# GEO 2000 Drill Rig





# **Depth Capacities (Vertical Borehole)**

	Dry Hole (m)*	Wet Hole (m)*
PWL	1.500	1.650
HWL	2.500	2.750
NWL	3.500	3.850

(\*) Depth capacity is given according to drill rig feed cylinder pull capacity. Depth capacity might be increased while using the rods which have light weight V-wall or different thread design. Depth based on vertical hole.

# Power Unit (160 cc)

Option 1  MFG Ford (@2000 RPM)  Model 9E33  Power 243 kW (330 HP)  Type Diesel turbo charged / After cooled.  Cooling Water		
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<b>Type</b> Diesel turbo charged / After cooled.	Model	9E33
71 J	Power	243 kW (330 HP)
Cooling Water	Туре	Diesel turbo charged / After cooled.
	Cooling	Water

Our standard production includes Ford and Cummins engines. Upon request from different manufacturers such as Volvo, Deutz, Iveco, and Cummins the delivery date may vary based on the engine delivery date.

#### **Torque & RPM Rating**

<b>Gear Ratio</b>	Speed (RPM)	Torque (Nm)
1. 6,27:1	122 - 199	6.250 - 3.800
2. 3,12:1	246 - 400	3.100 - 1.890
3. 1,75:1	439 - 714	1.750 - 1.050
4. 1,00:1	714 - 1.250	990 - 600

#### **Rotation Lubrication Unit**

Hydraulically driven cooled oil circulation, with 25 micron suction filter.

#### **Chuck Assembly**

Туре	7 jaws - Hydraulic open, spring closed
Max. Inside	120 mm (P wireline size)
Diameter	120 mm (i wireline 3ize)
Holding	19.000 kg
Capacity	5

# **Hydraulic System (@1.600 RPM)**

	Max. Flow Rate	Max. Pressure
<b>Primary Pump</b>	224 L/min	300 Bar
(Main hoist, Wireline hoist, Rotation, Fast feed pull/ push cylinder and Crawler tracks)		
Secondary Pun	ip 72 L/min	230 Bar
(Water/mud pum	p)	
Third Pump	72 L/min	230 Bar

**Auxiliary Pump** 72 L/min 180 Bar

(Fine feed drilling, Foot clamp, Chuck, Rod slide, Rotation head slide, Rotation pilot, Main hoist pilot, Rotation lubrication, Mast raising/lowering, Mast dump/retraction, Mast telescope, Leveling jacks (4))

(Hydro pump, Hydraulic welder, Hydraulic generator)

**Mixer Gear Pump** 32 L/min 60 Bar

(Hydraulic oil and rotation unit box oil cooling)

# **Hydraulic Oil Cooling**

Hydraulic and rotation unit box oil are cooling by air.

#### **Mast & Feed System**

<b>Drilling Angle</b>	45 - 90 degree
Sliding Distance	2,20 m (According to mast axis)
Feed Travel	3,40 m
Telescopic Mast	3,30 m (Open and close by
	hydraulic feed cylinder)
Feed Speeds	Fast and slow with variable controls
Maximum Pull	30.000 kg
<b>Maximum Push</b>	17.000 kg

Standard 6 m pull, angle hole, telescopic mast for ease of set up, ST 52-3 steel profile.

#### **Rod Holder**

There is a rod holder on top of the rotation unit. The rod holder keeps the rod steady, allowing it to be opened using a hydraulic chuck. By moving up and down with a spring system, the rod holder prevents damage to the threads of the rods. The rod holder prevents friction of the rod during advancement by moving forward and backward. P, H and N wireline jaws are using.



#### **Main Line Hoist**

**Capacity** 19.000 kg (Single line)

**Cable Size** 33 m x 24 mm rope

**Line Speed** Bare Drum 35 m/min

Hydraulic driven planetary hoist.

#### **Wireline Hoist**

Hydraulically driven with integral counter balance valves.

**Capacity** 3.000 m x 4,6 mm rope

#### Line Pull (kg) Line Speed (m/min)

<b>Bare Drum</b>	1.870	138
Full Drum	545	474

#### **Rod Clamp**

Hydraulically powered N, H, P and S wireline rod jaw sizes.

Capacity 25.000 kg

# **Water Pump**

Hydraulically driven 835 water/mud pump.

Max. Flow Rate 35 gpm @ 800 psi

#### Mud Mixer (With Mud Mixing Tank)

Hydraulically driven mud mixer.

Max. Speed 2.300 rpm

#### **Drill Base Support**

Supports 4 Hydraulic leveling jacks.

Travel Length 500 mm

#### **Crawler Mounted**

Max. Velocity 4,2 km/h
Max. Slope 30 Degree

#### **Lighting System**

There are 4 LED lighting lamp on the mast.

#### **Mast Ladder**

3 parts of ladder.

# Weight

Crawler Mounted Weight 13.000 kg

# **Hydraulic Hose & Connections**

Parker connection and hydraulic hoses German brand or Cast connection and hydraulic hoses Italian brand.

### **Proportional Valves**

**Controls:** Main winch, Wireline winch, Rotation, Fast feed pull/push cylinder and Crawler

#### **Manifold Valve Bank**

**Controls:** Fine feed drilling, Foot clamp, Chuck, Rod slide, Rotation head slide, Head opener, Rotation pilot, Main hoist pilot, Rotation lubrication control valves.

# **Auxiliary Valve Bank**

**Controls:** Mast raising/lowering, Mast dump/retraction, Levelling jacks (4)

# **Swivelling Panel**

Emergency stop, Drill head rotation pressure, Feed monometer, Hold back monometer, Main hoist monometer, First pump monometer, Secondary pump monometer, Auxiliary pump monometer, Drill head rotation lubrication monometer.

Engine pressure, Engine temperature, Engine RPM, Engine working hour; Engine trouble information, Drill head lubrication trouble information, Rotation RPM meter.

# Warranty

1 year against faulty workmanship individual manufactures warranty on all components as per our terms and condition of sale.

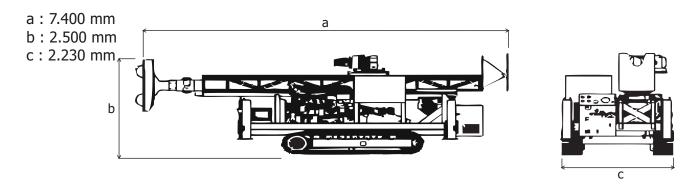
These technical specifications are based on theoretical engineering calculations. Actual capacity will depend on specific drilling conditions and materials. Geo Sondaj Makine İmalat Ltd. reserves the right to change or make modifications to designs and specifications without prior notice or obligation.



# **Options**

Hydraulic welder and generator package, Hydro pump, Cyclone, Mast lighting and installation, Water pump release valve, monometer, accumulator and diaphragm, Rod spinner, Rod holder, Rod loader, Swiveling control panel, Remote control panel, Mast ladder, Enclose operator cabin, Engine service information connection, Warning horn to alert drill crew, Fire suppression unit, Water flow meter, Hydraulic oil reservoir fill pump, Wireline hoist self levelling system

#### **Dimensions**



All weights and dimensions are approximations and are subject to change.

**CE** certificated.