

## 01 Spherical Roller Thrust Bearings

BMI Spherical rollers thrust bearings have specially designed raceways and accommodate large number of asymmetrical rollers. This type can withstand very high axial load and also allow upto 2° misalignment.

BMI has the entire range in steel and brass cage. These bearings are manufacturing in normal accuracy for standard applications and for high running accuracy P6 are used

### Applications:

- Extruders
- Screw Conveyors
- Blowout preventers
- Pumps



### Size Range:

- 40 mm to 600mm

For any application engineering or other requests for large size bearings feel free to contact us at [sales@bmibearings.com](mailto:sales@bmibearings.com)

This type can withstand very high axial load & also allow upto 2° misalignment.

## 02 MAINTENANCE TIPS: Pump bearing failure

The 2nd leading cause of pump breakdowns is bearing failures. This is due in part because fewer than 10 to 30 percent of all ball bearings run long enough to succumb to normal fatigue failure. Most bearings fail at an early age because of static overload, wear, corrosion, lubricant failure, contamination, or overheating.

Particle contamination and corrosion-related failures account for 52 percent of all of these bearing failures. Further, bearing housing seals - more specifically the seal type - also play a crucial role in centrifugal pump/bearing

reliability.

The function of the bearings in a centrifugal pump is to keep the shaft or rotor in correct alignment with the stationary parts under the action of radial and transverse (axial) loads. In most applications, the thrust bearings actually serve both as thrust and radial bearings.

Specific ways of reducing bearing failures and increasing bearing life:

- Excessive shaft fits increase bearing preload, which shortens their life.
- Temperature difference between inner and outer bearing races increases the preload.

- Do not cool the exterior of an antifriction bearing housing since it will also cool the bearing outer race, which will reduce the internal radial bearing operating clearances, thus increasing the bearing load and reducing the bearing life.
- Avoid damage due to external causes (such as vibration and/or stray electric currents, such as from a variable frequency drive).
- Avoid unequal flow of the liquid into the two suction eyes of a split-case, double-suction pump, due to an improper suction piping arrangement, to minimize the thrust load.

Source: <http://www.waterworld.com/articles/print/volume-30/issue-9/inside-every-issue/pump-tips-techniques/centrifugal-pump-bearings-tips-for-improving-reliability-and-reducing-failure.html>

