



Technical Specification

PRD BH 15 100



PRD 15 100 is a wise choice of blast hole rig for small scale mines with 100 – 165 mm diameter drilling. With 6000 kg pull down, 4 meter single pass depth and HVAC Cabin with all mining requirements fulfilled.

Note: The images provided here are for reference only and do not depict the exact specification outlined in this document.





Application	Drilling for blasting in Mines
Capacity	Hole Diameter : 100 – 165 mm (4" - 6 ½") diameter
	Maximum Depth : 16 m
	Estimated machine weight : 16,000 kg
Drilling Method	DTH and Rotary
Prime Mover*	Suitable Deck Engine 160 hp
Platform Structure	Heavy I and C section welded steel structure covered with 5mm chequered plate
Mast Assembly	Strong structural steel twin tubular box type construction
	Mast Overall Length : 6170 mm
	Rotary Head Travel : 4900 mm
	Drill rod size : 3 ½" / 4 ½" with 4 meters length
	Single pass depth : 4 m
Mast Raising Cylinder	Mast is raised and lowered by single hydraulic cylinder
Mast Dumping	Mast is provided with forward dumping arrangement
Feed System	Motor feed with 1:2 chain reeving system
	Pull Up Force : 6000 kgf @ 180 bar
	Pull Down Force : 6000 kgf @ 180 bar
	Pull Up Speed : 20 m/min
	Pull Down Speed : 20 m/min
	Weight on bit : 7000 kgf (max)





Rotary Head Assembly (Top Head Drive)

Fabricated steel body with spur gear reduction and oil bath lubrication type gearbox with top air entry having spindle thread connection of API 2 7/8 IF driven by single hydraulic motor.

Maximum Torque : 334 kg.m (3300 Nm)

Rotation Speed: 0 - 100 rpm Fine controlled

Hydraulics

1 x variable displacement pump for feed and rotation
1 x fixed displacement pump for Auxiliary operation
1 x fixed displacement pump for hydraulic cooler

Maximum System Pressure : 3045 psi (210 bar)

Hydraulic Oil Cooler : 70 gpm

Hydraulic Tank Capacity : 450 litres

Control Panel

A spacious centralised control panel along with Air conditioned cabin with all controls for the operation of drill rig, traction, necessary gauges and control system are fitted for convenient view of drill table

Levelling Jacks

4 x Hydraulic levelling jacks are provided for quick setting and levelling with Box mounted

Breakout Wrench

Hydraulic operated break out wrench is provided for fast breaking of rod joints

Water / Foam Injection Pump

Hydraulic operated water injection triplex pump with necessary fittings, pressure regulator, flow regulator check valve and suction filter are provided

Maximum Flow : 80 lpm

Maximum Pressure : 40 kg/sq.cm





Rod Carousel	Manually operated 3 rod carousel to couple drill pipe to Rotary head
Dust Collector	<p>Dust collector is robust and efficient. Powered to clean holes built with heavy duty system which effectively manages to clear rock fragments and dust. Easy to clean and service.</p> <p>Flow capacity : 1300 cfm</p>
Airline Lubricator	<p>A positive acting venturi type inline lubricator is provided for injecting oil to the down hole hammer.</p> <p>Tank capacity : 15 litres</p> <p>Working pressure : 350 psi</p>
Air Compressor*	<p><u>Make</u> ELGI / Atlas Copco / Doosan</p> <p><u>Compressor capacity</u> 600 cfm - 200 psi (14 bar)</p>
Additional Fitments	Night Lights, Tools box
User Manual	Manual for Operation, Maintenance and Spare Parts
Mounting	<p>18 ton Crawler</p> <p>Tramming speed : 1.5 km/hr</p>
Operators Cabin	HVAC cabin with all controls & gauges provided for easy operation





Optional Attachments

Mine safety features

Air conditioned Operators Cabin

Centralised Lubrication System

Fire suppression system

Without Cabin

Hydraulic power from compressor Engine

**Combinations will vary according to our Design feasibility*





Happy Drilling forever with PRD Rigs

