › High pressure flushing pump
- › Transformer
- › Pipe Feeder
- › Transport frame
- › Control cabinet
- › Chiller system
- › Flow meters
- › Drilling tools
- › Other tools on request

Crawler

- › Drive: diesel powered hydraulic drive
- › Power: 55 kW (74 hp)
- › Grade: max. +25 %
- › Optional: forklift equipment

Crawler for quick and easy movement and erection of the rig.

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