# **Matrix Seal Success in Coal Mining**

Coal Mining Industry
Chesterton Matrix Rotary Seal
Case Study 048 Rotating Equipment

# Challenge

#### Issue

- A client experienced continuous oil leaks after startup on a conveyor gearbox.
- Contamination was entering the bearing housing, resulting in frequent seal changes and considerable downtime costs.
- The seals lasted only four weeks.

# **Solution**

### **Application**

A Chesterton representative installed two Chesterton Matrix Rotary Seals:

- One faced the bearing to seal lubrication.
- The other faced the retainer ring to prevent outside contamination from entering the bearing housing.
- Both seals were installed rapidly without the need for disassembly of equipment, thereby minimizing downtime.

## **Results**

### **Client Reported**

- MTBR increased to 18 months, 12X the previous method with zero leakage!
- Matrix Seals offer an excellent solution for long-term bearing protection.
- With the split seal design, the Matrix Seal can be installed in minutes, delivering significant savings on critical downtime!



The plant's conveyor equipment leaked excessively.



**Chesterton Matrix Rotary Seal** combines two materials for exceptional performance.



The Matrix Seal installation is very simple and fast.