

Metso

Gear and pinion services

Design upgrades for increased production

Make the most out of your new gears and pinions.



Your challenge:

When greater production is required, there are many factors to consider. It can be a challenge to balance performance, longevity and cost for new components.

Metso solution:

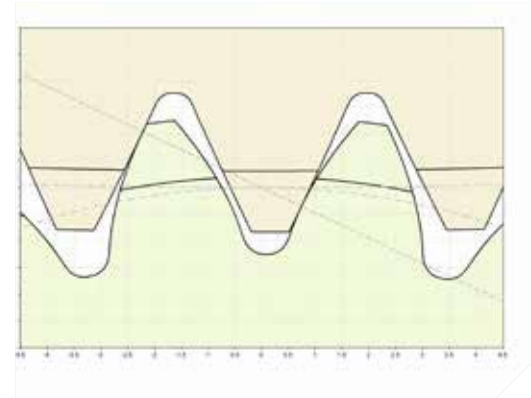
- **New gear and pinion design**, to increase performance through improved strength and resistance
- **Compatibility evaluation**, to ensure other mill components operate properly at new production levels

The design process

- Metso engineers establish a new design to increase bending strength and pitting resistance with OEM specifications
- Service factors are verified to meet latest AGMA 6014-B15 or AGMA 321.05 standards
- Pinions can be upgraded from through hardened to carburized design

The compatibility evaluation

- To increase horsepower and meet higher production demands, older gear set tooth geometry is redesigned
- Higher tooth cutting accuracy is achieved while the gear set envelope remains unchanged without modifications to the mill
- Evaluation is made to ensure other mill components, such as the drivetrain, can handle increased production requirements



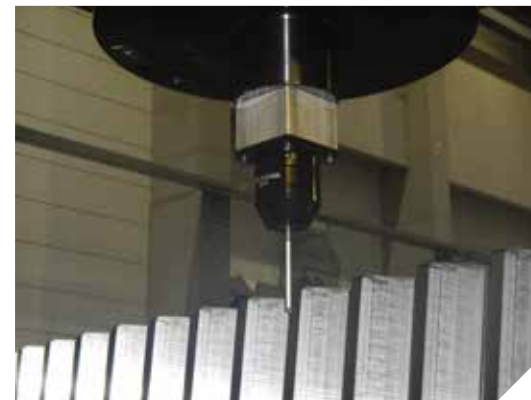
Applying the AGMA's in-depth gearing calculations



Measuring critical parameters of the pinion

Why Metso services?

- Metso gear design engineers have a complete understanding of the relationship between the mill and the drivetrain
- As the OEM, Metso has detailed drawings, design expertise and experience to help you achieve greater production output



Verifying the gear tooth profile with a CMM probe