Pall Corporation

HYDRAULIC & LUBRICATION
Application Bulletin
MINING

Blast Hole Drill Rig Hydraulics

Application

With the ever increasing impact of the global economy slowdown, open-cast mines are very focused in looking at ways to reduce maintenance and operational costs by increased reliability and availability of their heavy mobile equipment. Today's high pressure hydraulic systems on drill rigs demand far cleaner oil than ever before to guard against premature wear and failure.

Drill Rig

Problem

A large Indonesian copper mine was having numerous problems with premature wear and failure of many hydraulic components on their Blast Hole Drill Rigs. The problems were causing unacceptable levels of downtime, costs and lost production. An investigation by Pall under their Total Fluid Management (TFM) contract with the mine found the oil contamination levels exceeded the mines standards for such systems.

Pall Ultipleat USRT UP319 Filter

Solution

The mine installed a Pall UP319++13ZB9 **Ultipleat®** **USRT** filter housing complete with a UE319AZ13Z filter element and an RC861CZ091ZYM electrical indicator to provide the operator with remote indication of the filter element blockage.

In cab filter element blockage display

Results

- The cleanliness levels improved from ISO Code 18/17/14 to ISO Code 12/10/6 as reported by an independent laboratory.
- Cleanliness levels now exceed OEM and mine specifications
- Based on estimates of component service life extension due to improved oil cleanliness, provided by Noria, the improvement in cleanliness levels would translate to an estimated life extension factor of 5.

Contact us at www.pall.com/mining

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