# 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

#### **JWS-340**

#### 4-1/2 x 5

	LINERS		LINER GASKETS		PIST	ONS		PISTON RUBBERS
SIZE	PART NUMBER		PART NUMBER	URETHANE BONDED	RUBBER BONDED	N'DURALL BONDED	REPLACEABLE RUBBER	PART NUMBER
3-1/2"	TS-0240-34HP		G-925C	LLU-34-K10	LL-34-K10	HPW-34-K10	I-34-K10	TM-34-KR
4"	TS-0240-40HP		G-925C	LLU-40-K10	LL-40-K10	HPW-40-K10	I-40-K10	TM-40-KR
4-1/2"	TS-0240-44Cr		G-925C	LLU-44-B10	LL-44-B10	HPW-44-B10	I-44-B10	TM-44-BR
PLUNGER	STUFFING BOX		ADJUSTING NUT	GLAND	ADAPTER	LUBE RING WASHER		PACKING
2-3/4"	TS-1717829-1		TS-1717740-2	TS-1717762-2	TS-1717782-2	TS-1717772-2	TS-1717792-2	TS-6400035
3	TS-17179011		TS-1717902	TS-1712090	-	TS-1717331-2	TS-1717321-2	TS-6423002
3-1/2"	TS-1717835-1		TS-1717741-2	TS-1717765-2	TS-1717785-2	TS-1717775-2	TS-1717795-2	TS-6400038
4"	TS-1717837-1		TS-1717743-2	TS-1717767-2	TS-1717787-2	TS-1717777-2	TS-1717797-2	TS-6400040
VALVES, SEATS, SPRINGS						GASKETS		
	4 WEB DESIGN		3 WEB DESIGN	FULL OPEN (1)	FULL OPEN (2)			PART NUMBER
VALVE	-		-	TS-1575M	TS-4-V7	VALVE COVER GASKET		G-1718265
SEAT SUCTION	-		-	TS-1571M	TS-4-S17	CYLINDER HEAD GASKET		-
SEAT DISCHARGE	-		-	TS-1572M	TS-4-S18	WEAR PLATE GASKET		-
SUCTION SPRING	-		-	TS-1712211	TS-19000-6	EXTENSION ROD SEAL		-
DISCHARGE SPRING	-		-	TS-1712206	TS-5710-118			
INSERT (Urethane)	-		-	TS-1577M	TS-4-FIA	EXTENSION ROD BAFFLE		TS-1717016
INSERT (Rubber)	-		-	-	-			-
PISTON ROD & EXTENSION ROD								
ROD CLAMP	PISTON ROD STUD	PISTON NUT	THREADED TYPE PISTON ROD	CLAMP TYPE PISTON ROD	SUB ROD		PE EXTENSION	CLAMP TYPE EXTENSION ROD
TM165-03-08	N/A	TM-NUT1	N/A	TM-165-A	TM-165-B	٩	1/A	TM-165C
FLUID END MODULE								
FLUID END MODULE				MODULE SEAL SET		STUDS & NUTS SET		
TS-171719612				TMJWS34	SEALKIT	TMJWS34-STUDSET		

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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