

CUSTOMIZED TIMKEN® SPHERICAL ROLLER BEARING AND LUBRICATION SOLUTION SAVES CEMENT CUSTOMER THOUSANDS IN REWORK AND DOWNTIME

CHALLENGE ▼

At a cement plant in Fieni, Romania, a crusher operation was sizing limestone for further processing. But operations were frequently and unexpectedly coming to a halt. The competitor cylindrical roller and ball bearings on the motor belt pulley that drives the hammers inside the crusher kept failing. The reason? The crusher's operating temperatures caused the bearings to burn up every three months.

TIMKEN SOLUTION ▼

Timken application engineers studied the entire system using our proprietary analytical tools. While searching for a new bearing option, we also conducted lubrication analysis to find the right type and amount of grease – and the proper re-lubrication intervals.

Our team developed a multifaceted solution that included:

- Replacing the current bearings with eight Timken® spherical roller bearings. Thanks to revolutionary design features, the bearings run 5° C cooler, on average, than the competition. *
- Making minor design modifications to the crusher unit so it could accommodate the new spherical roller bearings. The customer was happy that our solution fit into the existing housing with very few changes – enabling a quick implementation.
- Changing the existing lubricant with our Premium All-Purpose Industrial Grease and motorized single-point lubricators.

**All results are from head-to-head testing against multiple competitors.*

RESULTS THAT MATTER ▼

After installation, the overheating bearing issues have nearly disappeared. Now, the crusher operation transitioned from paying for costly, unexpected breakdowns to annual scheduled maintenance.

Estimated value: \$90,000



For more information visit timken.com/spherical or contact your local representative.

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 bearings, gear drives, automated lubrication systems, belts, brakes, clutches, chain, couplings, linear motion products and related power transmission rebuild and repair services.



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