



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 ²
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 ³ /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)

RAISE BORE RIG		
Dimensions	Extended Height Height Retracted Width Depth Weight Standard Beams	6.600m 4.860m 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