



High-Performance Air Filtration

for Copper Mining Equipment

**Upgrade Your Maintenance Strategy:
Achieve 4 Times Longer Filter Life, Maximize Uptime,
and Cut Maintenance Costs with Donaldson's
High-Performance Air Filters for Mining Equipment.**

Background

In a copper mining operation, extreme dust levels and long equipment hours lead to frequent filter changes, causing unplanned downtime and high operational costs. Donaldson introduced the **P608306 air filter**, designed for heavy-duty use, to demonstrate its superior durability, efficiency, and cost-saving potential.

Challenge

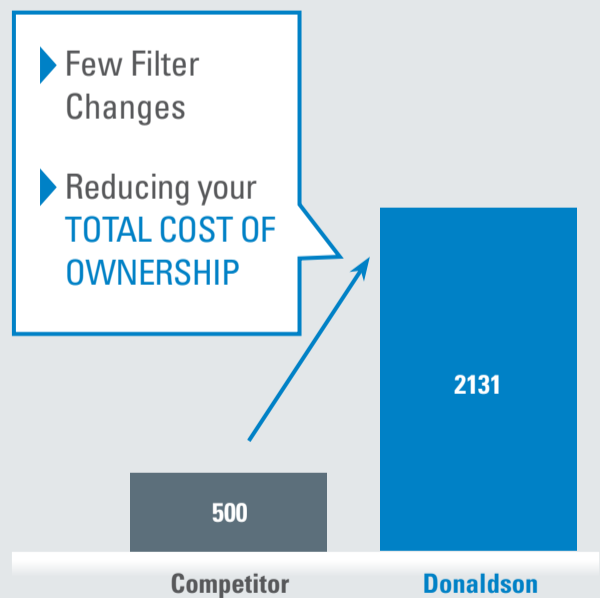
Engine air filters were clogging after just **500 engine hours**, forcing frequent replacements, increased labor, and downtime. The use of non-compatible filters compromised engine performance and increased the risk of equipment failure.

Key Results

- **Extended Filter Life:** Donaldson's P608306 filter achieved over **2,000 engine hours** – a 300% increase over the competitor's filters.
- **Reduced Downtime:** Fewer filter changes minimized unplanned equipment stoppages, improving operational uptime.
- **Cost Savings:** Longer intervals between changes reduced labor, inventory, and waste, lowering maintenance costs significantly.

Donaldson vs Competitor

Filter Life in Engine Hours*

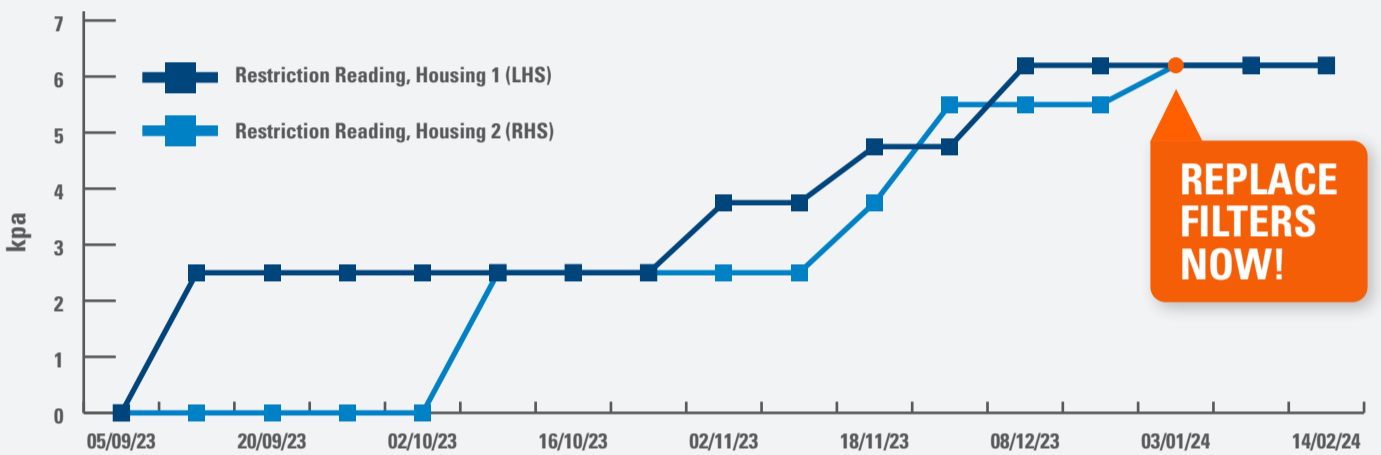


* Filter Life could change subject to a specific conditions of operating environment or application use.

Technical Solution

The P608306 air filter features **advanced cellulose media** that traps large contaminants on the surface while capturing finer particles within deeper layers, extending service intervals. Real-time **restriction sensors** monitor the filter's condition, maximizing its operational life and minimizing unnecessary changes.

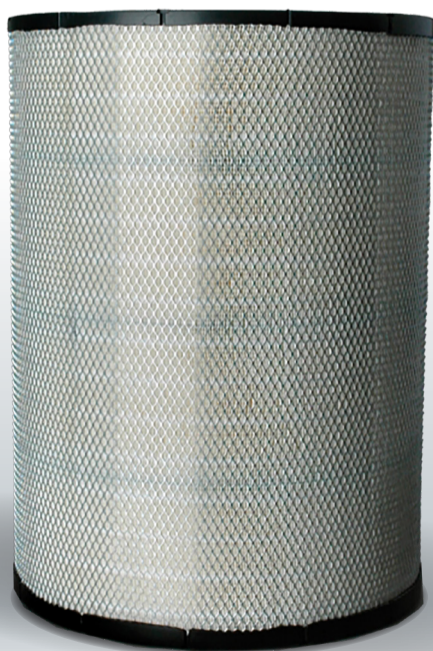
Test Results



Equipment Inspection Timeline with Real-Time Restriction Sensor Data

Conclusion

Donaldson's P608306 filter has been proven to extend filter life, reduce maintenance costs, and improve overall efficiency for mining operations. By enhancing engine protection and minimizing downtime, it offers a highly effective solution for heavy-duty applications in harsh environments.



Estimated Total Annual Savings*

\$ 65,078

▶ 300% saving primary air filter + Efficiency increased

▶ 250% saving safety filter

* Cost savings include both primary Air Filter P608306 + Safety Filter P608305 which is service at 1500 hrs interval