

HZJ70/4500D Drilling Rig Gunashli7 - Equipment Limits



Crown Block - HTC450

Maximal hook load 4500kN / 1,011,645 lbs
 90% 910,480 Number of main pulley 8
 Diameter of main pulley 1524 mm (60")
 Diameter of steel wire rope 38mm (1 1/2")

Derrick

Maximal hook load 4500kN / 1,011,645 lbs 90% 910,480lbs
 Nominal drilling depth 127mm (5" drill pipe) 7000 m
 Permissible wind speed operating mode (max. load, full candles) 25.8m/s(50knot)
 Working temperature -18°C ~ +50°C
 Effective height 46.6m
 Type of derrick "K" Type,

Drilling line

Minimum Braking Force is 1010kN 227,048 lbs
 1 1/2" 38mm 6x19S IWRC

Kelly Hose

4" Fig 1002
 79'
 5,000 psi wp
 10,000 psi test

Top Drive

NOV / TDS-115A
 Hoisting Capacity: 500 ton
 Pressure Rating: 500 bar / 7500 psi
 AC Motor Power: 2x400HP
 Speed Range: 0 ... 228 rpm
 Continuous Torque: 37,500 ft-lbs Make/ Break
 Torque: 55,000 ft-lbs
 Ambient Temperature: 45°C ... +55°C
 Total weight 27,000 lb

Travelling Assy YC450

SWL - 1,011,645 lbs 90% 910,480
 6 Pulley
 Weight - 8.135 t

Setback capacity of racking board

(127mm drill pipe, 28m setback) 6,600m
 (114mm drill pipe, 28m setback) 7,000m
 5" drill pipe 220 column, 9 1/2" drill collar 8 column, 11" drill collar 1 column

Derrick Structure Loadings

1. Maximal hook load 4500kN / 1,011,645 lbs 90% 910,480lbs

Drawworks - JC70D Rated input power 1600KW (2150hp)

Maximal fast line pulling force 485 kN
 The dimension trough of main barrel (diameter x length) 770 x 1439mm
 Diameter of the steel wire rope of barrel 38mm (1 1/2")
 Auxiliary brake air cooled Eddy Current Brake
 Rated max speed 1.79 m/s

HDZ450/14BX Substructure (API Spec 4F)

Height from rotary table beam to ground 1.4 m
 Max. Static load of rotary table 4,500kN
 Rated load of setback 2,200kN
 Area of drill floor 16.2m x 20.1m

Rotary table

Model ZP-375
 Maximal static load 5850 kN Through hole diameter 952.5 mm (37.1/2")
 Max. operating torque 32362 N.m maximum speed revolution 300 rpm

Mud Pump 3NB-1600F

Rated input power 1193kW
 The rated power and quantity of motor of each pump 2 x 800 kW
 Maximum pressure 35 MPa
 Stroke 304.8 mm
 Gear Ration 4.206:1
 Max. stroke 120 SPM

冲数 次/分 Число ходов хол/мин	缸套直径 Диаметр гильзы mm		额定压力 Nom. давление MPa (psi)							
	mm		180	170	160	150	140	(130)		
	3NB-1300F	3NB-1600F	(2712)	(3046)	(3437)	(3916)	(4496)	(5076)		
	23.1	25.9	29.2	33.2	35.0	35.0	35.0	35.0		
	(3350)	(3756)	(4235)	(4815)	(5076)	(5076)	(5076)	(5076)		
h	额定功率 Nom. мощность		排量 Производительность L/s (GPM)							
	3NB-1300F	3NB-1600F	kW	hp	kW	hp				
130	1049	1407	1293	1734	50.42	44.97	39.83	35.01	30.50	26.30
					(799)	(713)	(631)	(555)	(483)	(417)
120	969	1300	1193	1600	46.54	41.51	36.77	32.32	28.15	24.27
					(738)	(658)	(583)	(512)	(446)	(385)
110	888	1191	1094	1467	42.66	38.05	33.71	29.62	25.81	22.25
					(676)	(603)	(534)	(469)	(409)	(353)
100	807	1082	995	1334	38.78	34.59	30.64	26.93	23.46	20.23
					(615)	(548)	(486)	(427)	(372)	(321)
90	726	974	895	1200	34.90	31.13	27.58	24.24	21.11	18.21
					(553)	(493)	(437)	(384)	(335)	(289)
80	646	866	796	1067	31.02	27.67	24.51	21.55	18.77	16.18
					(492)	(439)	(388)	(342)	(298)	(256)
1					0.3878	0.3459	0.3064	0.2693	0.2346	0.2023
					(6.147)	(5.483)	(4.857)	(4.268)	(3.718)	(3.207)