

Hydraulic Drilling Rig HH300 - Equipment Limits



Crown Block - Drillmec
 Maximal hook load 272 metric ton (600,000 lbs) / Number of main pulley 8
 Diameter of main pulley 1000 mm (40")
 Diameter of steel wire rope 42mm (1.65")

Derrick

Maximal hook load 272 metric ton (600,000 lbs)
 Nominal drilling depth 127mm (5" drill pipe) 3276 m/
 Maximal weight of drilling string 558 kN
 Diameter of drilling steel wire rope 42 mm (1.65") Effective height 16.6 m
 Type of derrick as well as its effective height Type Telescopic, 16.6m

Drilling line
 42 mm (1.65") 6x19S IWRC

Kelly Hose
 4" Fig 1002
 5,000 psi wp
 10,000 psi test

Top Drive

Drillmec / HH300
 Hoisting Capacity: 272 ton
 Pressure Rating: 345 bar / 5000 psi
 Speed Range: 0 ... 195 rpm
 Continuous Torque: 5000 daNm (36878 lbf-ft) / Make / Break Torque: 44,438 ft lb
 Drill torque 36,878 ft lb

Setback capacity of racking board

(127mm drill pipe, 9m setback)
 (114mm drill pipe, 9m setback)

Derrick Structure Loadings

1. 272 metric ton (600,000 lbs)

Set back area

Technical data Qty
 - Vertical pipe bins 12
 - Storage capacity for each pipe bin 5" OD DP, 6_" T.J. R3 18 joints for 10 pipe bins
 27 joints for 2 pipe bins
 - Total storage capacity 5" OD DP, 6_" T.J. R3 234 joints, approx. 3276 m
 Vertical pipe bins base frame will be installed on skidding rails.

Rotary table

o Opening 698 mm (27 1/2")
 o Max torque 980 daN·m (7,233 lbs·ft)
 o Max speed 45 rpm
 o Max load on table 272 metric ton (600,000 lbs)
 o Hydraulic motor 2 ea

Mud Pumps 12T1600

Horizontal design, manufactures as per API SPEC 7K
 Rated input 1600 Hp (1193 kW) at 120 SPM
 Stroke 12"
 Max stroke per minute 120 SPM
 Continuous stroke range 40-120 SPM
 Piston diameter range 4.1/2" - 7.1/2"
 Max delivery 3127 l/min (826 GPM) with 7.1/2" piston at 120 SPM
 Discharge pressure at max delivery 206 bar (2987 psi) with 7.1/2" piston
 Max Discharge pressure 345 bar (5000 psi) with 4.1/2" piston
 Delivery at max discharge pressure 1125 l/min (297 GPM) with 4.1/2" piston at 120 SPM
 Gear ratio 3.171
 Valve pot size 7
 Technical data (90% pump mechanical efficiency - 100% pump volumetric efficiency)

