RegalRexnord™

Rex™ and Link-Belt™ Type E Spherical Roller Bearings

OVERVIEW

Rex™ LINK-BELT™

Rex™ and Link-Belt™ **Type E Spherical Roller Bearings**

Since the mid-1970's, Regal Rexnord has served the aggregate industry with its solid-housed Rex and Link-Belt Type E Spherical Roller Bearings, in part due to their high load capacity and greater misalignment capabilities than competitive Type E tapered roller bearings.

The aggregate industry has always demanded reliable and affordable equipment, which led to the standardization of Type E tapered roller bearings 75 years ago, due to their low-cost and high thrust load capacity. While some improvements have been made to Type E tapered roller bearings over the years, even more have been made to spherical roller bearings to decrease your downtime and increase production — and Regal Rexnord has led the industry in this effort.

Rex and Link-Belt Type E Roller Bearings provide you with:

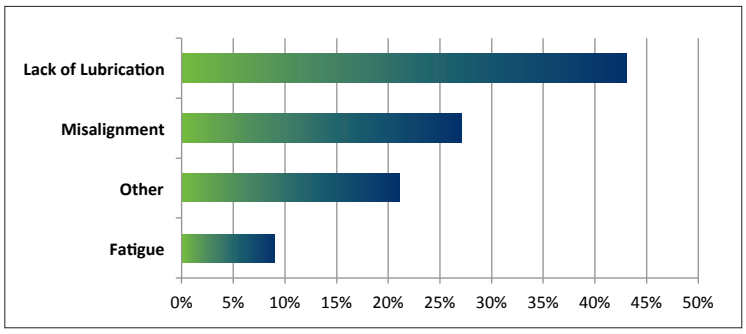
- Shaft sizes from 3/4 to 5 inches
- Multiple mounting options for application customization
- Self-aligning spherical roller bearing, featuring four degrees of total misalignment, allows for installation inaccuracies or shaft deflection, eliminating premature bearing, shaft, structure, pulley and other connected equipment failures
- Adjustable internal clearances for flexibility in your application
- Best-in-class load ratings for longer life
- Interchangeable seals for vast configurability, allowing customers to upgrade their Rex and Link-Belt Type E Spherical Roller Bearings to seals tailored to their specific application by purchasing a seal kit
- Dimensional interchangeability with competitive Type E bearings for ease of use
- Three shaft attachment options: single- and double-locking collar and adapter mount

WHY CHOOSE REX AND LINK-BELT TYPE E SPHERICAL ROLLER BEARINGS?

Increased misalignment capacity.

Industry failure data shows **(Figure 1)** the second most common cause of bearing failure is misalignment. One characteristic of Rex and Link-Belt Type E Spherical Roller Bearings that has not changed over the years is that the misalignment capacity is much greater than that of any Type E tapered roller bearing without the added cost of an expensive, swiveling insert cartridge. Increased misalignment capabilities lead to easier installations and longer bearing life.

Figure 1 — Bearing Failure Root Causes



Tolerates variation during operation.

Rex™ and Link-Belt™ Type E Spherical Roller Bearings provide higher thrust load and +/- 2 degrees of equivalent misalignment capacity without additional parts or cost like tapered roller bearings, which have no inherent misalignment capacity. To make a Type E tapered roller bearing with the same misalignment capacity as a Rex and Link-Belt Type E Spherical Roller Bearing, the Type E tapered roller bearing insert must be housed in a cartridge with a split-block housing. This significantly increases the cost and complexity of the bearing.

Increased fatigue life.

Based on tests conducted by The Timken®* Company[1] and Regal Rexnord, competitive Type E tapered roller bearings that are misaligned by .003 inches per inch, or by about 0.2 inches in a 5-foot conveyor pulley assembly, will fail at roughly 40 percent of their expected fatigue life. The damage to the bearing surfaces due to geometric stress concentrations, shown in **Figure 2** and **Figure 3**, will cause noise, vibration and elevated temperatures, potentially leading to smoke and damaging other components. In the 5-foot pulley scenario, Rex and Link-Belt Type E Spherical Roller Bearings would be able to handle static and dynamic misalignment up to 2 inches during operation without any loss of fatigue life.

Higher thrust capacity.

Type E tapered roller bearings were historically selected for severe applications due to their thrust capacity. However, as Regal Rexnord and other Type E bearing manufacturer catalog data shows **(Figure 4)**, the Rex and Link-Belt Spherical Roller Bearings' calculated thrust rating exceeds that of Type E tapered roller bearings as a result of their unique geometry and shaft attachment options. Higher thrust ratings mean that Rex and Link-Belt Type E Spherical Roller Bearings can handle more rugged loads and will ultimately last longer than tapered Type E bearings under the same conditions.

Figure 2 — Inner ring

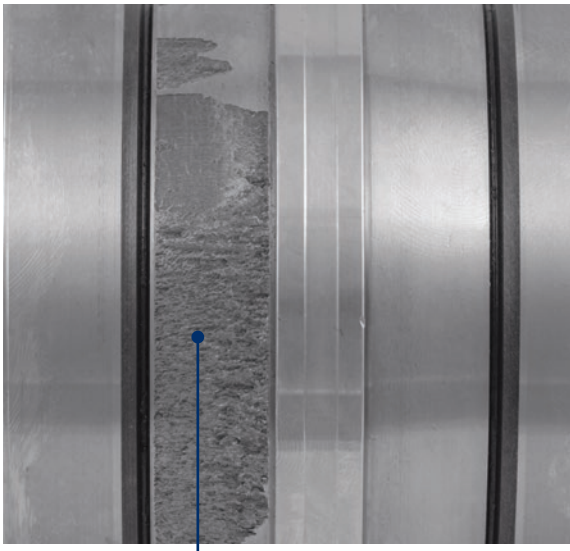


Figure 3 — Roller

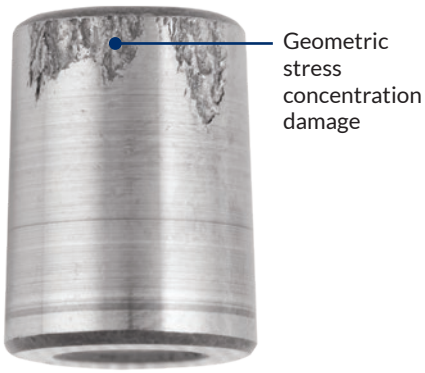
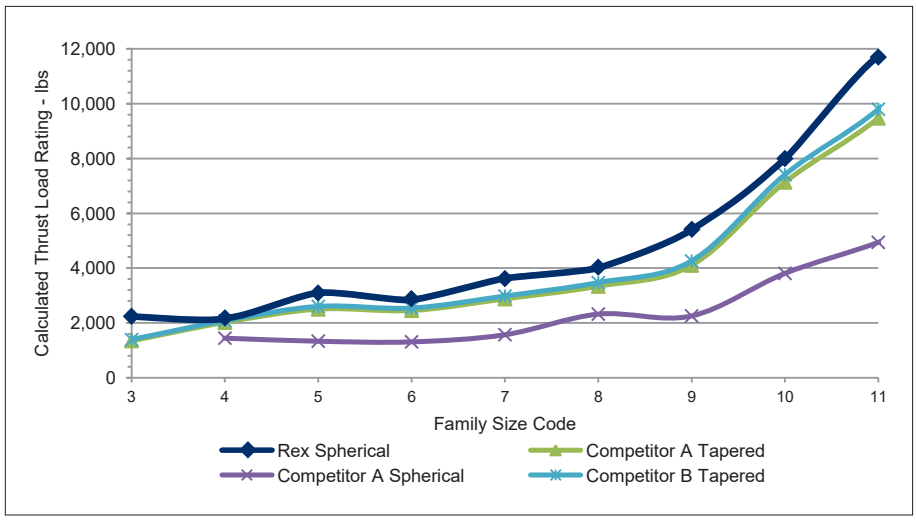


Figure 4 — Calculated Thrust Load Comparison[2]



[1] "TECHNICAL PAPER: COMPARISON OF DIN 281 BEARING FATIGUE LIFE PREDICTIONS WITH TEST DATA", The Timken Company, Michael Kotzalas and Gerald Fox, 2008.

[2] Based on Regal Rexnord and other Type E bearing manufacturer catalog data.

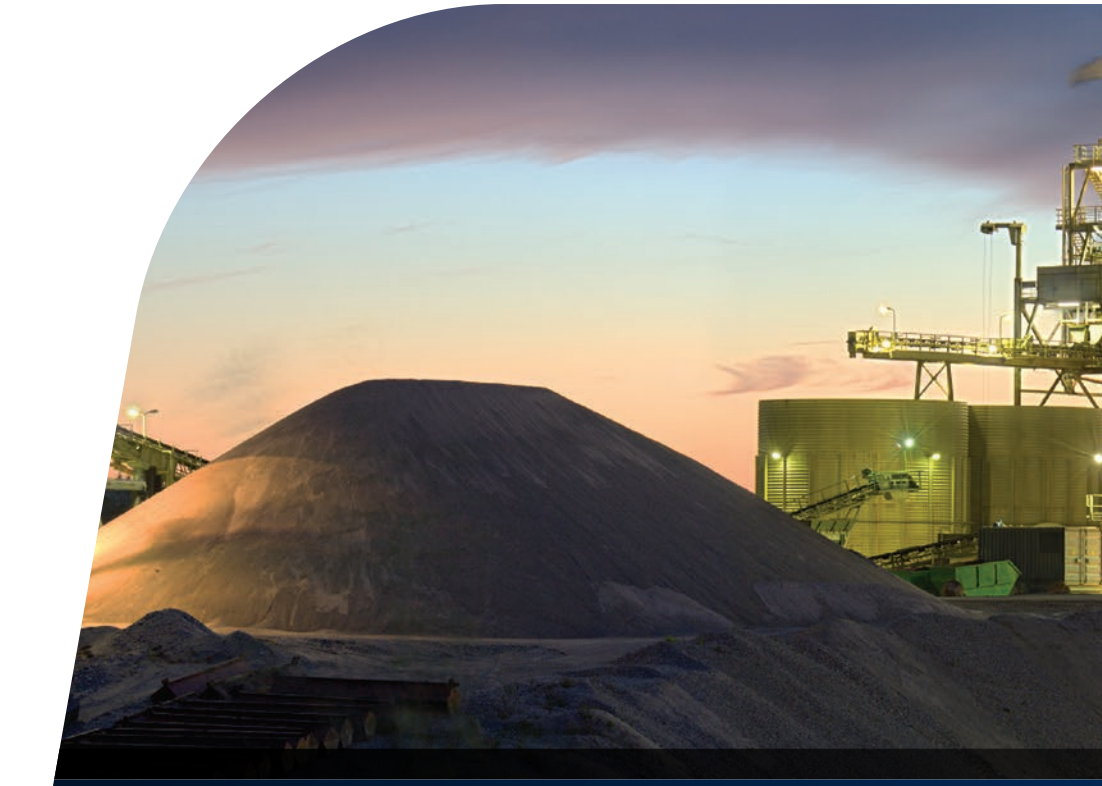
* Timken is believed to be the trademark and/or trade name of The Timken Company and is not owned or controlled by Regal Rexnord Corporation or its affiliates.

A BIG ADVANTAGE

Gravel Guard Seal

This triple contact seal extends bearing life in dirty applications, to help reduce downtime and increase production. With a metal guard ideal for the aggregates industry, it protects the seal lips from abrasion and damage. Three heavy lips protect against abrasive sand, gravel, dust and moisture.

Assembled in America with domestic and global compoonents.



Rex™

LINK-BELT™

Regal Rexnord

Contact us: rexnord.com/contact

regalrexnord.com

The proper selection and application of products and components, including assuring that the product is safe for its intended use, are the responsibility of the customer. To view our Application Considerations, please visit https://www.regalrexnord.com/Application-Considerations.

To view our Standard Terms and Conditions of Sale, please visit https://www.regalrexnord.com/Terms-and-Conditions-of-Sale (which may redirect to other website locations based on product family).

RegalRexnord™