INTRODUCTION

LINERS

When it comes to mud pump fluid end expendable parts, TSC Manufacturing and Supply, LLC. has it all.

TSC mud pump liners are designed and manufactured to meet or exceed original equipment specification and API standards for almost all types of mud pumps in use today. With advanced technology, metallurgical control and rigid inspection, we offer unmatched performance and durability according to customer testimonies in the most severe drilling conditions, both triplex and duplex liners are available in a wide range of sizes.

HIGH CHROME SLEEVE LINER

The outer hull, or body, of the liner is manufactured using high-strength forging. TSC uses forgings exclusively to ensure consistent quality. The sleeve is centrifugally cast in the TSC facilities by skilled craftsmen. It has the maximum amount of chrome for the base metal and TSC adds molybdenum to increase the hardness depth. The sleeve is then inserted into the hull at a tightness at exceeds its counterparts. The TSC liner is rated to match the pressure rating of the pump per liner size.

TSC mud pump liners are unsurpassed in quality and reliability.

Features

- Rated for all drilling operations.
- Bore hardness is 62-69 Rockwell.
- "HP" lip design to prevent inner sleeve slippage.
- Extremely long service life.

CHROME-PLATED LINER

TSC chrome-plates the same outer hull in lieu of the sleeve to maximum thickness. The hulls are then machined and polished to a mirror finish.



9

FLUID END EXPENDABLES

12-P-160 FAST CHANGE

NATIONAL

7-1/2 x 12

69

TÍSC

LINENS GASKETS PART NUMBER GASKETS RUBBER SIZE PART NUMBER PART NUMBER PART NUMBER RUBDALL RPLACEABLE PART NUMBER 4" TS $\supset Z \rightarrow U HP$ TS $O Z \rightarrow U HP$ <th colspan="9"></th>												
Size PART NUMBER		LIN	ERS	-				PIST	TONS		PISTON RUBBERS	
1 N <	SIZE	PART	UMBER	PART NUN	/IBER			-	-		PART NUMBER	
TS<0250 - 50.10 TS<0746 - 50.00 G.265 · 1LU-50-B15 LL-50-B15 LH-50-B15 HFW-50-B15 H50-B15 H60-B15 H6	4"	TS-025	59-40HP	TS-07466	6400	G-265 *	LLU-40-K15	LL-40-K15	HPW-40-K15	I-40-K15	TM-40-KR	
5 1/2 S 0.02 → 54H S 0.04 → 554H S 0.04 → 554H S 0.04 → 554H I.4.94 H	4 1/2"	TS-025	59-44HP	TS-07466	6450	G-265 *	LLU-44-B15	LL-44-B15	HPW-44-B15	I-44-B15	TM-44-BR	
5 34* TS-025-56HP TS-0746675 . LLU-56-B15 LL-56-B15 HPW-56-B15 i-56-B15 i-56-B15 TM-56-B15 6" TS-025-50HP TS-0746670 G-261 LLU-60-B15 LL-60-B15 HPW-60-B15 i-50-B15 i-50-B15 TM-62-L 61/2" TS-075-70HP TS-076670 G-283 LLU-60-B15 LL-60-L15 HPW-60-B15 i-50-B15 TM-62-L 61/2" TS-075-70HP TS-076670 G-283 LLU-64-L15 LL-66-L15 HPW-60-B15 i-66-L15 TM-64-L15 61/2" TS-074670 G-285 LU-06-L15 LL0-66-L15 HPW-70-L15 i-66-L15 HPM-70-L15 i-66-L15 HPM-70-L15 i-70-L15 TM-64-L 6'3/4" TS-074670 G-285 LU-07-L15 LL0-66-L15 HPW-70-L15 i-70-L15 TM-64-L 7'3 TS-074670 TS-074670 G-2857 G-2857 GLU-07015 FULD07E1 HPW-70-L15 Participaa 6/14 TS-7747 TS-7747 TS-7747 TS-7747 TS-7747	5"	TS-025	59-50HP	TS-07466500		G-265 *	LLU-50-B15	LL-50-B15	HPW-50-B15	I-50-B15	TM-50-BR	
6"IS-02 → coldIS-0746 ← coldG-261 +LLU-60-B5LL-60-B5HPW-60-B5He0-B5He0-B5 </td <td>5 1/2"</td> <td colspan="2">TS-0259-54HP</td> <td colspan="2">TS-07466550</td> <td>G-263 *</td> <td>LLU-54-B15</td> <td>LL-54-B15</td> <td>HPW-54-B15</td> <td>I-54-B15</td> <td>TM-54-BR</td>	5 1/2"	TS-0259-54HP		TS-07466550		G-263 *	LLU-54-B15	LL-54-B15	HPW-54-B15	I-54-B15	TM-54-BR	
6 1/4"TS-025+04HPTS-0746625G-283*LLU-62-L15HPW-62-L15HFW-62-L15He4-L15TM-62-L156 1/2"TS-025+04HPTS-0746605G-284*LLU-64-L15LL-64-L15HPW-64-L15He4-L15TM-64-L156 3/4"TS-025+04HPTS-0746607G-287*LLU-66-L15LL-66-L15HPW-66-L15He6-L15He6-L15TM-64-L157"TS-025+70HPTS-0746607G-285*LLU-70-L15LL-70-L15HPW-70-L15HPW-70-L15H70-105TM-70-L157"TS-025+70HPTS-0746607G-285*LLU-70-L15LL-70-L15HPW-70-	5 3/4"	TS-0259-56HP		TS-07466575		-	LLU-56-B15	LL-56-B15	HPW-56-B15	I-56-B15	TM-56-BR	
6 1/2" TS-02 → CHP TS-0746667 G-284* LLU-64-L15 LL-64-L15 HPW-64-L15 He4-L15 He4-L15 <t< td=""><td>6"</td><td colspan="2">TS-0259-60HP</td><td colspan="2">TS-07466600</td><td>G-261 *</td><td>LLU-60-B15</td><td>LL-60-B15</td><td>HPW-60-B15</td><td>I-60-B15</td><td>TM-60-BR</td></t<>	6"	TS-0259-60HP		TS-07466600		G-261 *	LLU-60-B15	LL-60-B15	HPW-60-B15	I-60-B15	TM-60-BR	
6 3/4" TS-0259-66HP TS-07466675 G-287* LLU-66-L15 LL-66-L15 HPW-66-L15 I-66-L15 TM-66-L 7" TS-0259-70HP TS-07466700 G-285* LLU-70-L15 LL-70-L15 HPW-70-L15 I-70-L15 TM-70-L15 7" TS-0259-70HP TS-07466700 G-285* LLU-70-L15 LL-70-L15 HPW-70-L15 I-70-L15 TM-70-L15 Valve Valves SEATS SPRING GASKETS PART Valve TS-7-EEF J WEB J WEB Full OPEN Full OPEN Cylinder Kasket GASKETS Valve TS-7-EEF J S-7-W TS-7-W Valve Cover GASKET G-767 SEAT TS-7-DB12 - TS-7002M TS-7510 Valve Cover GASKET G-767 INSERT TS-7-WI - TS-7-MI TS-710 Valve Cover GASKET G-767 M INSERT TS-7-WI - TS-7002M TS-710115L WEAR PLATE GASKET TS-12921 INSERT TS-7-WR - -	6 1/4"	TS-025	59-62HP	TS-07466	625	G-283 *	LLU-62-L15	LL-62-L15	HPW-62-L15	I-62-L15	TM-62-LR	
7" TS-0259-70HP TS-0746700 G-285 + LLU-70-L15 LHPW-70-L15 HPW-70-L15 I-70-L15 TM-70-L15 VALVES, SEATS, SPRINGS GASKETS VALVES, SEATS, SPRINGS GASKETS VALVES, SEATS, SPRINGS GASKETS VALVES, SEATS, SPRINGS GASKETS VALVE, VEB, SEAT, SPRINGS FULL OPEN (2) PART VALVE SAWEB SUB COLSPAN PART VALVE SAWEB SUB ROD TS-7-VI PART VALVE TS-7-VE TS-0985M TS-7-VI VALVE COVER GASKET GASKET SPRIMG TS-7-VE TS-7-VE TS-7-VE TS-7-VE INSERT TS-7-VI TS-7-VE TS-7-VE TS-7-VE INSERT TS-7-VE TS-7-VE TS-7-VE <th colsp<="" td=""><td>6 1/2"</td><td>TS-02</td><td>59-64HP</td><td>TS-07466</td><td>650</td><td>G-284 *</td><td>LLU-64-L15</td><td>LL-64-L15</td><td>HPW-64-L15</td><td>I-64-L15</td><td>TM-64-LR</td></th>	<td>6 1/2"</td> <td>TS-02</td> <td>59-64HP</td> <td>TS-07466</td> <td>650</td> <td>G-284 *</td> <td>LLU-64-L15</td> <td>LL-64-L15</td> <td>HPW-64-L15</td> <td>I-64-L15</td> <td>TM-64-LR</td>	6 1/2"	TS-02	59-64HP	TS-07466	650	G-284 *	LLU-64-L15	LL-64-L15	HPW-64-L15	I-64-L15	TM-64-LR
VALVES, SEATS, SPRINGS GASKETS 4 WEB DESIGN 3 WEB DESIGN FULL OPEN (1) FULL OPEN (2) PART NUMBE VALVE TS-7-EEF - TS-0985M TS-7-V1 VALVE COVER GASKET G-787 SEAT TS-7-DDB12 - TS-1440M TS-7-S12 CYLINDER HEAD GASKET - SPRING TS-5710-115 - TS-0702M TS-5710-115L WEAR PLATE GASKET TS-12922 INSERT (Urethane) TS-7-WI - TS-7-MI TS-7-FI EXTENSION ROD SEAL TS-12921 INSERT (Rubber) TS-7-WR - - EXTENSION ROD BAFFLE TS-12921 INSERT (Rubber) TS-7-WR - - EXTENSION ROD BAFFLE TS-12921 INSERT (Rubber) TS-7-WR - - EXTENSION ROD TS-12921 ROD CLAMP PISTON STUD THREADED TYPE INTON ROD CLAMP TYPE PISTON ROD SUB ROD THREADED TYPE EXTENSION ROD CLAMP TYPE EXTENSION ROD CLAMP TYPE	6 3/4"	TS-025	59-66HP	TS-07466	675	G-287 *	LLU-66-L15	LL-66-L15	HPW-66-L15	I-66-L15	TM-66-LR	
Normalization Normalization 4 WEB 3 WEB FULL OPEN FULL OPEN FULL OPEN PART VALVE TS-TEF TS TS TS VALVE VALVE COVER GASKET G-787 SEAT TS-TUB12 Income TS-0985M TS-7V1 VALVE COVER GASKET G-787 SEAT TS-7DB12 Income TS-1440M TS-7S12 CYLINDER HEAD GASKET G-787 SPRING TS-7V-115 Income TS-0702M TS-7512 CYLINDER HEAD GASKET TS-12922 INSERT (Urethane) TS-7WI Income TS-7FII EXTENSION ROD SEAL TS-12921 INSERT (Rubber) TS-7WR Income Income Income Income Income ROD CLAMP PISTON PISTON ROD CLAMP TYPE SUB ROD THREADED TYPE CLAMP TYPE	7"	TS-025	59-70HP	TS-07466	6700	G-285 *	LLU-70-L15	LL-70-L15	HPW-70-L15	I-70-L15	TM-70-LR	
DESIGNDESIGNDESIGN(1)(2)NUMBERVALVETS-7-EEF-TS-0985MTS-7-V1VALVE COVER GASKETG-787SEATTS-7-DB12-TS-1440MTS-7-S12CYLINDER HEAD GASKET-SPRINGTS-7-DB12-TS-0702MTS-5710-115WEAR PLATE GASKETTS-12922INSERT (Urethane)TS-7-VI-TS-0702MTS-5710-115LWEAR PLATE GASKETTS-12922INSERT (Urethane)TS-7-VI-TS-7-MITS-7-FIEXTENSION ROD SEALTS-12922INSERT (Rubber)TS-7-WREXTENSION ROD BAFFLETS-12922INSERT (Rubber)TS-7-WRPISTON SUDTS-7-WRROD CLAMP SUDPISTON NUTTHREADED TYPE PISTON RODSUB RODTHREADED TYPE EXTENSION RODCLAMP TYPE EXTENSION RODCLAMP TYPE EXTENSION ROD	VALVES, SEATS, SPRINGS GASKETS											
SEATTS- $$ DB12Independence INSERT (Urethane)TS- $$ DB12TS- $$ DB						• • • • •					PART NUMBER	
SPRINGTS-5710-115TS-0702MTS-5710-115WEAR PLATE GASKETTS-12927INSERT (Urethane)TS-7WITS-7MITS-7FIEXTENSION ROD SEALTS-12921INSERT (Rubber)TS-7WRAAASEXTENSION ROD BAFFLETS-12921INSERT (Rubber)TS-7WRAAASEXTENSION ROD BAFFLETS-12921INSERT (Rubber)TS-7WRAAASEXTENSION ROD BAFFLETS-12921INSERT (Rubber)TS-7WRAAASEXTENSION ROD BAFFLETS-12921INSERT (Rubber)TS-7WRCLAMP TYPE PISTON RODSUB RODTHREADED TYPE EXTENSION RODCLAMP TYPE EXTENSION RODCLAMP TYPE EXTENSION RODSUB RODTHREADED TYPE EXTENSION RODCLAMP TYPE EXTENSION RODCLAMP TYPE EXTENSION ROD	VALVE		TS-7-EEF			-	TS-0985M	TS-7-V1	VALVE COVER GASKET		G-787 *	
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(Urethane) 1S-7-WI IS-7-MI IS-7-MI IS-7-FI EXTENSION ROD SEAL IS-12921 INSERT (Rubber) TS-7-WR - - EXTENSION ROD BAFFLE TS-12921 INSERT (Rubber) TS-7-WR - - - EXTENSION ROD BAFFLE TS-12921 ROD CLAMP PISTON STUD PISTON NUT THREADED TYPE PISTON ROD CLAMP TYPE PISTON ROD SUB ROD THREADED TYPE EXTENSION ROD CLAMP TYPE ROD	SPRING		TS-5710-115			-	TS-0702M	TS-5710-115L	WEAR PLATE GASKET		TS-1292257	
(Rubber) TS-7-WR Image: Constraint of the second s	-		TS-7-WI			-	TS-7-MI	TS-7-FI	EXTENSION ROD SEAL		TS-1292182	
ROD CLAMP PISTON ROD STUD PISTON NUT THREADED TYPE PISTON ROD CLAMP TYPE PISTON ROD SUB ROD THREADED TYPE EXTENSION ROD CLAMP TY EXTENSION ROD			TS-7-WR			-	-	-	EXTENSION ROD BAFFLE		TS-1292194	
ROD CLAMP ROD STUD PISTON IHREADED TYPE PISTON ROD CLAMP TYPE PISTON ROD SUB ROD THREADED TYPE EXTENSION ROD EXTENSION	PISTON ROD & EXTENSION ROD											
TM12P-03-08 N/A TM-NUT N/A TM-258-A TM-258-B N/A TM12P-01	ROD C	CLAMP	ROD					SUB ROD			CLAMP TYPE EXTENSION ROD	
	TM12F	- 03-08	N/A	TM-NUT		N/A	TM-258-A	TM-258-B	N	I/A	TM12P-01-06	
FLUID END MODULE												

SUCTION MODULE STUDDED	DISCHARGE MODULE STUDDED	MODULE SEAL SET	STUDS & NUTS SET
TS-1292362	TS-1292361	TM12P-SEALKIT	TM12PQ-STUDSETD TM12PQ-STUDSETS

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.

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