

# BENTEC 450 Drilling Rig



This new, modern land-drilling rig represents environmental and safety solutions as well as technological progress. The rig is designed and manufactured according to

API 4F and the latest European regulations including low emissions and is fully ATEX certified. The rig is AC driven and joystick operated.

# BENTEC 450 Drilling Rig

## Mast

Type:	MVL-1000-143,7-33,5
System:	Vertical lift
Total overall height incl. substructure:	55,1 m (180,8 ft)
Mast clear height:	43,3 m (142 ft)
Mast base:	10,20 x 5,65 m (33,50 x 18,54 ft)
Hookload capacity at 12 lines:	450 mt (1.000.000 lbs)
Racking capacity:	cca 7.200 m (23.600 ft)

## Substructure

Type:	SSB-1000-575-29,5
System:	Box-on-Box
Height of drill floor:	9 m (29,5 ft)
Height underneath rotary table:	7,4 m (24,3 ft)
Casing load:	450 mt (1.000.000 lbs)
Setback load max.:	260 mt (573.000 lbs)

## Drawworks

Make and Type:	Bentec E-2000-AC-1-3/8
Drive capacity:	1.470 kW (2.000 HP)
Drill line diameter:	35 mm (1 3/8")
Max. line pull, 1st gear:	420 kN (42,9 mt)

## Power Generation

Make and Type:	Four (4 x) x Cummins KTA50
Engine rating:	1.305 bkW @ 1.500 1/min
Generator type:	Four (4 x) AvK-DSG
Emergency generator engine:	One (1 x) CAT C-15
VFD container:	Bentec

## Top Drive

Make and Type:	Bentec TD-500-HT
Load rating:	450 mt (1.000.000 lbs)
Output Torque (continuous):	63 kNm (46.500 ft lb)
Tool Torque (intermittent and stall):	100 kNm (73.760 ft lb)

## Rotary Table

Type:	Kerui RDF-375-850
Rotary Table Drive:	850 kW AC

## Mud Pumps

Make and Type:	Bentec T-1600-AC-7 1/2"x12"
Number of:	Three (3 x)
Electric Motors:	1.200 kW AC (1.600HP)
Max pressure:	345 bar (5.000 psi)

## Mud Tank System

Type:	Rectangular tanks
Active mud volume:	220 m <sup>3</sup> (incl. mix compartments)
Reserve mud tank:	140 m <sup>3</sup>

## Solids Removal System

Shale shaker type:	Three (3 x) Mongoose PT
Desander:	3 x 10" cones
Desilter:	20 x 4" cones
Drilling Mud Degasser:	Bentec Vacuum Degasser DMD-250-H
Mud Gas Separator:	Poor boy style 48", freestanding

## Iron Roughneck

Make and Type:	NOV Roughneck ST-120
Make-up Torque:	135,6 kNm (100.000 ft-lb)
Break-out Torque:	162,7 kNm (120.000 ft-lb)

## Additional Features

Mast:	Vertical erection (Bootstrap system) for small locations
Drawworks:	4-Quadrant system with Disc Brake, Eddy Current Brake
Colour Camera System:	At Racking Board, Shale Shakers, Mud Pumps, Drawworks
Safety Systems:	AntiCollision System, Gas Detection System
Another Features:	InfoDrill Information System, Soft Torque System, Soft Pump System, FeedOff Control, etc.
Another options:	Skidding system for rig move with full setback for up to 22 m Transformer Unit 2 x 2,5 MW for rig connection to public grid