# Metso

Gear and pinion services Alignment services

Ensuring alignment is as critical as the component itself



# Your challenge:

Uneven temperatures and excessive vibration are often signs of misalignment. If not treated, premature wear and cracking can occur.

## Metso solution:

- Dynamic pinion and gear alignment, evening out load distribution for each pinion
- Drivetrain alignment, ensuring all components are lined up properly and operating together within tight tolerances

#### The importance of alignment

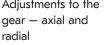
- Installation and maintenance are as critical as the manufacturing and design.
- · Alignment to strict tolerances must be achieved to ensure even load distribution. It is also key to control operating temperatures and reduce vibration.

#### The alignment process

- Static alignment of all components is performed using laser technology. Dial indicators with Bluetooth technology is also used.
- Specialists confirm that all bolts are pre-loaded to engineering specifications
- · Anti-friction roller/babbitted bearing alignment is controlled and recorded
- The motor, gear box reducer, clutch and coupling conditions are checked
- After mill starts-up, dynamic pinion alignment is performed to ensure longevity of the components
- · Vibrations and operating temperatures of vital components are verified to confirm successful installation



Field personnel align the synchronous motor to the pinion





Adjustments to the gear - axial and radial

## Why Metso services?

- Metso have extensive field experience with many drivetrain arrangements
- Trained professionals ensure alignment is always performed to OEM specifications



An inching drive through a reducer gear box

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## Partner for positive change