

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