

Chesterton SuperSet™ Takes Over Stuffing Boxes at a Mining Plant in Canada



Mining | Nickel & Copper Slurry | Packing

Application Info & Challenge

- **Location:** Canada
- **Equipment:** Various Process and Concentrate Pumps
- **Flush:** Plan 32 external flush, some solids in flush water
- **Product Temperature:** Ambient

Customer has issues with poor packing life, excessive leakage and frequent gland adjustments. Stuffing boxes are typically configured with a 0L5 configuration.

Product details:

- **Scavenger Concentrate Pumps:** Nickel-Copper Concentrate, 30% solids Cw, pH 8.6
- **Copper Cleaner Cells Pumps:** Copper Slurry, 30% solids Cw, pH 10.8
- **HG Ni Thickener Overflow Pumps:** Nickel Contaminated Water, pH 11.7
- **Copper Thickener Overflow Pump:** Copper Contaminated Water, <5% solids Cw, pH 10



Mining Plant in Eastern Canada

Solution & Result

Chesterton SuperSet™, configured with:

- **Split Packing Version SpiralTrac**, made of 17-4PH Stainless steel, heat treated
- 3 rings of Chesterton **1830 SSP** Slurry Pump Packing



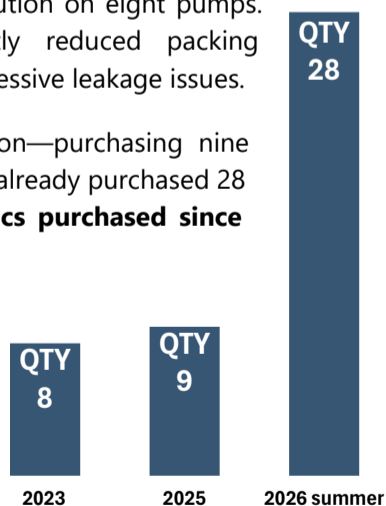
Packing Version SpiralTrac, made of 17-4PH stainless steel, heat treated

The Chesterton Specialist collaborated with EnviroSeal to design SpiralTracs for three different Goulds SLR pump configurations the customer selected for testing. Due to the gland water quality—approximately 30% reclaimed from a tailings pond and 70% fresh water—17-4PH stainless steel was selected and heat treated by EnviroSeal to achieve a Rockwell C 42 hardness. This heat-treated alloy has consistently delivered strong performance in SpiralTracs under the toughest mining conditions, with a proven track record in operations across Chile and Western Canada.

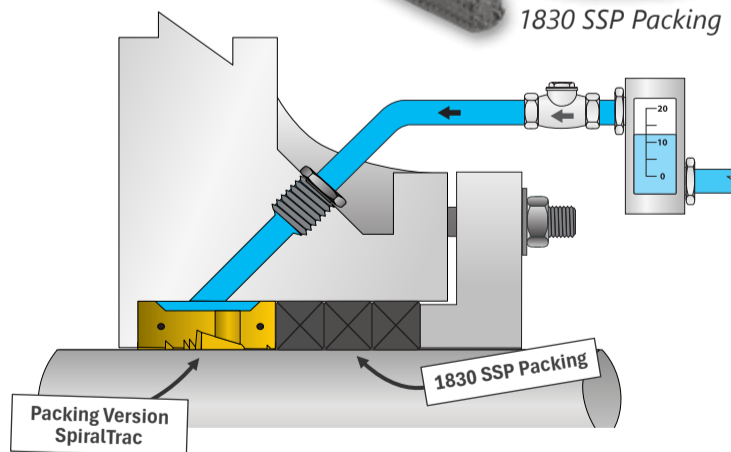
In 2023, the customer agreed to trial the Chesterton solution on eight pumps. The results were a resounding success: significantly reduced packing adjustments, extended packing life, and elimination of excessive leakage issues.

Following this success, the customer expanded adoption—purchasing nine additional SpiralTracs in 2025. As of June 2026, they have already purchased 28 units this year alone, bringing the total to **42 SpiralTracs purchased since 2023!**

This momentum continues to build. With the solution now well proven at the plant, the Chesterton Specialist is actively working with the customer to standardize similar SuperSet configurations across many of the facility's remaining pumps.



1830 SSP Packing



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

