



Technical Specification

PRD 600



A highly compact bore hole drilling rig with a pull up force of 4450 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 - 52 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
Mast Raising Cylinder	Centralizer Opening : 10 5/8" (270 mm)
	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 : 4450 kgf (9790 lb.f) @ 140 bar
	Pull Down Force : 2700 kgf (5940 lb.f) @ 140 bar
	Pull Up Speed : 35 m/min
Rotary Head Assembly (Top Head Drive)	Pull Down Speed : 87 m/min
	Fabricated steel body with spur gear reduction and oil bath lubrication type gearbox along with top air entry and spindle with rope thread connection
	Maximum Torque : 2100 Nm
	Rotation Speed : 0 - 80 rpm Fine controlled





Hydraulics	2 x Fixed displacement pump for Feed and Rotation 2 x Fixed displacement pump for Auxiliary operations and Micro feed.
	Maximum System Pressure : 2030 psi (140 bar)
	Hydraulic Tank Capacity : 350 litres
Control Panel	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
Levelling Jacks	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
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 : 50 lpm
	Maximum Pressure : 50 kg/sq.cm
Airline Lubricator	A positive acting venturi type inline lubricator is provided for injecting oil to the down hole hammer
	Tank capacity : 5 litres
	Working pressure : 250 psi
Recommended Air Compressor*	<u>Make</u> ELGI / Atlas Copco / Doosan
	<u>Compressor capacity</u> 600 cfm - 200 psi (14 bar) 540 cfm - 160 psi (11 bar)





Mud Pump Option*	Engine / Hydraulic driven Centrifugal Mud Pump : Discharge : 600 lpm Total Head : 30 mtr
Additional Fitments	Night Lights, Tools 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 ISUZU SML 4x4 12 ton GVW Truck
Mounting Option*	Truck / Crawler / Skid
Optional Attachments	Welding Machine
	Auxiliary winch : 1 ton
	Single Rod Changer
	Hydraulic Oil Cooler

**Combinations will vary according to our Design feasibility*







Happy Drilling Forever with PRD Rigs

