

Timken Makes a Huge Impact on Romanian Cement Maker

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Customer

Carpatcement
Fieni, Romania

Market

Cement

Products

Timken® Spherical Roller Bearing

Timken® Premium All-Purpose Grease

Timken Single Point Lubricators

The Timken Advantage

Timken® bearings, grease and single-point lubricators offer Carpatcement improved crusher performance, including:

- Longer service life
- Reduced maintenance intervals
- Lower overall maintenance and bearing replacement costs

Timken solutions are suitable for the most challenging applications in the world. One of the toughest applications is cement crushers, where bearings and related components are subject to extreme loads and debris. Timken recently helped Carpatcement Fieni, a subsidiary of Heidelberg Cement Group, improve its crusher operation by utilizing Timken® bearings, grease and lubricators.

Carpatcement's Fieni cement plant takes huge rocks from its quarry operations and reduces them to pebbles.

"The problem was that the bearings on the motor belt pulley that drives the hammers inside the rock crusher unit failed about every three months," says Bogdan Scarlatescu-Rafu, senior Timken service engineer. "They wanted to know if Timken could help. We did, and we now have the basis for a long relationship with them."

After meeting with the customer, Timken's sales and service engineers went to work collecting application data and establishing a direct communications link between Timken's application engineering in Ploiesti, Romania, and Heidelberg's maintenance department.

Application engineers studied the entire system using Timken's Advanced Syber Analysis tool. They searched for the most suitable bearings solution and did a lubrication analysis to find the right type and amount of grease and the proper re-lubrication intervals. They also offered design modifications to the unit, so it could accommodate the new Timken spherical roller bearing that replaced the previous cylindrical and ball bearings.

Spherical roller bearings are ideal for this application because of the many distortions, misalignments and accidental axial load impacts that occur during rock crushing.

Timken provided bearings – as well as Timken premium all-purpose industrial grease and motorized single-point lubricators – as a first installment. Since Timken service engineers installed the new bearings, the crusher has run for a year-and-a-half without a bearing breakdown.

This stellar performance led to a second order for the same solution, including four bearings.

“Our old solution often led to high operating temperatures, and bearings burned up every three months,” said Gheorghe Gurgu, maintenance manager at Carpatcement Fieni. “The new Timken solution not only made all these problems vanish, but also allowed us to move from costly unexpected breakdowns to annual scheduled maintenance. Particularly pleasant to us was the fact that the Timken solution fitted into the existing housing with little changes, thus allowing a quick implementation.”

Carpatcement Fieni is a subsidiary of Heidelberg Cement Group, a global market leader in aggregates and one of the world’s largest building material manufacturers.

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