

Challenge Identification

To anticipate particulate pollution to protect engines and extend the useful life

Area	Mine Operations
Problem Description	Engines, final drives and critical components are exposed to suspended particle ingress and dust contamination, which affects the useful life and generates costly failures. Diagnosis is usually performed late, when the damage has already started. The challenge is to have early monitoring of particles, automated analysis and predictive alerts that allow intervening before severe wear occurs.

 **Expected Results**

To minimize downtime hours due to engine failure (40,500 hours in the past year)

 **Scope**

To change the strategy | Standardized work | To minimize total cost ownership