MUD PUMP FLUID END EXPENDABLES AST []



TRIPLEX MUD PUMP



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Fluid End Expendables & Accessories

Liner: hy-chrome liner, zirconia liner, ceramic liner, chrome-plated liner, hardned liner

Piston: nitrile rubber piston, supreme piston, polyurethane piston, urethane bonded piston, green duo piston, blue lightning piston, white lightning piston

Valve & Seat: three-web valve seat, four-web valve seat, full open valve seat, Bomco type valve seat, NOV valve seat, Mission valve seat, Southwest valve seat

Pulsation Dampener: KB45,KB75,PD45,PD55,K10,K20

Module: "I" shaped module, "L" shaped module, suction module, discharge module

Spare parts: Upper and lower Valve Guide, Liner Gasket, Piston Rod, Rod Clamp, Valve Cover, Valve Cover Seal, Cylinder head, Cylinder Head Gasket, Cylinder Head Flange/Threaded Ring, Alignment Ring, Wear Plate, Cylinder Head Plug, Liner Flange, Liner Lock, Mud Baffle

Power End Parts

Pony Rod/Extension Rod, Stuffing Box, Stuffing box Seal Parts, Crosshead, Crosshead Guide, Crosshead Pin, Crosshead Bearing, Connection Rod, Bull Gears, Pinion Shaft, Pinion Shaft Bearing/Bearing Carrier/Oil Seal Gasket/, Crank Shaft, Crank Shaft Bearing/Bearing Carrier, Eccentric Bearing, Inner/outer Race Retainer, Gauges, Oil Lubrication Pump, Mud Pump Transmission Belt Pulley/V-belt

Mud Pump Model:

Bomco: F-500, F-800, F-1000,F-1300, F-1600,F-1600HL, F-2200HL

Brewster: B-1000-T, B-1100-T, B-1300-T, B-1600-T

HONGHUA: HHF-500, HHF-800, HHF-1000, HHF-1300, HHF-1600, HHF-1600HL, HHF-2200HL

Emsco: F-350,F-500,F-650, F-800, F-1000,FD-1000, FB-1300, FB-1600, FA-1600, FA-1300, FC-1600,

FD-1600,FC-2200D-300/500, D-175,D-225,D-375,

D-500,D-550,DA-500,DB-500,D-700,DA-70,DB-700,DC-700,DA-850,DB-850,DC-850,D-1000,DB-1000,

DC-1000,D-1000-A,D-1350,D-1650

National: 7-P-50, 8-P-80, 9-P-100, 10-P-130, 12-P-160, 14-P-220, JWS-165-L, JWS-340,

JWS-400,C-250,C-350,K-380,K-500-A,G-700,K-700,N-1000,N-1300,N-1600

Oilwell: 350-PT,A-650P-T,A-850-PT, A-1100-PT, A-1400-PT,A-1700-PT,HD-1400-PT,HD-1700-PT

612-P, 212-P,214-P,218-P,700-P,816-P,818-P,1000-P

Ideco: T-500, T-800, T-1000, T-1300, T-1600,MM-450,MM-500-F,MM-600-A,MM-700-F,MM-1000

Gardner Denver: PZ-7, PZ-8,PZ-9,PZ-10, PZ-11, FK-FXK, FY-FXD, FD-FXX, FG-GXG, FG-FXG, KG-KXG,

FQ-FXQ, FF-FXF, FF-FXP, TGE, TGF, TGH, PAH-275

LS National Mud Pumps: 3NB-500C, 3NB1000C, 3NB1300C, 3NB1600

Wirth Mud Pump: TPK1000, TPK1600, TPK 2000

 $\textbf{Russian Pumps:} UNBT-950,\ UNB-600,\ 8T-650,\ UNBT650,\ NBT600,\ UNB1180,\ UNB1180L,$

WEATHERFORD/Ellis Williams:MP-5,MP-8,MP-10,MP-13,MP-16, E-447, E-2200, W446, W440

Drillmec: 7TS-600,8T-800,9T1000,10T-1300, 12T1600,14T-2200,10D2C, 8D1S

Upetrom: 3PN-1000, 3PN-1600, 3PN-1300, 3PN-2000

OPI: 350-D,350-GD,500-DC,700-HDL | 1000-HDL

Lewco/Ewco:W-250-C,WH440,W446,W600,WH600,WH770,W1100,WH1312,W1612,W1712,W2000,W2214,W

2215

American Block: K800,K1000,K1300,K1600,K2200 **Brewster**: B-1000-T,B-1100-T,B-1300-T,B-1600-T

Loadmaster: LSF-500, LSF-800, LSF-1000, LSF-1300, LSF-1600

Soilmec: 7T500,7T508,8T650 **Dragon**: 440HP,660HP

GASO/Wheatly:1550,1560,1563,1654,1742,1753,1874,1849,1860,2652

Great American: GA-550, GA-750

TFI:BH-800, F-500, F-800, F-1000, F-1300, F-1600

TSC: WF-400,WF-450,WF-700,WFU-750,WF-1000,WF-1300,WF-1600,WF-2000,WF-2200

Liner

Eastland offers zirconia liner, hy-chrome liner, chrome-plated liner and hardened liner matched performance and durability for in most drilling conditions.

Hy-chrome Liner

Eastland's hy-chrome liner is made with a over 27% chrome iron inner sleeve in a forged steel outer shell. The bore hardness is 60 to 65 RC while the hull has high tensile strength of more than 90000psi. All hy-chrome liner are manufactured with an "HP" lip in case of inner sleeve slippage.



The service life of this liner is more than 800 hours under normal drilling conditions. Eastland's hy-chrome liners are made for superior performance under tough corrosive and abrasive conditions.

Zirconia Liner

Zirconia liner(ZrO₃) combines the strength of a forged steel outer shell with the abrasion and corrosion resistance of a ceramic inner sleeve. Zirconia liner is designed to adapt to deep oil reservoir, hard stratum and severe earthiness, offsore oil and natural gas exploitation. The service life of this type liner is over 4000 hours. Compared with hy-chrome liner and Alumina liner, zirconia liner possesses better impact strength, higher hardness with wear resistance, stronger erosion resistance, higher pressure resistance and finer surface finishes.



Chrome-plated Liner

Chrome-plated Liner is made from premium forged steel with chrome-coated core. The chrome-plated liners have hardening characteristics of 58 to 62 RC hardness.

Hardened Liner

Hardened Liner is made from premium seamless steel tube or premium forged steel, in which the bore is carburized and quenched, creating a hardened layer with hardness of 58 to 62 RC from abrasion and corrosion. It is honed to a mirror surface to prolong the life of pistons with lowest friction.







Valve & Seat

Eastland offers a full range of popular used valve and seat to meet your different drilling demands.

Wing-guided Valve and Seat-Full Open

- Forged alloy construction
- Deep carburized wear surface
- Greater fluid flow
- Easier valve maintenance and seat pulling

Three-web and Four -web Design Valve and Seat

- Carburized premium ally steel
- Tested to withstand the harshest service condition
- Easy replacement to insert with a minimum of down time
- Long lasting service life





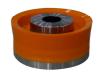


Piston

Eastland offers a full line of API taper pistons both for duplex and triplex mud pump. We have right options for your applications with versatile options of replaceable rubbers, urethane or bonded urethane pistons.

Bonded Urethane Piston

These pistons are constructed of urethane bonded to a solid metal hub, Double durometer urethane is designed to provide optimum performance in oil base or water base mud and high drilling pressure.



Designed with harder, denser polyurethane construction

- High pressure mud pump service
- Maximum operating temperature is 180 °F
- Extended service life

Replaceable Urethane Piston

These pistons are constructed of replaceable urethane mounted to a solid metal hub which is designed for high temperature drilling mud.

- Rated for all drilling conditions
- Maximum operating temperature is 230 °F
- High pressure mud service
- Extended service life

Replaceable Rubber Piston

Replaceable rubber pistons are made with nitrile rubber to resist extrusion and abrasion. These pistons are fully interchangeable with most other manufactures products. Available



sizes are from 3" through 7-1/2"

	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	6-1/4"	6-1/2"	6-3/4"	7"	7-1/4"
Duplex	K	K	Κ	K	В	В	В	L	L	L	L	L
Triplex	Κ	K	K	K	В	В	В	L	L	L	L	L

- High tensile strength
- Rated for all drilling conditions
- Maximum operating temperature is 250 °F
- Extended service life

Piston Rod

Eastland offers a full line of piston rods and extension rods for duplex and triplex mud pump. Eastland's rods offer excellent resistance to fatigue, corrosion and heavy loads.

- Fabricate with premium alloy steel
- Numerically controlled machining
- Long lasting service life
- Clamped and threaded

Extension Rod

Eastland's extension rods are made from high strength alloy steel, heat treated or chrome plated. They are so machined and polished to ensure a perfect seal for protection of the mud pump gear end.

- Fabricate with premium alloy steel
- Numerically controlled machining
- Long lasting service life









Module

Heat-treated and internally hardened for high durability; available in various materials to meet a wide range of applications; standard one-and/or-two-piece configuration, with designs available for pressure of 5000psi(35.1Mpa), 7500psi(52.7Mpa), and 10000psi(70.3Mpa); discharge connections available on each side; suction connections on each side or front center.

- 100% interchangeable with OEM
- Premium forged alloy steel
- Made on CNC boring mills
- Strict computer controlled heat treat procedures
- Rigid inspection







Fluid End Accessories

Eastland offers a complete line of accessories for OEM fluid end modules, CNC machining makes these accessories uniformly dimensional and interchangeable with OEM.

The perfect exterior surface reflects the superior inside quality.

Fluid end accessories include.

- Valve and cylinder head plug
- Valve and cylinder head thread ring
- Upper and lower valve guide
- Stud and nut
- Gasket, Cylinder Head Gasket, etc.

