



Technical Specification

PRD Multi Star



A versatile drilling rig capable of drilling various methods like DTH, RC and also Core drilling with a simple switch over. Its multi-purpose ability and easy of operations have made it a star among Explores.

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





Application	Surface Exploration
Capacity	DTH : 750 m @ 6 ½" (165 mm) diameter
	Core : PQ - 150 m; HQ - 450 m; NQ - 750 m RC : 400 m @ 140 mm (5 ½")
Drilling Method	DTH , Reverse Circulation, Core Drilling
Drilling Angle	45° to 90°
Prime Mover*	Rig hydraulic system is powered from Deck engine 260 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 : 8560 mm
	Rotary Head Travel : 6800 mm
	Rod Handling : 6 m
Mast Raising Cylinder	Mast is raised and lowered by two hydraulic cylinder
Mast Dumping	Mast is provided with dumping arrangement for angle drilling
Feed System	2 x Double acting hydraulic cylinder with 1:2 chain reeving system
	Pull Up Force : 25800 kgf (56760 lb.f) @ 210 bar
	Pull Down Force : 17700 kgf (38940 lb.f) @ 210 bar
	Pull Up Speed : 46 m/min
	Pull Down Speed : 67 m/min
Rotary Head Assembly (Top Head Drive)	Rotary head sliding for wireline winch usage
	Torque : 785 – 3525 Nm
	Speed : 257 – 1200 rpm





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>
Recommended Air Compressor*	<p><u>Make</u> ELGI / Atlas Copco / Doosan</p> <p><u>Compressor capacity</u> 1200 cfm - 330 psi (24 bar) 1500 cfm - 400 psi (27 bar) 1350 cfm - 365 psi (25 bar) / 425 psi(29 bar)</p>
Hydraulics	<p>2 x variable displacement piston pump for Feed, Rotation & winches 2 x fixed displacement pump for Hydraulic cooler, Auxiliary operations and Micro feed</p> <p>Maximum System Pressure : 3045 psi (210 bar)</p> <p>Hydraulic Oil Cooler : 120 gpm</p> <p>Hydraulic Tank Capacity : 850 litres</p>
Jib Boom Arm	<p>Jib Boom Arm is provided for handling drill rods during Angle drilling</p>
RC Attachments	<p>RC Head, Cyclone, RC hose, Swivel</p>
Control Panel	<p>Swing out - Centralized control panel is at rear end of the equipment for convenient view of drill table provided with all necessary gauges, control system and emergency switch. Locking arrangement is provided for the safety of control panel</p>





Levelling Jacks	4 x Hydraulic levelling jacks are provided for quick setting and levelling with heavy duty telescopic guides. Locking check valves for safety with adequate capacity to withstand load
Foot Clamp	Hydraulic operated Rod clamp has gripping range of NQ HQ PQ sizes/RC Rods
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 : 140 lpm
	Maximum Pressure : 69 bar
Winch	Main winch : 10 ton Line Speed : 45 mtr/min
	Wire line winch : 2 ton with 800 m rope Line Speed : 72 mtr/min
Mud Pump Option*	Hydraulic operated PRD 200 Mud Pump (8" x 6") Stroke : 8" (203 mm) Liner size diameter : 6" (152 mm) Displacement (Max recommended) : 1333 lpm Maximum working pressure : 285 psi (20 kg/sq.cm)
	Hydraulic / Engine operated PRD 250 Mud Pump (10" x 7") Stroke : 10" (254 mm) Liner size diameter : 7" (178 mm) Displacement (Max recommended) : 1980 lpm Maximum working pressure : 292 psi (20.53 kg/sq.cm)
Additional Fitments	Night Lights and Tools box
User Manual	Manual for Operation, Maintenance and Spare Parts





Mounting Option*	Crawler / Truck / Skid
Optional Attachments	Mines safety features
	Spin cage
	RC fixed cone splitter

**Combinations will vary according to our Design feasibility*







Happy Drilling forever with PRD Rigs

