

Grinding retrofits

Gear guard upgrade

Ensuring the health and longevity of your gears



Your challenge

Contamination, extreme heat, and insufficient lubrication all pose risks to your gears and pinions. If not prevented, these will cause accelerated wear and decreased operating life.

The Metso solution

A gear guard upgrade featuring:

- **Self-support system**
- **Gear spray system**
- **Infrared temperature monitoring**
- **Pressurized and sealing systems**

Self-support system for safer and more efficient maintenance

- Support columns hold the gear guard in place and allow for the removal of gear guard sections for easy gear and pinion inspection
- System improves safety, simplifies and accelerates maintenance, and reduces downtime

Gear spray system for even and optimal lubrication

- Systems are custom engineered for your individual gear set and lubricant
- PLC system is fail safe and interlocked with your mill
- Minimizes waste and cost by ensuring that the exact lubrication quantity needed is metered, dispensed and continuously monitored

Infrared monitoring system to track gear and pinion health

- The pinion temperature monitoring system uses differential temperature checks across the pinion face to ensure proper alignment
- Automatic sensing and continuous condition monitoring is accomplished through infrared sensor technology

Pressurized and sealing systems to prevent contamination

- Minimize fine particle contamination using pressurized filtered air and a sealed gear guard
- A non-contact mud guard ring is used to protect against coarse particle contamination

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



Metered lubrication is precisely applied to the teeth



An infrared temperature system tracks the readings continuously



Protecting the gear with a pressurized guard