



RAISE BORE DIVISION SBM 450

**FAST.
EFFICIENT.**
RESPONSIVE.

1000V HYDRAULIC DRIVE MACHINE

The SBM 450 is a compact, dual-purpose rig specifically designed for conventional rises and boxhole slot rises while maintaining a low profile. It is a complete system for drilling long holes and boring raises as large as 2.4m in diameter and up to 350m in length.

FEATURES

- Capable of reaming 700mm to 1.1m diameter up-hole slots up to 60m in length and conventional rises up to 2.4m in diameter and up to 350m in length
- Mechanised wrenching system and lay-down rod handler
- Hydraulic 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

SBM 450

1000V Hydraulic Drive Machine

OPERATIONAL		
Up-hole Slot Diameter	Diameter Length	700mm to 1.1m 60m
Conventional Ream Diameter	Diameter Length	1.1m to 2.4m 350m
Raise Angle	Up-hole Slot Mode Ream Mode	60 degrees to vertical 45 degrees to vertical
Pilot Hole Diameter	Normal Maximum	11" (297mm) 12-1/4" (312mm)

TECHNICAL		
Rotation System	Type	Hydraulic Drive
Pilot Drilling Data	Pilot RPM Pilot Thrust	0 – 60RPM variable 470kN (106,000 lbs)
Reaming Data	Reaming RPM Reaming Thrust Reaming Torque Maximum Torque	0 – 16RPM variable 1,700kN (384,000lbs) 76kNm (56,000ft/lbs) 108kNm (80,000ft/lbs)
Drill Pipe Data	Diameter Length s/s	HS 10" (254mm) 1.525m

ELECTRICAL		
Power Supply	Main Supply Generator Transformer Supply Cable Size	1000V, 50hz 300Kva 250Kva 32mm ²
Power Pack Supply	Power Rating Full Load Current Starter Type Start Up Current Voltage	150Kw (200Hp) 108A Soft Starter 260A 1000V

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

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

RAISE BORE RIG		
Dimensions	Extended Height Height Retracted Width Depth Weight Standard Beams	4.100m 4.100m 1.950m 2.100m 12.2 tons 4.0m x 400mm high beams
Transporter	Diesel Crawler	With inbuilt erection device