



# RAISE BORE DIVISION RBR 600-VF

AGILE.  
EFFICIENT.  
PROGRESSIVE.

## 1000V ELECTRIC (VF) DRIVE MACHINE

The RBR 600-VF is a large diameter raise bore ideally suited for surface and underground ventilation raises, shafts and ore passages. The compact design provides a cost-effective method to drill large diameter raises while minimising costly underground excavations.

### FEATURES

- Capable of reaming 4.0m to 7.0m diameter rises, up to 1,000m in length
- PLC controls system, allowing unprecedented control over the drilling process
- Fully compatible with directional drilling technology, allowing the drill to deliver vertical excavation when needed
- Modular track mounted design, providing flexibility in confined spaces
- Mechanised wrench system and rod handling, providing improved work safety

### INTEGRATED UNDERGROUND MINING SERVICES:

- Mine development
- Production mining
- Cable bolting, production drilling and ITH drilling
- Raise boring and specialist boxhole boring
- Shotcreting and shaftlining
- Plant and equipment hire

**PYBAR**  
MINING SERVICES  
LEADERS IN UNDERGROUND MINING

# RBR 600-VF

## 1000V Electric (VF) Drive Machine

### OPERATIONAL

Conventional Ream Diameter	Diameter Length	4.0m to 7.0m 1,000m
Raise Angle	Ream Mode	70 degrees to vertical
Pilot Hole Diameter	Normal Maximum	13-3/4" (349mm) 15" (381mm)

### TECHNICAL

Rotation System	Type	Electric (VF) Drive
Pilot Drilling Data	Pilot RPM Pilot Thrust	0 – 50RPM variable 446kN (100,000lbs)
Reaming Data	Reaming RPM Reaming Thrust Reaming Torque Maximum Torque	0 – 13 RPM variable 10,000kN (2,248,000lbs) 550kNm (406,000lbs/ft) 750kNm (553,000lbs/ft)
Drill Pipe Data	Diameter Length s/s	HS 12-7/8" (327mm) 1.525m

### ELECTRICAL

Power Supply	Main Supply Generator Transformer Supply Cable Size	1000V, 50hz 1250Kva 850Kva (has own transformer 1000-690V) 240mm <sup>2</sup>
Power Pack Supply <i>(Note calculated currents listed – measured current -130A when reaming 6m at 100m)</i>	Power Rating Full Load Current Starter Type Start Up Current Voltage	540kW (724 Hp) 520A VSD 500 - 560A 690V

### CONSUMPTION

Air	Pilot Drilling Air	23m <sup>3</sup> /min @ 7 bar (600cfm @ approximately 100psi)
Water	Pilot Drilling Water Cooling Water	Approximately 900 litres/min which is recirculated via sumps Chiller with cooling circuit and tank

### WATER PUMP

Water Recycling	Pilot Drilling Water	90kW (pending pilot hole diameter and length)
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### RAISE BORE RIG

Dimensions	Extended Height Height Retracted Width Depth Weight Standard Beams	4.860m 6.600m 2.390m 2.305m 48 tons 6.0m x 400mm high beams 8.0m x 400mm high beams
Transporter	Diesel Crawler	With inbuilt erection device