



# GEO 500

## PERFORMANCE SPECIFICATION

### DEPTH CAPACITIES (VERTICAL BOREHOLE):

	Dry Hole (m)*	Wet Hole (m)*
PQ	300	350
HQ	520	600
NQ	760	850
BQ	1000	1100



(\*) 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: Iveco

Model: N67 MNT F41

Power: 165 kW- 210 HP @ 1600 rpm

Fuel consumption: 128 g/kWh @ 1600 rpm

Engine Type: Diesel Turbo charged/ After cooled

Cooling: Water

Power Unit (Engine Option II)

MFG: Deutz

Model: TCD 2012

Power: 135 kW-184 HP -- 155 kW-210 HP @ 2400 rpm

Fuel consumption: 150 g/kWh @ 1600 rpm -- 215 g/kWh @ 2400 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: 80 cc, 2 Speed Bent Axis Piston Type Hydraulic Motor.

Gear Ratio	Speed (RPM)	Torque (Nm)
1. 6.27: 1	98-159	2452-3981
2. 3.12: 1	112-320	1220-1981
3. 1.75: 1	352-571	684-1111
4. 1.00: 1	671-1000	391-635

## 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: 120 L/min

Maximum Pressure: 280 Bar

### Second Pump

Maximum Flow Rate: 72 L/min

Maximum Pressure: 280 Bar

### Auxiliary Pump

Maximum Flow Rate: 70 L/min

Maximum Pressure: 280 Bar

## Mixer Pump

Maximum Flow Rate: 40 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

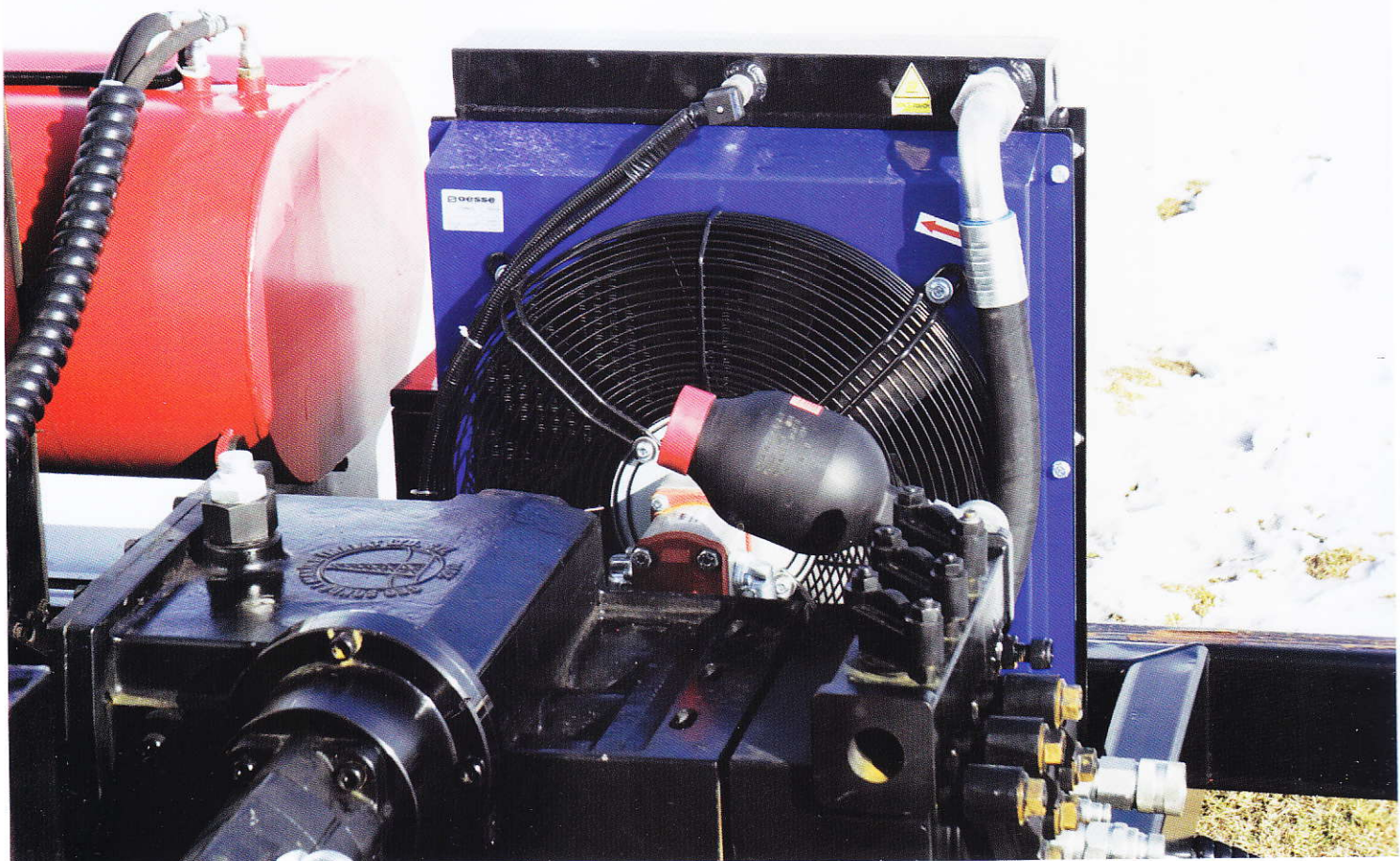
## MAIN HOIST:

Hydraulic driven planetary winch.

Capacity: 9000 kg (single line)

Cable Size: 30 m x 16 mm rope

Line Speed: Bare drum 35 m/min



### WIRE-LINE WINCH:

Hydraulically driven with integral counter balance valves.

Capacity: 1500 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 Weight: 10 000 kg

### 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

