NTN’s Solid-Housed SPAW Heavy-Duty Bearing Units Help Cement Facility Buck Costly Downtime

A leading cement manufacture was experiencing frequent bearing failures on their bucket elevator due to serious contamination from cement dust and other fine particulates. The downtime was causing issues with production and driving up maintenance cost, resulting in a yearly cost of over $155,000.

NTN’s Engineering and Sales support team reviewed the bucket elevator and assessed the failed bearings. It was determined that the SAF style units the facility had been using were only lasting 3 months due to exposure to contamination during installation.

The NTN Solution

NTN’s team of experts recommended that the facility switch to the SPAW Series of heavy-duty, mounted roller bearing units with open end covers. Our SPAW heavy-duty mounted units are a one-piece solid ductile housed bearing unit that arrives factory greased with preset C3 clearance and features a robust spring-loaded contact seal. Additionally, end covers provide extra maximum protection from contamination.

The Result

The NTN solution lasted 10 times longer! The SPAW heavy-duty bearing units with two open covers successfully ran for over 30 months without a single failure, compared to the original bearings that were failing every three months. The increased bearing life, decreased downtime and reduced acquisition cost resulted in over $161,000 in annual cost savings.

VALUE ADDED BREAKDOWN

<table>
<thead>
<tr>
<th>UPTIME IMPROVEMENT</th>
<th>$133,920</th>
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<tbody>
<tr>
<td>REDUCED ACQUISITION COST</td>
<td>$20,688</td>
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<tr>
<td>MAINTENANCE REDUCTION</td>
<td>$7,344</td>
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<tr>
<td>DOCUMENTED COST SAVINGS</td>
<td>$161,952</td>
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</tbody>
</table>

ANNUALIZED COST SAVINGS $161,952
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:

- **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

- **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
- Drop-in replacement for split housing bearings permitting faster, easier installations than SAF/SN units, having the same base-to-shaft center height and bolt position

**NTN SPAW/SPW HEAVY DUTY MOUNTED UNIT**

Heavy loads and contamination require heavy-duty protection.