

PROJECT PROFILE

Bolter Gearbox

The Brandt Industrial Repair Service team delivers exceptional repairs to ensure our customers can get back up and running with minimal downtime.

Whatever the industry, Brandt delivers unmatched end-to-end solutions, refurbishing components and equipment to OEM specifications or better.

The Challenge

- The gearbox for the drill drive system on a custom underground roof bolter was experiencing repeated failure of internal components.
- Component failures were occurring after a low number of operating hours, leading to unplanned production losses for the mine.
- Two issues were contributing to the failure of the unit: significant vibration levels during operation and lubrication system reliability.

The Solution

- Brandt performed a root-cause analysis, following clear and extensive communication between the customer and the Brandt engineering team.

- With support from the Brandt engineering team, a design modification was developed to improve gearbox performance and service life without compromising the bolter operation.
- Upgrades to the chain drive sprocket were implemented to eliminate vibration, and a lubrication delivery system was added to protect critical gearbox components.

The Result

✔ Reliability

The upgrades resulted in a significant improvement in mean time between failures (MTBF), resulting in increased operating hours for the equipment.

✔ Total Cost of Ownership

The upgraded gearbox resulted in an immediate and permanent reduction in downtime and production losses for the customer.

And, the improved MTBF paired with effective design revisions contributed to lower operating costs for the roof bolter.

With 24/7/365 support, Brandt will always be there to help ensure the success of our customers, day or night.

It's what we do. We build confidence.

