



# RAISE BORE DIVISION REDBORE 50-MDUR

**FAST.  
EFFICIENT.**  
RESPONSIVE.

## 1000V ELECTRIC DRIVE MACHINE

The Redbore 50-MDUR is a compact dual purpose rig specifically designed for conventional rises and boxhole slot rises while maintaining a low profile. It provides a complete boxhole and down-hole slot solution.

### FEATURES

- Capable of reaming 1.1m to 1.5m diameter up-hole slots up to 60m in length and conventional rises up to 2.1m in diameter and up to 183m in length
- Retractable wrenching arm system and lay-down rod handler
- Electric PLC drive system to improve transfer of energy and reduce power consumption

### INTEGRATED UNDERGROUND MINING SERVICES:

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

**PYBAR**  
MINING SERVICES  
LEADERS IN UNDERGROUND MINING

# Redbore 50-MDUR

## 1000V Electric Drive Machine

### OPERATIONAL

Up-hole Slot Diameter	Diameter	1.1m to 1.5m
	Length	60m
Conventional Ream Diameter	Diameter	1.1m to 2.1m
	Length	183m
Raise Angle	Up-hole Slot Mode	45 degrees to vertical
	Ream Mode	45 degrees to vertical
Pilot Hole Diameter	Normal	11" (297mm)
	Maximum	12-1/4" (312mm)

### TECHNICAL

Rotation System	Type	Electric Drive
Pilot Drilling Data	Pilot RPM	0 – 80RPM variable
	Pilot Thrust	222kN (50,000lbs)
Reaming Data	Reaming RPM	0 – 10RPM variable
	Reaming Thrust	1,334kN (300,000lbs)
	Reaming Torque	92kNm (68,000ft/lbs)
	Maximum Torque	122kNm (90,091ft/lbs)
Drill Pipe Data	Diameter	HS 10" (254mm)
	Length s/s	1.220m

### ELECTRICAL

Power Supply	Main Supply	1000V, 50hz
	Generator	250Kva
	Transformer	200Kva
	Supply Cable Size	35mm <sup>2</sup>
Power Pack Supply	Power Rating	127kW (170Hp)
	Full Load Current	170A
	Starter Type	VSD
	Start Up Current	210-250A
	Voltage	1000V

### CONSUMPTION

Air	Pilot Drilling Air	17m <sup>3</sup> /min @ 7 bar (400cfm @ approximately 100psi)
Water	Pilot Drilling Water	Approximately 500 litres/min which is recirculated via sumps
	Cooling Water	Approximately 75 litres/min

### WATER PUMP

Water Recycling	Pilot Drilling Water	37kW (pending pilot hole diameter and length)
-----------------	----------------------	-----------------------------------------------

### RAISE BORE RIG

Dimensions	Extended Height	4.100m
	Height Retracted	4.100m
	Width	2.400m
	Depth	1.926m
	Weight	14.1 tons
	Standard Beams	3.0m x 400mm high beams
Transporter	On Sled	With inbuilt erection device