

# Sealing Slurry Pumps

## The Challenge

Sealing abrasive slurry is a tough job even for dedicated slurry pumps and slurry seals. Operating directly in the slurry, seal life has traditionally been problematic leading to reduced reliability and costly downtime. Generally large and cumbersome, these pumps are difficult and costly to remove for service. Repair times of 72 hours or more are common. Slurry pumps and applications can be found in the Power industry in Flue Gas De-sulfurization thickener/recycle & ash pumps; Iron & Steel Industry in mill discharge & slag, Wastewater in sludge; Mining in Dewatering and Mineral and Ore processing; Pulp & Paper Industry in Pulp and Process Operations; Drilling and Dredging in Process pumps and in the Cement Industry.

## The Chesterton Solution

Chesterton brings next-generation slurry sealing technology to industry. The Chesterton 442 split mechanical seal with split SpiralTrac is a cost effective solution offering continuous operation and low maintenance. Successful application of the Chesterton 442 Split Seal with SpiralTrac technology in these harsh pumping applications has shown reductions in maintenance costs of up to 80%. The 442 split mechanical seal can handle slurries from micron size to fist sized particles using silicon carbide versus silicon carbide seal faces and adequate environmental controls.

The 442 Split Seal features the ability to repair the seals without equipment dis-assembly. Seal repairs can be effected in hours instead of days. The SpiralTrac features self cleaning abilities ensuring an almost abrasive-free operating environment for the seal at all times. Operating in the harshest industrial applications, the need for gland water is drastically reduced up to 95% of the rate typically required for conventional seals.

## The 442 / SpiralTrac Solution

A Louisiana power plant employed the Chesterton **TOTAL** solution installing a 442 Split Seal with SpiralTrac environmental control bushing and replaced the rubber liner with Chesterton ARC BX1 epoxy metal coating system. At less than 1/3 the competitive seal and pump repair cost, the equipment upgrades were effected in-plant in only a few days with no expensive shipping or turnaround delays. The Chesterton solution has provided up to 6 times the normal service life and the 22 sister pumps have since been converted.



**SPIRALTRAC**



**442 SPLIT SEAL**

### Why Use Chesterton Slurry Seals?

- ◆ **AWC Slurry Seals Provide:**
- ◆ **LOW to NO Flush water required**
- ◆ **NO EQUIPMENT DISASSEMBLY required**
- ◆ **HIGH reliability – NO maintenance**
- ◆ **SPECIALLY designed for slurries**
- ◆ **ENGINEERED Custom designs**



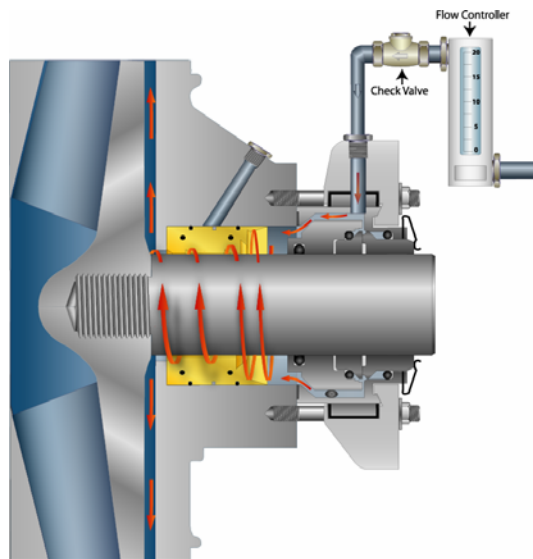
# Slurry Pump Seals

DWG SIZE	ITEM NO.	SEAL MODEL	DESCRIPTION	MFGR	MODEL
34538	6882009	155	-18 TC/DC/316/FKM	WARMAN	3/2 C-AH
33816	668778	255S	-18 TC/SC/CB/SC/S/FKM	WARMAN	3/2 C-AH
35412	107056	999	60MM SA SSC/SSC/AVESTA/316SS/VT	WARMAN	4/3 C-AH
36735	242963	170	100M TC/TC/316/EP	WARMAN	6/4 E-AH
36577	237442	180WB	100M TC/TC/316/FKM	WARMAN	6/4 E-AH
35603	171182	442	130M SC/SC/316/FKM	WARMAN	8/6EE-AH
36590	237987	180WB	-26 TC/TC/316/EP	WARMAN	
36613	295380	HVS	30MM AWC 100 FKM	WARMAN	
36584	237437	180	130MM TC/TC/316/EP	WARMAN	8/6 F-AH
36749-1	264009	170WB	-31.5 SC/SC/316/FKM	EKATO	HWL 100R
36718	263492	999	110MM 999 Concentric TC/SC/SC/316/FKM	FLYGT	C360 2
34381	665716	155	-15 155 SC/CB/316/VT	GOULDS SI	JC GR1
34403	666138	255	-17 255 TC/SC/CB/TC/316/VT	GOULDS SI	JC GR2
36438	192101	280M	-4.397 280M TC/TC/CB/TC/316/VT	DENVER	F FRAME
36595	294337	S10	47.5MM	DENVER	HM75 C FRAME
36451	177019	180	-20 180 TC/TC/316/VT	DENVER	SRL FRAME 3



**BEFORE**

## The CHESTERTON TOTAL SOLUTION



**AFTER**



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