

## Application Success Story:

Industry: **Fossil Power**  
 Product: **Gypsum Slurry**  
 Sealing Solution: **Mechanical Seal**



### • Application Info

- Six Metso Series 500 Slurry Pumps
- Application: FGD Unit
- Shaft Size : 7.750" (196.85mm)
- Shaft Speed: 560 RPM
- Product: Gypsum Slurry
- Strained River Water Flush at 2-3GPM (7.5-11.4LPM)
- Temp: 140°F / 38°C
- Vessel pressure: 25-30 psia (1.7-2.0 bar)

### • Problem

- Previous single cartridge slurry seals leaked at or very shortly after startup. The first set of replacement seals which were replaced under warranty failed in the same manner. The plant was quoted \$34,240.00 per seal for replacement seals for a total of \$205,440.00 for six seals.



### • Solution

- Turned sleeve to 7.750" (196.85mm), utilized a 316SS adaptor plate to house a SpiralTrac™ Version F Type S and a -62 Chesterton 442 mechanical seal (RSC-RSC-EP-SS)
- Strained river water flush 2-3GPM (7.5-11.4LPM)

### • Result

- One pump was upgraded with the 442 and SpiralTrac sealing solution and continues to run leak free.
- As a result the remaining five pumps have been upgraded to the 442 and SpiralTrac solution with an immediate savings of \$94,026 and a substantial projected future savings.

