REXNORD

Rex and Link-Belt Type E Spherical Roller Bearings

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Advancing the industry

Since the mid-1970s, Rexnord has served the aggregate industry with its solid-housed Rex® and Link-Belt® Type E Spherical Roller Bearings. Since 2010, Rexnord has also offered equivalent or higher load capacity, and greater misalignment capacity than competitive Type E tapered roller bearings for conveying applications.

The aggregate industry demands equipment that is reliable and affordable, which is why it standardized on Type E tapered roller bearings 75 years ago — because of the balance between 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 Rexnord has led the industry in this effort.

Why Choose Rex and Link-Belt Type E Spherical Roller Bearings?

Increased misalignment capacity.
Rexnord industry warranty and failure data shows (Figure 1) the second most common root cause of bearing failure, after lack of lubrication, 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.

Bearing Failure Root Causes

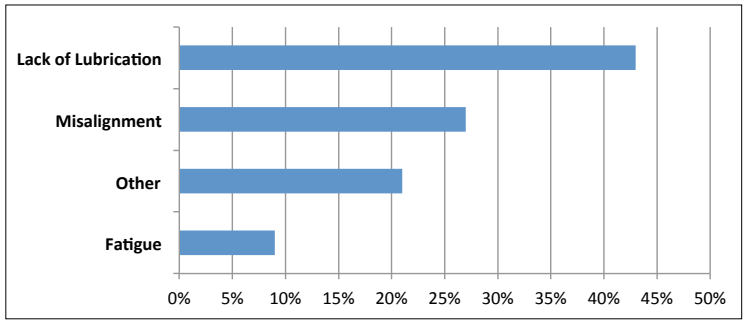

Figure 1

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

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 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 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.

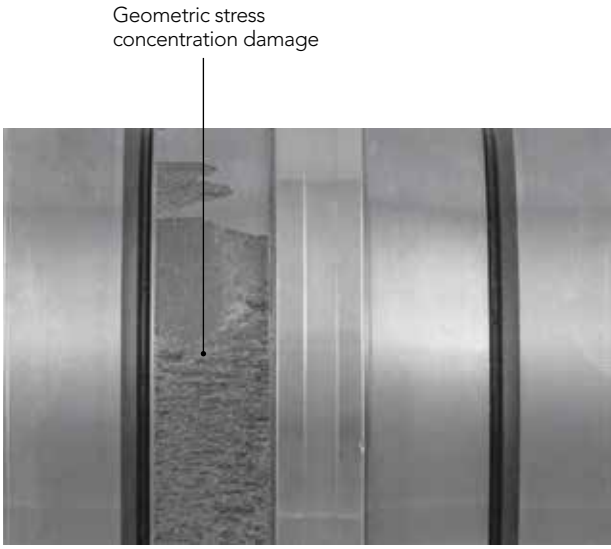

Figure 2 (inner ring)

Figure 3 (roller)

Calculated Thrust Load Comparison[2]

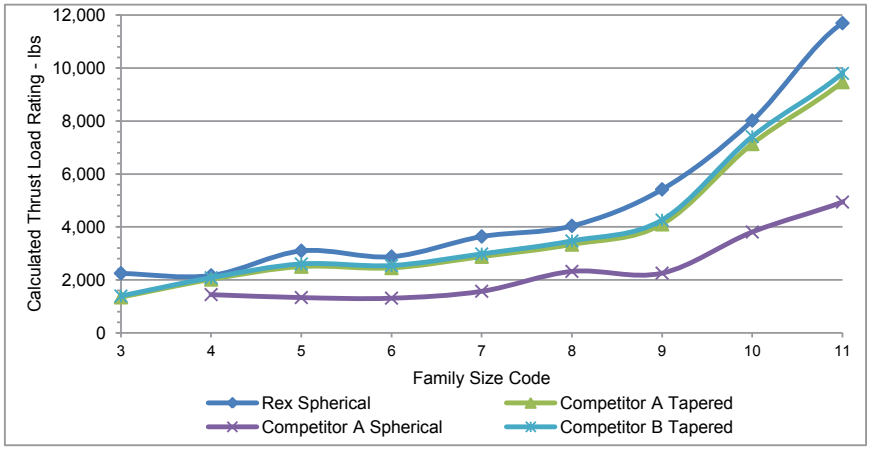

Figure 4

[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 Rexnord and other Type E bearing manufacturer catalog data.*

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.

Made in America
Rex and Link-Belt Type E Spherical Roller Bearings are manufactured in the United States.

866-REXNORD/866-739-6673 (Within the US)
414-643-2366 (Outside the US)
www.rexnord.com

Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.

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