



Technical Specification

PRD 600



A highly compact bore hole drilling rig with a pull up force of 5100 kg capable of drilling 6 ½" diameter up to 180 m depth. Drilling hole size range from 6 ½" to 8".

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





Application	Domestic Water Wells
Capacity	Hole Diameter: 165 - 203 mm (6 ½" - 8")
	Maximum Depth: 180 m @ 165 mm (6 ½") diameter
Drilling Method	DTH and Rotary Drilling
Prime Mover*	Rig hydraulic system is powered from Truck Engine with PTO option through Transfer Gearbox arrangements or suitable Deck Engine – 105 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: 5000 mm
	Rotary Head Travel: 3700 mm
	Rod Handling: 3 m
	Drill rod size: 3 ½" OD (89 mm)
	Centralizer Opening: 10 5/8" (270 mm)
Mast Raising Cylinder	Mast is raised and lowered by single hydraulic cylinder
Feed System	1 x Double acting hydraulic cylinder with 1:2 rope reeving system
	Pull Up Force: 5100 kgf (9790 lb.f) @ 140 bar
	Pull Down Force: 3100 kgf (5940 lb.f) @ 140 bar
	Pull Up Speed: 35 m/min
	Pull Down Speed: 87 m/min





Rotary Head Assembly (Top Head Drive)	<p>Fabricated steel body with spur gear reduction and oil bath lubrication type gearbox along with top air entry and spindle with rope thread connection</p> <p>Maximum Torque: 2100 Nm</p> <p>Rotation Speed: 0 - 80 rpm Fine controlled</p>
Hydraulics	<p>1 x Fixed displacement pump for Feed and Rotation</p> <p>1 x Fixed displacement pump for Auxiliary operations and Micro feed.</p> <p>Maximum System Pressure: 2030 psi (140 bar)</p> <p>Hydraulic Tank Capacity: 300 litres</p>
Control Panel	<p>Centralized control panel 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	<p>4 x Lug mounted Hydraulic levelling jacks are provided for quick setting and levelling of the drill rig. Locking check valves for safety with adequate capacity to withstand load</p>
Breakout Wrench	<p>Hydraulic operated break out wrench is provided for fast breaking of rod joints</p>
Water / Foam Injection Pump	<p>Hydraulic operated water injection triplex pump with necessary fittings, pressure regulator, flow regulator check valve and suction filter are provided</p> <p>Maximum Flow: 50 lpm</p> <p>Maximum Pressure: 50 kg/sq.cm</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: 5 litres</p> <p>Working pressure: 250 psi</p>





Recommended Air Compressor*	<u>Make</u> ELGI <u>Compressor capacity</u> 550 cfm - 200 psi (14 bar) 575 cfm - 225 psi (16 bar)
Mud Pump Option*	Hydraulic operated PRD 125 Mud Pump (5" x 4.5") Stroke: 5" (127 mm) Liner size diameter: 4.5" (114 mm) Displacement (Max recommended): 550 lpm Maximum working Pressure: 197 psi (13.85 kg/sq.cm) Engine / Hydraulic driven Centrifugal Mud Pump: Discharge: 600 lpm Total Head: 30 mtr
Additional Fitments	Night Lights, Tool box, Hammer stand, Fuel tank for compressor
User Manual	Manual for Operation, Maintenance and Spare Parts
Truck Option*	Ashok Leyland 4x2 Ashok Leyland Stallion 4x4 SINOTRUK 4x4 12 ton GVW Truck
Mounting Option*	Truck / Crawler / Skid
Optional Attachments	Welding Machine Auxiliary winch: 1 ton Single Rod Changer

**Combinations will vary according to our Design feasibility*













HAPPY DRILLING FOREVER WITH PRD RIGS

