

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/
 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

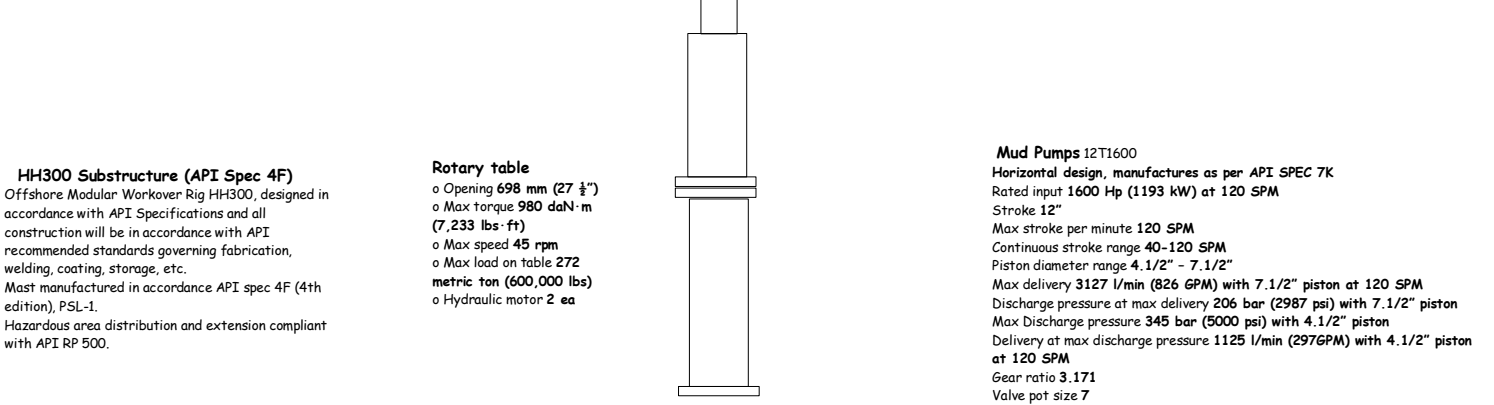
Technical data Qty
 - Vertical pipe bins 12
 - Storage capacity for each pipe bin 5" OD DP, 6" T.J. R3 18 joints for 10 pipe bins
 27 joints for 2 pipe bins
 - Total storage capacity 5" OD DP, 6" T.J. R3 234 joints, approx. 3276 m
 Vertical pipe bins base frame will be installed on skidding rails.

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)



HH300 Substructure (API Spec 4F)
 Offshore Modular Workover Rig HH300, designed in accordance with API Specifications and all construction will be in accordance with API recommended standards governing fabrication, welding, coating, storage, etc.
 Mast manufactured in accordance API spec 4F (4th edition), PSL-1.
 Hazardous area distribution and extension compliant with API RP 500.

@ 2 L			RATED INPUT 1600 HP @ SPM 120				GEARRATIO : 3,171					
			12T1600 PERFORMANCE DATA SHEET									
STROKE		[in] [mm]	90% pump mechanical efficiency - 100% pump volumetric efficiency									
LNER SIZE		[in]	7,50	7,25	7,00	6,75	6,50	6,25	6,00	5,50	5,00	4,50
		[mm]	190,50	184,15	177,80	171,45	165,10	158,75	152,40	139,70	127,00	114,30
MAX. DISCHARGE PRESSURE		[psi]	2987	3190	3422	3683	3974	4293	4655	5000	5000	5000
		[bar]	206	220	236	254	274	296	321	345	345	345
VOLUME / STROKE		[gal/rev]	6,885	6,434	5,998	5,577	5,171	4,781	4,406	3,703	3,060	2,479
		(l/rev)	26,062	24,354	22,703	21,111	19,576	18,099	16,680	14,016	11,583	9,382
PUMP SPEED [spm]	RATED INPUT [HP]	HYDR. POWER [HP]	US G.P.M. L/min									
120	1600	1440	826	771	719	669	620	573	528	444	366	297
			3127	2922	2724	2533	2349	2171	2001	1681	1389	1125
110	1466	1320	757	707	659	613	568	525	484	407	336	272
			2866	2678	2497	2322	2153	1990	1834	1541	1274	1032
100	1333	1200	688	643	599	557	516	477	440	370	305	247
			2606	2435	2270	2111	1957	1809	1667	1401	1158	938
90	1200	1080	619	578	539	501	465	430	396	333	275	222
			2345	2191	2043	1899	1761	1628	1501	1261	1042	844
80	1066	960	550	514	479	445	413	382	352	296	244	198
			2084	1948	1816	1688	1566	1447	1334	1121	926	750
70	933	840	481	450	419	390	361	334	308	259	213	173
			1824	1704	1589	1477	1370	1266	1167	981	810	656
60	800	720	412	385	359	334	310	286	264	221	183	148
			1563	1461	1362	1266	1174	1085	1000	840	694	562
50	667	600	344	321	299	278	258	238	220	184	152	123
			1303	1217	1135	1055	978	904	833	700	579	469
40	533	480	275	257	239	222	206	190	176	147	122	99
			1042	974	908	844	783	723	667	560	463	375