

MTBF Increased from 3 Months to 3 Years with Chesterton S10 Seal and SpiralTrac™



Steel Manufacturing | Steel slurry | Mechanical Seal

Application Info & Challenge

- Location:** Japan
- Equipment:** Furukawa SP2H thickener water feed pump for blast furnace
- Product:** Steel slurry with iron particles
- Temperature:** 40-50°C
- Speed:** 1760 RPM



Steel manufacturing plant

This equipment handles slurry with high iron content. It was previously packed, with external flush being utilized. Because of the abrasive nature of the process, the gland packing had a short lifespan of **3-6 months**, requiring frequent replacements and high maintenance costs.

Customer goal is to extend MTBF, improve reliability and lower operating costs.

Solution & Result

- Chesterton S10** SSC/SSC FEPM 70mm single cassette seal
- SpiralTrac Version N Type B** made of 316 stainless steel, part# NM07000RB09600(316)



Chesterton solution installed in Furukawa SP2H-50 slurry pump

The SpiralTrac keeps the seal cavity area clean of iron particles present in the process and improves fluid circulation around the mechanical seal. By controlling and improving the environment, SpiralTrac allows the S10 seal to operate in ideal conditions.

After installation, this solution has been operating without leaks for **36 months!**

8 months into the trial on one piece of equipment, the plant converted all their thickener pumps to this solution, a total of 23 pumps!



Chesterton S10 single cassette seal

Cost Comparison

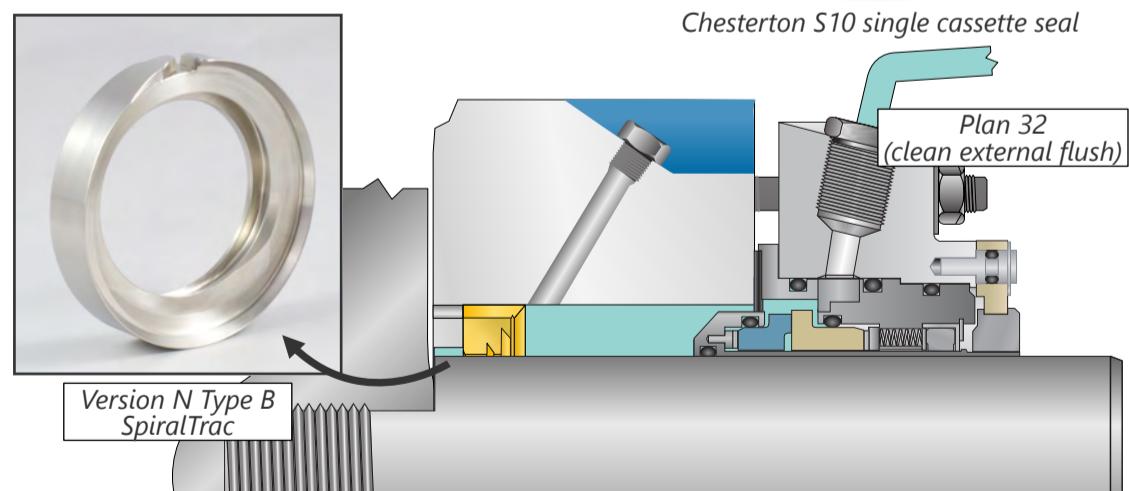
Traditional method:

- Gland packing: ¥150,000
- Disassembly: ¥300,000
- Total (12 months): **¥900,000**

Chesterton Solution:

- S10 + SpiralTrac: ¥770,000
- Disassembly and Installation: ¥300,000
- Total cost for 36 months: ¥1,070,000

Cost savings: **¥1,630,000 over 3 years!**



For more information please send an email to us at support@enviroseal.ca. We hope to hear from you!

