



Technical Specification

PRD OZ RC



A robust & efficient sample recovery reverse circulation drilling rig with a pull up force of 25800 kg capable of drilling 5 ½" diameters up to 400 m depth.

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





Application	Surface Exploration
Capacity	RC : 400 m @ 140 mm (5 ½”) diameter
Drilling Angle	45° to 90°
Prime Mover*	Rig hydraulic system is powered from suitable 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)	<p>Fabricated steel body with spur gear reduction and oil bath lubrication type gearbox equipped with top air entry swivel, bottom swivel and blow down unit having 65 mm hollow spindle thread connection of 3 ½" API IF (male) at the bottom driven by two hydraulic motor.</p> <p>Maximum Torque : 9400 Nm</p> <p>Rotation Speed : 0 - 100 rpm Fine controlled</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>
Hydraulics	<p>2 x variable displacement piston pump for Feed & Rotation 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>
Breakout Wrench	<p>Hydraulic operated break out wrench is provided for fast breaking of rod joints</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	<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>





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>
Additional Fitments	Night Lights, Hand rails, Emergency switch, Fire Extinguisher, Hammer stand, Fuel tank for compressor
User Manual	Manual for Operation, Maintenance and Spare Parts
Truck Option*	MAN 6x6 & 6x4 SINOTRUK Howo 6x6 & 6x4 Min 25 ton GVW Truck
Mounting Option*	Crawler / Truck / Skid
Optional Attachments	<p><u>ICE Package</u></p> <ul style="list-style-type: none">• Real time fuel monitoring system• Drilling progress monitoring• Drill efficiency indicator• Bit load sensing system• GPS location monitoring system• Power breakout system• Digital display in control panel• Centralized hydraulic test station• Real time hydraulic system status• Remote access through mobile app• Fire extinguisher and hose reel• Adaptable for all water well rig models
	Auto rod handling system
	RC fixed cone splitter

**Combinations will vary according to our Design feasibility*





Happy Drilling Forever with PRD Rigs

