

Challenge

Issue

Customer used general packing on a coal-submerged scraper conveyor. There was significant leaking, which caused premature pillow block bearing failure along with significant water loss. The old style packing and bearings were being replaced every month.

Packing Cost: \$200/month = \$2,400/year

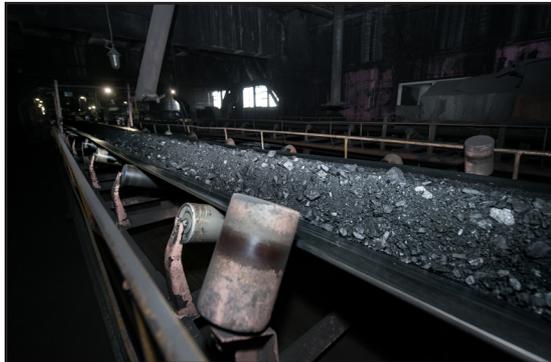
Bearing Cost: \$300/month = \$3,600/year

Labor Cost: \$800/month = \$9,600/year

Total Cost: \$15,600/year

Goal

Increase time of continuous service to support plant cycle and reduce costs.



Coal conveyor had significant leakage.

Solution

Overview

A Chesterton Sealing Specialist recommended our next generation packing: **DualPac® 2211**, a braided packing that brings together the best of aramid and PTFE packing with distinct shaft-facing and outward-facing properties.

Five rings of **DualPac 2211** were installed as shown in Figure 2 for solids resistance. With **DualPac 2211** aramid side against the bottom of the stuffing box, you achieve resistance to extrusion and solids yet there is minimal contact between the aramid and shaft. This unique ability reduces shaft wear and increases uptime.



Figure 1: **DualPac 2211** reduces leakage significantly with a positive impact on overall production.

Results

Client Reported

- Leakage was reduced significantly
- Customer no longer experiencing frequent bearing failure
- Over six months of trouble-free performance and still running

Repair Costs / MTBR / Savings

DualPac 2211 Packing: \$2,000/year

Labor cost: \$ 800/year

Total cost: \$2,800/year

Total savings over previous method : \$12,800/year

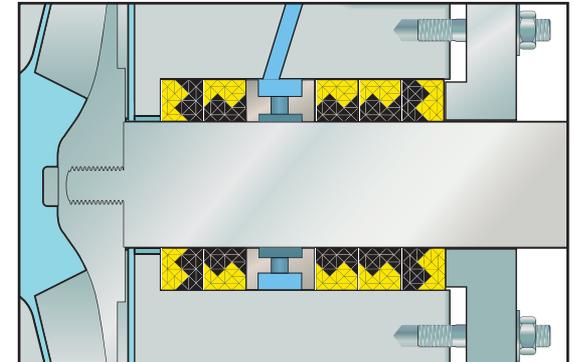


Figure 2: With **DualPac 2211**, you can configure the packing for just sealing or for sealing and solids resistance.