



Technical Specification

PRD Tractor Mounted Rig



**A robust and proven innovative product which is used in the application of construction Piling
capable of drilling 1200 mm diameter up to 30 m depth and
also DTH drilling 6 ½" diameters up to 200 m
With high torque it has drilling through the toughest of site in the Indian sub-continent.**

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





Application	Domestic water wells Piling Exploration Solar
Capacity	Water well Drilling : 200 m @ 165 mm (6 ½”) diameter Pile Drilling : 30 m @ 1200 mm direct mud circulation method
Drilling Method	DTH and Rotary
Prime Mover*	Rig hydraulic system is powered from Tractor Engine with PTO option through Transfer Gearbox arrangements -75 hp/90 hp
Mast Assembly	Strong structural steel twin tubular box type construction Mast Overall Length : 5280 mm Rotary Head Travel : 3700 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 1:3 rope reeving system Pull Up Force : 7900 kgf (17420 lb.f) @ 190 bar Pull Down Force : 5400 kgf (11900 lb.f) @ 190 bar Pull Up Speed : 62 m/min Pull Down Speed : 103 m/min
Rotary Head Assembly (Top Head Drive)	Fabricated steel body with spur gear reduction and oil bath lubrication type gearbox along with top air entry and spindle thread connection of API 2 7/8 IF driven by single hydraulic motor. Maximum Torque : 4000 Nm Rotation Speed : 0 - 80 rpm Fine controlled





Hydraulics	<p>2 x Fixed displacement pump for Feed and Rotation</p> <p>2 x Fixed displacement pump for Mud pump, Auxiliary operations and Micro feed</p> <p>Maximum System Pressure : 2750 psi (190 bar)</p> <p>Hydraulic Tank Capacity : 450 litres</p>
Control Panel	<p>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	<p>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.</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 : 10 litres</p> <p>Working pressure : 350 psi</p>





Recommended Air Compressor*	<u>Make</u> ELGI / Atlas Copco / Doosan <u>Compressor capacity</u> 600 cfm-200 psi (14 bar) 1100 cfm-300 psi (21 bar)
Mud Pump Option*	Separate Engine driven 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, Tools box
User Manual	Manual for Operation, Maintenance and Spare Parts
Tractor Option*	Sonalika New Holland - 75 HP/90 HP
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

