

MINING EQUIPMENT MAKER HELPS CUSTOMERS DIG DEEPER WITH TIMKEN ENGINEERING SUPPORT

CHALLENGE ▼

A leading European manufacturer of mining equipment was looking for ways to boost the operating performance of a next generation longwall shearer by making improvements to the cutter heads, bevel shaft and conveyor gearboxes.

They turned to Timken after successfully working with them on an earlier project.

TIMKEN SOLUTION ▼

After studying the customers design, engineering data, and technical requirements, Timken engineers came up with the following suggestions:

They developed a tapered roller bearing design for the bevel shaft gearbox to lower component weight, ease assembly and reduce power loss by 30 percent.

For the cutter heads, they found a combined tapered and cylindrical roller bearing solution including specific geometry and positioning.

Timken also helped design changes to improve bearing performance and assembly in the conveyor gearbox.

RESULTS THAT MATTER ▼

The new shearer was tested rigorously under real-world mining conditions and met all the demanding customer requirements

The innovative new product was successfully introduced to the market and is now in use at mining sites all over the world.



The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, brakes, clutches, chain, couplings, gears and related mechanical power transmission products and services.