Triplex Mud Pump

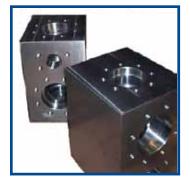


Available in the following hp models: 1300 &1600

White Star mud pumps are designed and manufactured to achieve the highest precision and deliver maximum performance and efficiency. White Star triplex mud pumps are compatible with other major brands. Expendables are available in domestic and international markets.

Fluid End

White Star's discharge manifolds are single piece alloy steel forged then machined for maximum strength and life. The fluid end modules are in one or two-piece configurations, using quenched and tempered forged alloy steel material.





NEW: 2-PIECE SPLIT MODULE

Separate replaceable suction and discharge modules c/w replaceable wear ring for extended module life.

Frame and Skid

Pump frames suffer from stress and fatigue cracking at the frontend bulkhead, pinion, crankshaft, and bearing support areas, so White Star has paid particular attention to the strength of the frame and the way it's manufactured. The material is a hot rolled premium steel plate with the longitudinal plates increased in thickness by nearly 1/2" to prevent the frame from "breathing." The White Star frame is machined the full length of the hold down runners at the base on either side. The skid has a fully milled flush run of 1" plate the full length of the pump. When the pump is bolted to the machined skid, the stresses from the front end of the pump are transmitted through the skid. This provides added strength to the frame and a reduction in stress at the high stress points typical of other existing triplex pumps.

Crankshaft, Pinion, Bull Gear & Connecting Rods

White Star's crankshaft is manufactured from a forged 4140 material

with high nickel content to reduce crack initiation and propagation. It has a high chrome content to prevent corrosion.

White Star crankshafts are static balanced for smooth operation to reduce noise and vibration, which extends the life of the bearings and crankshaft. The pinion and bull gear are made from similar



Triplex Mud Pump



material to the crankshaft and with a high precision double helical gear, with less backlash than other available pumps. The precision gears ensure power is transmitted over the full width of the adjacent gears and the decreased backlash prevents the hammering effect, which occurs with speed change. Our connecting rods are made from high specifica-



tion alloy steel. White Star connecting rods are machined with great precision to guarantee alignment between the crankshaft and the cross heads.



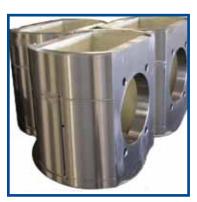
Ancillary Parts

The White Star ancillary parts are all considered individually critical to successful pump operation. Whether it's a simple liner nut with a modified acme thread, a plug retainer or an extension rod, they are designed and manufactured to the highest standards.



Cross heads and Guides

White Star's cross heads are manufactured from high quality, cast steel and the guides are manufactured from a quality manganese bronze normally used in bearings. This combination of materials provides a low



friction interface and generates very little heat, which equates to minimal wear.

Pulsation Dampeners

White Star's pulsation dampener, rated at 20 gallons, is made from forged alloy steel. Each dampener is hydrostatically tested

to 10,000 psi before shipment. White Star also offers a 10gallon 7500 WP pulsation dampener for the 7500 PSI triplex fluid end.





Triplex Performance Charts

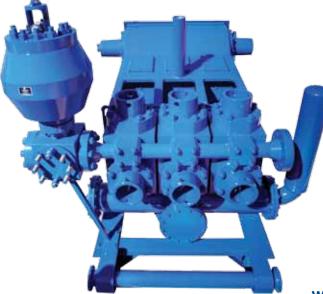
Stroke per min.				120	100	80	60
1300 hp	Hydraulic hp			1170	975	780	585
Liner size in. (mm)	Gal/stk (Liters/stk)	Max discharge pressure PSI (kg/cm ²)		GPM - Gallons per minute			
		5000 PSI	7500 PSI*	(LPM - Liters per minute)			
7.5 (190.5)	6.88 (26.06)	2429 (178)	2429 (178)	826 (3127)	688 (2606)	551 (2085)	413 (1564)
7 (177.8)	6.00 (22.70)	2788 (205)	2788 (205)	720 (2724)	600 (2270)	480 (1816)	360 (1362)
6.5 (165.1)	5.17 (19.57)	3234 (238)	3234 (238)	621 (2349)	517 (1957)	414 (1566)	310 (1174)
6 (152.4)	4.41 (16.68)	3795 (279)	3795 (279)	529 (2001)	441 (1668)	353 (1334)	264 (1001)
5.5 (139.7)	3.70 (14.01)	4516 (332)	4516 (332)	444 (1682)	370 (1401)	296 (1121)	222 (841)
5 (127)	3.06 (11.58)	5000 (367)	5465 (401)	367 (1390)	306 (1158)	245 (927)	184 (695)
4.5 (114.3)	2.48 (9.38)	5000 (367)	6747 (496)	297 (1126)	248 (938)	198 (751)	149 (563)
4 (101.6)	1.96 (7.41)	5000 (367)	7500 (551)	235 (890)	196 (741)	157 (593)	118 (445)

Rated strokes and horsepower 120 SPM @ 1300 Input horsepower. | *With 7500 PSI module

Hydraulic horsepower & flow rate based upon 90% mechanical efficiency and 100% volumetric efficiency. All data subject to change without notification

Stroke per min.				120	100	80	60
1600 hp	Hydraulic hp			1440	1200	960	720
Liner size in. (mm)	Gal/stk (Liters/stk)	Max discharge pressure PSI (kg/cm ²)		GPM - Gallons per minute			
		5000 PSI	7500 PSI*	(LPM - Liters per minute)			
7.5 (190.5)	6.88 (26.06)	2989 (220)	2989 (220)	826 (3127)	688 (2606)	551 (2085)	413 (1564)
7 (177.8)	6.00 (22.70)	3431 (252)	3431 (252)	720 (2724)	600 (2270)	480 (1816)	360 (1362)
6.5 (165.1)	5.17 (19.57)	3979 (292)	3979 (292)	621 (2349)	517 (1957)	414 (1566)	310 (1174)
6 (152.4)	4.41 (16.68)	4670 (343)	4670 (343)	529 (2001)	441 (1668)	353 (1334)	264 (1001)
5.5 (139.7)	3.70 (14.01)	5000 (367)	5558 (408)	444 (1682)	370 (1401)	296 (1121)	222 (841)
5 (127)	3.06 (11.58)	5000 (367)	6725 (494)	367 (1390)	306 (1158)	245 (927)	184 (695)
4.5 (114.3)	2.48 (9.38)	5000 (367)	7500 (551)	297 (1126)	248 (938)	198 (751)	149 (563)
4 (101.6)	1.96 (7.41)	5000 (367)	7500 (551)	235 (890)	196 (741)	157 (593)	118 (445)

Rated strokes and horsepower 120 SPM @ 1600 Input horsepower. | *With 7500 PSI module Hydraulic horsepower & flow rate based upon 90% mechanical efficiency and 100% volumetric efficiency. All data subject to change without notification





Triplex Schematics

