

NTN's SFCW Bearing Units Successfully Quadruple Uptime by Reducing Contamination

A leading manufacturer of industrial absorbents was experiencing bearing failures in one of their grinding mills. The grinding mill application is located in a very dirty environment and incorporates an open spherical roller bearing mounted into a specialty housing that contains external seals. The mill is located at the top level of the facility and very difficult to access when problems do arise. After a thorough application review, it was determined that failure was a result of bearing seizure due to contamination ingress introduced during installation.

The NTN Solution

After further scrutiny of application and mounting procedures, NTN's team determined a sealed spherical roller bearing would eliminate the ingress of contamination during installation. So therefore, NTN recommended the facility switch to our SFCW unit, a 4-bolt flanged, ductile iron unit with a robust sealed spherical roller bearing that has versatile mounting configurations resulting in the proper mounted radial clearance. For this application, the unit was installed similarly to the spherical roller bearing previously used, but since it is sealed and in a unitized housing, the installation time was reduced by 75%, saving on the system downtime as well.

The Result

The NTN solution has been proven to last *4 times longer!* The SFCW bearing unit has successfully run for over 24 months without a single failure, compared to the original bearings that were failing every six months. The increased bearing life, decreased downtime and reduced acquisition cost resulted in over \$171,000 in annual cost savings.



VALUE ADDED BREAKDOWN

UPTIME IMPROVEMENT

\$149,310

REDUCED ACQUISITION COST

\$12,082

MAINTENANCE REDUCTION

\$10,500

DOCUMENTED COST SAVINGS

\$171,892

CS0633



NTN SFCW FOUR-BOLT MOUNTED UNIT

Heavy loads and contamination require heavy-duty protection.



- **Heavy-duty**, one-piece, sturdy ductile iron housing to withstand shocks & impacts from falling debris and cold operating conditions
- **Superior sealing** protection from water and contaminants with spring-loaded, single-lip contact bearing seal
- **Extra bearing protection** with optional end covers for severe debris & contamination services
* (2 open covers, or 1 open & 1 closed cover)
- **Phosphate-coated** bearing insert, locknut & adapter sleeve for corrosion protection
- **Prelubricated & factory sealed** for quick, trouble-free start ups
- **Versatile** with repositionable snap ring for fixed or floating operation



Beyond Bearings

Training. Installation Support.
Trouble-shooting. And more.

When you choose NTN, your team is equipped with all the necessary tools and resources to get the job done right. From installation to problem-solving, we'll be there with the hands-on support you need to take on your toughest challenges. This includes extra services such as:



Technical Training Unit

On-site, mobile training unit offering specialized, hands-on instruction from NTN engineers



Product Training School

Three days of in-depth instruction from NTN engineers at headquarters



eKnowledge

WEB-BASED TRAINING PROGRAM

Six online product training modules covering different bearing types and nomenclature



NTN Bearing Finder

Customizable search tool featuring exhaustive data sets, comprehensive part interchanges and interactive CAD drawings

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