

Industry: Mining
End User: Grupo México
Application: Grab/bowl bearings on front-end loader
Thordon Grade: ThorPlas-Blue
Date of Original Installation: 2019

About:

Grupo México is the fourth largest copper producer in the world. They operate 14 underground and open pit mines for copper, silver, molybdenum, zinc, sulfuric acid, gold, and selenium.

Challenge:

Grupo México utilizes several Komatsu® front end loaders (also known as wheel loaders, or bucket loaders) in their mining operations. They are important tractor equipment used to move and load heavy material. The OEM carbon steel bearings fitted on the bucket of the Komatsu® machines were experiencing premature excessive wear and unfortunately lasting only 3-4 months. When the bearings failed, repairs would need to be completed as quickly as possible to keep these machines working.

Solution:

Grupo México was already familiar with Thordon's products having had success with ThorPlas-Blue pump bearings in 54 pumps operating at the Buena Vista del Cobre and Operadora De Minas De Nacozari mines. They contacted Thordon's authorized distributor in Mexico, TZ Industrias, for a solution on their Komatsu® front end loaders. ThorPlas-Blue was also recommended for this application because of its high load capabilities and self-lubricating properties. A longer projected wear rate would also allow them to do preventative maintenance to significantly reduce downtime.

Result:

In 2019, TZ Industrias supplied and installed thirty-three 314mm (12.36in) diameter and eighteen 116mm (4.57in) diameter ThorPlas-Blue bearings to Komatsu® 600 series front end loaders. The first bearings lasted for 11 months, but after some adjustments were made, they are expected to last 14 months moving forward.

Based on the success on these machines, Grupo México is working with TZ Industrias to run tests on electric rope shovels, and other high-load applications to see where Thordon products can create efficiencies, eliminate maintenance, and reduce downtime.



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