## 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.

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# **FLUID END EXPENDABLES**

NATIONAL 14-P-220 9 x 14

	LINERS		ZIRCONIA LINERS		LINER GASKETS	PISTONS				PISTON RUBBERS
SIZE	PART NUMBER		PART NUMBER		PART NUMBER	URETHANE BONDED	RUBBER BONDED	N'DURALL BONDED	REPLACEABLE RUBBER	PART NUMBER
5"	TS-0260-50HP		TS-07545500		G-265 *	LLU-50-B15	LL-50-B15	HPW-50-B15	I-50-B15	TM-50-BR
5 1/2"	TS-0260-54HP		TS-07545550		G-263 *	LLU-54-B15	LL-54-B15	HPW-54-B15	I-54-B15	TM-54-BR
5 3/4"	TS-0260-56HP				-	LLU-56-B15	LL-56-B15	HPW-56-B15	I-56-B15	TM-56-BR
6 "	TS-0260-60HP		TS-07545600		G-261 *	LLU-60-B15	LL-60-B15	HPW-60-B15	I-60-B15	TM-60-BR
6 1/4"	TS-0260-62HP		TS-07545625		G-283 *	LLU-62-L15	LL-62-L15	HPW-62-L15	I-62-L15	TM-62-LR
6 1/2"	TS-0260-64HP		TS-07545650		G-284 *	LLU-64-L15	LL-64-L15	HPW-64-L15	I-64-L15	TM-64-LR
6 3/4"	TS-0260-66HP		TS-07545675		G-287 *	LLU-66-L15	LL-66-L15	HPW-66-L15	I-66-L15	TM-66-LR
7"	TS-0260-70HP		TS-07545700		G-285 *	LLU-70-L15	LL-70-L15	HPW-70-L15	I-70-L15	TM-70-LR
7 1/4"	TS-0260-72HP		TS-07545725			LLU-72-L15	LL-72-L15	HPW-72-L15	I-72-L15	TM-72-LR
7 1/2"	TS-0260-74HP		TS-07545750			LLU-74-L15	LL-74-L15	HPW-74-L15	I-74-L15	TM-74-LR
			VALVE	GASKETS						
		4 WEB DESIGN			3 WEB DESIGN	FULL OPEN (1)	FULL OPEN (2)			PART NUMBER
VALVE		TS-U	TS-U5B-23		-	TS-0965M	TS-8-V2	VALVE COVER GASKET		TS-1540163
SEAT		TS-8	TS-8-DDB7		-	TS-1410M	TS-8-S7	CYLINDER HEAD GASKET		-
SPRING			-		-	TS-0702M	-	WEAR PLATE GASKET		TS-1295257
INSERT (Urethane)		TS-	TS-8-WI		-	TS-8-MI	TS-8-FI	EXTENSION ROD SEAL		-
(Rubber)		TS-	TS-8-WR		-	-	-	EXTENSION ROD BAFFLE		TS-1292194
PISTON ROD & EXTENSION ROD										
ROD CLAMP		PISTON ROD STUD	PISTON NUT	-		CLAMP TYPE PISTON ROD	SUB ROD	THREADED TYPE EXTENSION ROD		CLAMP TYPE EXTENSION ROD
TM14F	TM14P-03-08		TM-NUT	TM-NUT N/A		TM-1295147	TS-1295146	N/A		TM14P-01-06
FLUID END MODULE										
	TION MC		DISCHARGE			MODULE SEAL SET		STUDS & NUTS SE		т
Т	S-12952	43	TS-1295240			TM14P-SEALKIT		TM14P-STUDSETD TM14P-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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