



# GEO 1500

## PERFORMANCE SPECIFICATION

### Depth Capacities (Vertical Borehole):

	Dry Hole (m)*	Wet Hole (m)*
PQ	1040	1190
HQ	1420	1590
NQ	2230	2660
BQ	3020	3460



(\*) Depth capacity is given according to standard QWL rods. Depth capacity might be increased while using the rods which have light weight V-wall or different thread design.

### POWER UNIT

Power Unit (Engine Option I)

MFG: Ford

Model: Ecotorq

Power: 175 kW-238 HP @ 1600 rpm

Fuel consumption: 192 g/kWh @ 1600 rpm

Engine Type: Diesel Turbo charged/ After cooled

Cooling: Water

Power Unit (Engine Option II)

MFG: Deutz

Model: TCD 2013

Power: 170 kW-232 HP @ 1600 rpm – 200 kW-272 HP @ 2300 rpm

Fuel consumption: 195 g/kWh @ 1600 rpm -- 205 g/kWh @ 1600 rpm

Engine Type: Turbocharging with air cooled

Cooling: Air

### TORQUE & RPM RATINGS:

Extreme duty gear driven head powered by 4 speed transmission with hydraulic sliding.

Power: 160 cc, 2 Speed Bent Axis Piston Type Hydraulic Motor.

Gear Ratio	Speed (RPM)	Torque (Nm)
1. 6.27: 1	122-199	5322-3254
2. 3.12: 1	246-400	2648-1620
3. 1.75: 1	439-714	1620-908
4. 1.00: 1	714-1250	849-519

### **LUBRICATION UNIT:**

Hydraulically driven cooled oil circulation

### **CHUCK ASSEMBLY:**

Type: 5 jaws - Hydraulic Open/ Spring Closed.

Maximum Inside Diameter: 120 mm (PQ)

Holding Capacity: 18 143 kg

### **HYDRAULIC SYSTEM:**

#### **Main Pump**

Maximum Flow Rate: 208 L/min

Maximum Pressure: 280 Bar

#### **Second Pump**

Maximum Flow Rate: 72 L/min

Maximum Pressure: 280 Bar

#### **Auxiliary Pump**

Maximum Flow Rate: 40 L/min

Maximum Pressure: 280 Bar

### **Mixer Pump**

Maximum Flow Rate: 32 L/min

Maximum Pressure: 250 Bar

Hydraulic oil cooling: Air

### **MAST AND FEED SYSTEM:**

Standard 6 m pull, angle hole, telescopic mast for ease of set up.

Drilling Angle: 45 – 90 degree

Sliding Distance: 2.00 m (According to mašt axis)

Feed Travel: 3.40 m

Telescopic Mast: 3.30 m

Feed Speeds: Fast and Slow with Variable Controls

Maximum Pull: 15 898 kg

Maximum Push: 12 750 kg

### **MAIN HOIST:**

Hydraulic driven planetary winch.

Capacity: 19 000 kg (single line)

Cable Size: 33 m x 16 mm rope

Line Speed: Bare drum 26 m/min



## WIRE-LINE WINCH:

Hydraulically driven with integral counter balance valves.

Capacity: 2200 m of 4.76 mm rope  
Line Pull: Bare drum: 1870 kg  
Full drum: 545 kg  
Line Speed: Bare drum: 138 m/min  
Full drum: 474 m/min

## WATER PUMP:

Hydraulically driven 835 water pump  
Maximum Flow rate: 35 gpm @ 800 psi

## MUD MIXER:

Hydraulically driven mud mixer  
Maximum speed: 2300 rpm

## DRILL BASE SUPPORTS:

Crawler  
Supports: 4 hydraulic jacks

## OPTIONAL EQUIPMENT:

- Welding generator
- Hydro pump
- Mast lighting and installation
- Water pump release valve , water pump manometer, water pump accumulator and diaphragm
- Hydraulic mud mixing tank
- Hydro pump and cyclone ( If third pump is demanded at drill rig.)

## DIMENSIONS:

a = 7400 mm  
b = 2500 mm  
c = 2300 mm

Weight: 15 000 kg

