

# GEO 900

## PERFORMANCE SPECIFICATION

### DEPTH CAPACITIES (VERTICAL BOREHOLE):

	Dry Hole (m)*	Wet Hole (m)*
PQ	590	690
HQ	900	1000
NQ	1300	1500
BQ	1700	2000

(\* ) 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

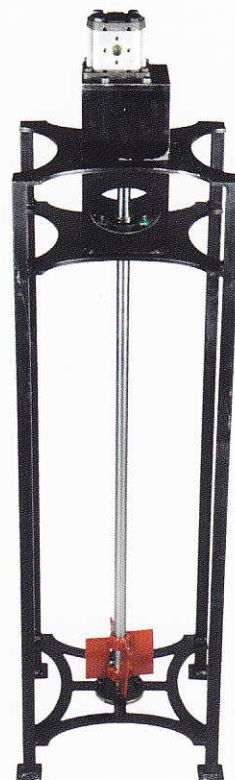
Model: TCD 6.1 L6

Power: 162 kW-220 HP @ 1600 rpm -- 180 kW @ 2300 rpm

Fuel consumption: 150 g/kWh @ 1600 rpm – 215 g/kWh @ 2300 rpm

Engine Type: Turbocharging with charge air cooler

Cooling: Air



### TORQUE & RPM RATINGS:

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

Power: 107 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 (@1600 RPM):**

#### **Main Pump**

Maximum Flow Rate: 160 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 mast 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: 13 000 kg (single line)

Cable Size: 33 m x 16 mm rope

Line Speed: Bare drum 27 m/min



### WIRE-LINE WINCH:

Hydraulically driven with integral counter balance valves.

Capacity: 2000 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

### ROD CLAMP:

Hydraulically powered BQ to PW rod jaw sizes.

### 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 lightening and installation
- Water pump release valve, water pump manometer, water pump accumulator and diaphragm
- Hydraulic mud mixing tank
- Trailer mounted rig, four 800 mm wheels
- Hydro pump and cyclone (If third pump is demanded at drill rig.)

### DIMENSIONS:

a= 7200 mm

b= 2570 mm

c= 2420 mm

Weight: 11 250 kg

