

## Grinding retrofits

# Trunnion bearing lubrication system

Automated system to extend bearing and trunnion life



### Your challenge

Maintaining oil temperature, flow, and cleanliness is vital for the health of your mill. If not controlled, fluctuations can shorten the life of key components.

### The Metso solution

A trunnion bearing lubrication system retrofit featuring:

- Custom-sized reservoir
- Filtration system and heat exchanger
- Temperature, flow, and pressure instrumentation

## Reservoir to separate contaminants from lubricant

- Sized for proper retention time, allowing dirt and air to separate from the oil
- To reach desired viscosity, oil is preheated in the reservoir before being pumped to the next phase

## Filtration and heat exchanger to eliminate dirt and cool the oil

- Oil is pumped through a filtration and cooling system to ensure that oil being distributed to bearing is clean and at optimal temperature

## Instrumentation to monitor oil condition

- Oil condition is monitored via pressure, temperature, and flow instrumentation
- Modern instrumentation is compatible with existing DCS or PLC, and is mounted on the reservoir/base

## Multiple retrofit options available

- Replace entire system or only selected components
- Available as a water or air-cooled system
- With the addition of a valve or flow divider, oil can be evenly distributed to the pinion bearings
- Hydrodynamic or hydrostatic system based on your mill's existing trunnion bearing configuration

## Why Metso services?

- As the OEM of your mill, Metso has the expert knowledge to maximize its life
- With detailed drawings, design expertise and field service personnel, Metso's services are reliable, accurate and timely



Hydrostatic lubrication system



Hydrostatic lubrication system with high pressure pumps



Hydrodynamic lubrication system