INTRODUCTION

PISTONS

TSC offers a full range of mud pump pistons for both triplex and duplex pumps. They are:

- · Bonded urethane pistons.
- Bonded rubber pistons.
- Replaceable rubber pistons.
- Endurance Premium Bonded Piston.



BONDED URETHANE PISTON

These pistons are constructed of double durometer urethane, bonded to a solid metal hub. Double durometer urethane is designed to provide optimum performance in oil-based mud and high drilling pressures.

Features

- Rated for all drilling operations.
- Maximum operating temperature is 180 °F.
- High pressure mud pump service.
- Extended service life.



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TSC Manufacturing and Supply LLC, 13788 West Road, Suite 100, Houston, Texas 77041, USA Tel: +1 832 456 3900 Fax: +1 832 456 3998 E-mail: sales@t-s-c.com

INTRODUCTION

N'DURALL PREMIUM BONDED PISTON

TSC's "N'durall" mud pump piston improves drilling contractor economics through advances in technology, improved process control and increased drilling penetration rates.

Chemistry

Manufactured from advanced polymer compounds, the advances in chemistry ultimately provide superior mechanical values and chemical resistance. The increased mechanical values provide resistance to reciprocating pump psitons biggest enemies listed below.

- Heat.
- Abrasion.
- Extrusion.

The advanced polymer compound provides strength to withstand chemical attack from additives used in today's oil, synthetic and water based drilling fluids. The compound also has improves abrasion resistance from drilling solids suspended in drilling muds and excels in high temperature performance capable of operating in fluid temperature up to 300°F.

Improved Process Control

The "N'durall" carries stamped batch numbers on the piston body for use in monitoring manufacturing dates and as an aid in rotating shelf stock.

Design

The single durometer design and open mold casting contribute to overall performance and improved economics.

Machining

CNC machining of steel piston heads yields close tolerances for improved performance.

Applications

- High Pressure Drilling.
- Elevated Mud Temperature.
- Synthetic Drilling Fluid.
- Ceramic and Zirconia Liners.
- Chrome Sleeved Liners.



TSC Manufacturing and Supply LLC, 13788 West Road, Suite 100, Houston, Texas 77041, USA Tel: +1 832 456 3900 Fax: +1 832 456 3998 E-mail: sales@t-s-c.com



INTRODUCTION

BONDED RUBBER PISTON

TSC pistons are constructed of nitrile rubber bonded to a solid metal hub. The oil resistant rubber is designed to provide optimum performance in oil base or water base mud and high drilling pressures.

Features

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



REPLACEABLE RUBBER PISTON

TSC 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 range from 3" through 7-1/2" and series are A, B, K and L.

Features

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





FLUID END EXPENDABLES

OILWELL

A-600-PT

7 x 8

SIZE PART UNINEER PART NUMBER URETHANE BONDED RUBBER BONDED N'DURALL BONDED REPLACEABLE RUBBER PART NUMBER 4" TS-0227-01P G-753° ILU-40-K15 IH-W-40-K15 IAU-K15 IH-W-40-K15 IAU-K15 IH-W-40-K15 4 12" TS-0227-501P G-753° ILU-40-K15 ILU-40-K15 IH-W-40-K15 IAU-K155 IAU-K156 IAU-K156 5" TS-0227-501P G-742° ILU-40-B15 IL-50-B15 IAU-S0-B15 IAU-S0-B1		LINI	ERS	LINER GASKETS	PISTONS				PISTON RUBBER	
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5 1/2ISOUT <t< td=""><td>4 1/2"</td><td colspan="2">TS-0287-44HP</td><td>G-754 *</td><td>LLU-44-B15</td><td>LL-44-B15</td><td>HPW-44-B15</td><td>I-44-B15</td><td>TM-44-BR</td></t<>	4 1/2"	TS-0287-44HP		G-754 *	LLU-44-B15	LL-44-B15	HPW-44-B15	I-44-B15	TM-44-BR	
5 3/4" TS-02F*FP G-744* LL0-56-B5 HPW-56-B5 H-56-B5 TM-66-B7 6" TS-02F*FP G-745* LL0-60.15 HPW-60.15 H60-B15 TM-60-B7 6 1/4" TS-02F*FP G-770* LL0-61.15 HPW-61.15 HPW-61.15 H62.15 TM-62.17 6 1/2" TS-02F*FP G-765* LU-61.15 LI-61.15 HPW-61.15 H64.15 TM-62.17 7" TS-02F*FP G-765* LU-70.15 LI-61.15 HPW-70.15 HFW-70.15 TM-61.15 7" TS-02F*F G-765* LU-70.15 LI-70.15 HPW-70.15 HFW-70.15 HFW 70.15	5"	TS-0287-50HP		G-742 *	LLU-50-B15	LL-50-B15	HPW-50-B15	I-50-B15	TM-50-BR	
6" TS-02F-VP G-745* LLU-60-B15 LL-60-B15 HPW-60-B15 I-60-B15 TM-60-B15 TM-60-L15	5 1/2"	TS-0287-54HP		G-743 *	LLU-54-B15	LL-54-B15	HPW-54-B15	I-54-B15	TM-54-BR	
6 1/4" TS-028 - G+PP G-770 LLU-62-L15 LL0-62-L15 HPW-62-L15 He2-L15 He4-L15 He4-L15 </td <td>5 3/4"</td> <td colspan="2">TS-0287-56HP</td> <td>G-744 *</td> <td>LLU-56-B15</td> <td>LL-56-B15</td> <td>HPW-56-B15</td> <td>I-56-B15</td> <td>TM-56-BR</td>	5 3/4"	TS-0287-56HP		G-744 *	LLU-56-B15	LL-56-B15	HPW-56-B15	I-56-B15	TM-56-BR	
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TSC does not warrant or represent that any of such information is accurate, or that any products listed are compatible with each other. Any deviations from the OEM products should be verified as to compatibility.

TSC Manufacturing and Supply LLC, 13788 West Road, Suite 100, Houston, Texas 77041, USA Tel: +1 832 456 3900 Fax: +1 832 456 3998 E-mail: sales@t-s-c.com