

HTD-1500 Hydraulic Drive

Provides a reliable, economical solution for a variety of PCP applications, including heavy to light oil, coalbed methane, and water source wells

Applications

- PCP applications driven by hydraulic power
- Temporary installations or areas with no electricity

Features and Benefits

- The small footprint is especially useful for height-restricted areas and aesthetically sensitive environments.
- Standard features include a hinged guard for easy sheave and belt inspection or replacement and a single-point, adjustable, balanced lifting system for ease of handling.
- The ability to vary hydraulic motor and sheave combinations provides flexibility to adjust output speed and torque.

Tool Description

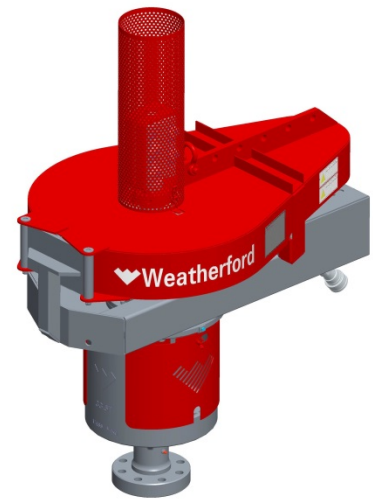
The Weatherford HTD-1500 drive is a hydraulic, belt-driven drive with a torque capacity of 1,500 lbf-ft. It is compatible with Weatherford stuffing boxes and various wellhead connections.

Specifications

Drive type	Hydraulic, belt-driven drive
Prime mover type	Hydraulic
Braking mechanism ^a	Fixed-orifice check valve required
Dynamic bearing capacity	99,902 lbf (444,385 N)
Bearing Ca90 capacity	25,900 lbf (11,748 kgf)
Torsional rating	1500 lbf-ft (2034 N•m)
Maximum polished-rod speed ^b	500 rpm
Polished-rod size	1-1/4 and 1-1/2 in.
Maximum axial load	9 tonne
Main shaft type	Hollow
Maximum sheave ratio	5.14:1
Input shaft diameter	2.75 in. (70 mm)
Maximum driven sheave diameter	28.5 in. (724 mm)
Maximum driver sheave diameter	10.5 in. (267 mm)
Maximum number of belts	1 ea. Synchronous
Shaft to shaft distance	21.2 in. (538 mm)
PR drive clamp type	8 bolt

^a Can be supplied with drive or provided by end user on hydraulic power unit

^b Depending on sheave ratio and hydraulic system



The HTD-1500 hydraulic drive is a low-cost drive that provides flexibility to accommodate speed and torque requirements in non-electrified areas.

Options

- Integral, booth- and yoke-mounted stuffing boxes^c
 - Conventional, I-PAK[®], and DuraSeal[®] stuffing box types
 - Polished-rod speed indicator
 - Polished-rod lock-out tool
- ^c Some conditions may apply



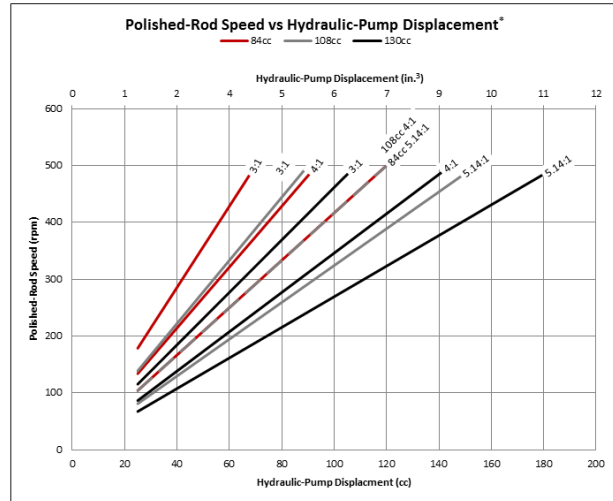
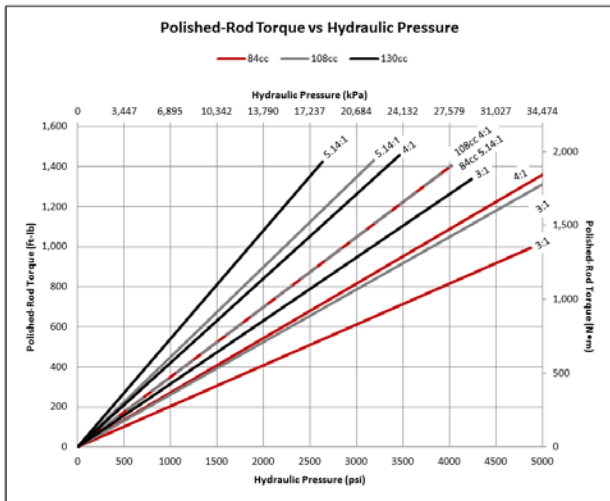
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Specifications

Available stuffing box (SB) mounting	12T two-post yoke, threaded cap, one-piece SB		33.6 T standard booth, bolt-on SB			Integral
Available stuffing box type	Conventional	I-PAK [®]	Conventional	I-PAK	DuraSeal [®]	DuraSeal
Available stuffing box wellhead connection API compatible	2-7/8 EUE pin					
				3-1/8 3M flange		
				4-1/16 2M or 3M flange		
				5-1/8 2M or 3M flange		
Height: top of PR guard	62 in. (1,570 mm)				47 in. (1,186 mm)	
Height: top of PR clamp	49 in. (1,245 mm)				34 in. (861 mm)	
Width	30 in. (757 mm)					
Length	48 in. (1,222 mm)					
Approximate weight ^a	618 lb (280 kg)				511 lb (232 kg)	
Motor mounting	Single					
Maximum motor frame size	SAE D (optional SAE C)					
Maximum motor weight ^b	800 lb (363 kg)		1,500 lb (680 kg)			2-7/8 EUE pin: 1,000 lb (454 kg)
Maximum slant angle from vertical	45°					
Ambient operating temperature range	-40 to 122°F (-40 to 50°C)					
Minimum start-up temperature	-4°F (-20°C)					
Operating temperature range	-4 to 167°F (-20 to 75°C)					

^a Not including motor, belts, sheaves, and bushings

^b Including motor, belts, sheaves, and bushings



Available polished-rod speed and torque will vary depending on hydraulic motor, sheave ratio, and hydraulic-power-unit capabilities. Consult your local Weatherford representative for more information about designing your system for your particular well conditions. *Information is based on an 1,800-rpm prime mover speed.

[†] I-PAK is a registered trademark of Weatherford in the US and Canada. DuraSeal is a registered trademark of Weatherford in the US.

