



# NSK

## SUPER LONG-LIFE SPHERICAL ROLLER BEARINGS FOR VIBRATING EQUIPMENT

NSK's Long-Life Spherical Roller Bearings for vibrating equipment are engineered specifically to contend with high speeds, shock loads, misalignment, and frequent vibration of equipment used in mining, quarrying and construction industries. Optimized internal bearing design and tightly controlled internal clearance and dimensional tolerances deliver robust performance, smooth roller guidance and extended operating life under severe operating conditions.

### PROVEN BENEFITS

- › Long service life of in applications subject to frequent vibration
- › High dynamic load ratings
- › Highly resistant to heavy or shock loads
- › High-speed performance and low operating temperature rise
- › Better roller guidance and smooth running – reduced bearing damage from slippage, surface fatigue, flaking

### CONDITIONS

**V** VIBRATION

**W** WEAR

**HL** HIGH LOADS

**MA** MISALIGNMENT

### APPLICATIONS

- › Vibrating screens and equipment
- › Crushing machinery

STAY IN MOTION. STAY IN CONTROL.

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## DESIGN FEATURES

- › Manufactured from high-strength, ultra-clean steel for greater fatigue strength
- › Heavy duty precision machined one-piece brass cage
- › Contoured cage roller pockets for controlling roller skew and optimizing lubrication flow
- › Improved raceway surface finish and geometry promotes reduced operating temperature and improved lubrication
- › Dimensional tolerance is set at 1/2 relative to the outer diameter tolerance and the internal diameter tolerance
- › Internal radial clearance set at upper 2/3 relative to the standard for optimal operating clearance and reduced heat generation
- › Availability from 40 mm to 220 mm bore diameter



## TOUGH STEEL OPTION

- › For severely contaminated service conditions, NSK spherical roller bearings for vibrating equipment are available with NSK Hi-TF and Super-TF design options
- › Advanced material composition containing appropriate levels of chrome and molybdenum for increased hardness
- › Innovative and patented heat treatment technology to optimize retained austenite and formation of finer carbide and carbonitride particles
- › Significantly outperforms standard bearing steel in seizure resistance, rate of wear and service life

FIG. 1 - COMPARISON OF SERVICE LIFE

