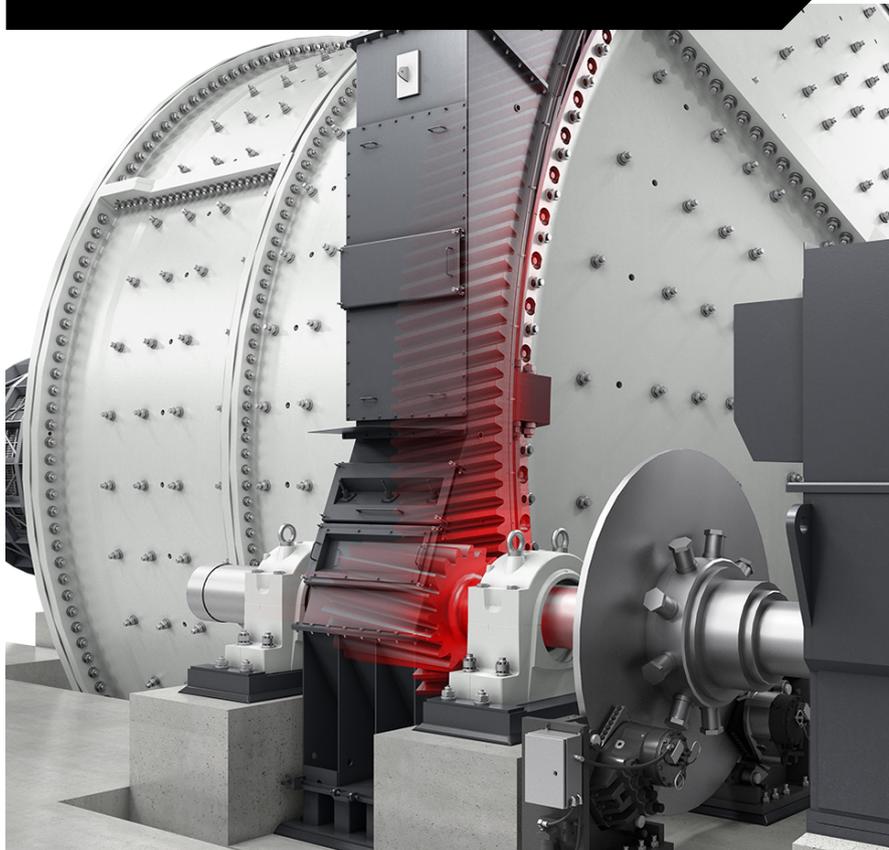


Metso

Grinding services

Pinion temperature monitoring system (PTMS)



Application

Unplanned equipment downtime can cause severe production losses. Avoid emergency shutdowns with the new pinion temperature monitoring system for efficient maintenance management.

Gear and pinion performance is critical to your horizontal grinding mill's operation. Proper pinion temperature control can mean the difference between a healthy asset lifecycle and damaging loss.

Prevent premature failure

Gear and pinion operating conditions affect the system profile temperature, and high temperatures can result in premature and potentially preventable failures.

Metso has enhanced its automated infrared condition monitoring protocol by adding a thermographic camera to analyze the gear set profile temperature and help prevent gear and pinion component damage. The new pinion temperature monitoring system (PTMS) camera and onboard sensors combine to create a complete solution for an invaluable indicator of critical pinion operating factors such as gear set alignment and lubrication.

Safe and reliable results

The new system improves operating safety and prevents unsafe working conditions by replacing the labor-intensive practice of opening gear guards to take manual pinion temperature readings with infrared measurement devices. Data obtained from manual temperature readings relies on consistent location measurement and reading frequency that could yield inaccurate results.

Complete coverage for accurate analysis

The pinion temperature monitoring system thermographic camera and infrared sensors cover the entire pinion width to provide temperature readings for three different areas across the profile. The inboard and

outboard temperature readings provide engineers and operators with precise data for critical decision making. The camera and sensors are conveniently located for maintenance and protected from lubrication spray that could inhibit accurate readings.

Maintenance solution

The enhanced monitoring system offers a proactive condition-based maintenance approach to maximize assets' useful life, increase productivity, enhance safety and reduce downtime.

The pinion monitoring system provides real-time operating data that can be helpful when planning shutdowns and maintenance programs. The system can be easily installed to allow online monitoring on any horizontal grinding mill connected to the customer's control system.

Benefits

- Higher mill availability
- Reduced maintenance costs
- Increased production time
- Less downtime
- Preventative maintenance