

# The New Timken® Spherical Roller Bearing

# TIMKEN

Where You Turn

## Top Performance, Longer Life and Cooler Running

For the new Timken® spherical roller bearing top performance is in the details. With our one-of-a-kind slotted-cage, unique internal geometries and enhanced surface textures, our spherical roller bearing line reaches the highest performance levels in the industry.

In fact, this product offers an 18 percent increase in capacity resulting in a 75 percent design life improvement over our former spherical roller bearing offering. Engineered for enhanced durability, the new spherical roller bearing from Timken also runs cooler and has a longer design life – for greater reliability.

### Innovative Design

#### Advanced Internal Geometries

- Optimized internal geometries balance the need for increasing load-carrying capability while lowering operating temperatures.
- Axial roller guidance improves lubricant distribution and positive roller guidance, which translates into lower operating temperatures and improved performance.
- Circumferential roller guidance generates positive hydrodynamic contact, contributing to better roller/cage interaction.

#### Surface Finishes

- Improved surface finishes help lower operating temperatures and increase speed capabilities.

*Timken's spherical roller bearings are available with stamped steel or machined brass cages.*

**Designs:** EJ/EM/EMB

#### Common Applications:

- Casters (metal mills)
- Conveyors
- Felt and Wire Rolls (paper)
- Gear Drives
- Shaker Screens

### Cage Options

#### Stamped Steel Cage (EJ)

- + Two-piece land riding
- + Surface hardened
- + Slotted for more efficient lubrication distribution
- + Ideal for increased speeds

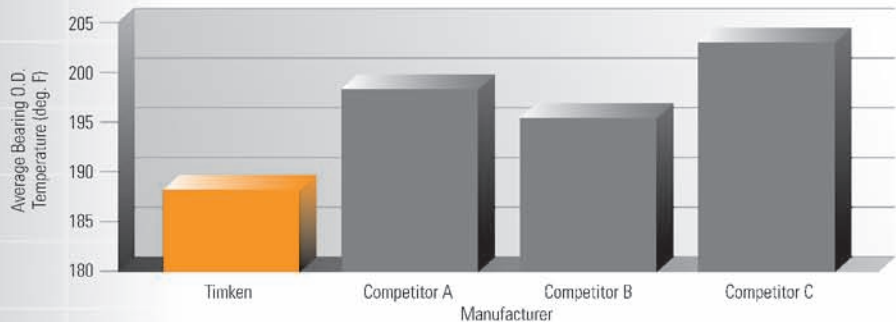
#### Machined Brass Cage (EM/EMB)

- + Type EM is roller riding
- + Type EMB is land riding
- + Ideal for extreme operating environments

### Cooler Than the Competition

Timken spherical roller bearings are designed to run cooler in heavy-duty applications subject to high temperatures. These bearings are engineered for maximum load capacity and are able to support combinations of radial and axial loading, even under significant misalignment conditions.

#### Actual Average Bearing O.D. Temperature Comparison: 22322 Spherical Roller Bearings



*The bearing outside diameter (O.D.) temperature shown here is an average of the temperatures measured at the bearing O.D. of four competing bearings included in the test. Timken spherical roller bearings ran up to 14°F cooler than the competition.*

The New Timken® Spherical Roller Bearing – One Look and You Can See the Difference

## From Design to Maintenance

Timken spherical roller bearings allow manufacturers and end-users to build and operate leaner, more reliable equipment while reducing their total cost of operation. Our power-dense bearings allow original equipment manufacturers to downsize their designs and still improve customer satisfaction. For operators, high bearing quality and reliability means less maintenance, while cooler operating temperatures help lengthen service life. It all adds up to greater uptime and a positive impact on your bottom line.

### The Timken Difference

The Timken brand stands for high quality and outstanding performance. Using our capabilities in bearing technology, manufacturing, application knowledge and engineering, we provide our customers with smart, cost-effective friction management and power transmission solutions that improve total system performance and help outperform the competition. We also strive to deliver and excel in the moments that build your trust and confidence in our products.

### Designed to Last

Our global engineering team collects performance requirements from around the world and designs bearings to meet the specifications our customers demand.

### High Material Quality

Timken is the only premium bearing manufacturer in the world to produce clean, high-alloy steel. Our steel manufacturing knowledge helps ensure quality materials are used in our bearings.

### Manufacturing Excellence

Timken worldwide quality standards are implemented in every manufacturing facility, so each Timken® bearing meets the same performance standards – no matter where in the world it is manufactured.

### Timken Experts are Your Experts

Every Timken bearing is backed by our team of experts, providing you with the industry's best design, application and 24/7 field-engineering support.

### A Full Range of Products

Timken continues to expand its line of spherical bearings to meet customer size and configuration demands. With our wide range of tapered, cylindrical and spherical bearings, you can make Timken your single-source bearing provider.

## Timken Spherical Bearing Nomenclature



**TIMKEN**  
Where You Turn

Bearings • Steel •  
Power Transmission Systems •  
Precision Components • Seals •  
Lubrication • Industrial Services •  
Remanufacture and Repair

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