

Miba Industrial Bearings Repair and Service Solution





Advanced Bearing Solutions realized through collaboration, innovation and expertise

Established over 90 years ago our facilities provide a center of excellence in bearing repair, troubleshooting, analysis and reverse engineering solutions.

Complementing the existing global network of manufacturing facilities. Miba Industrial Bearings designs and manufactures turbomachinery components and associated products primarily for the oil and gas, power, chemical, pulp and paper, and mining sectors.



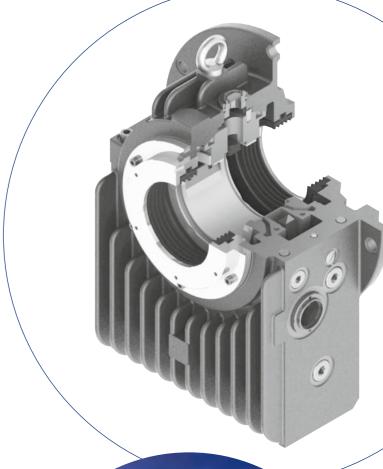
Markets are changing faster than ever, and environmental requirements and performance demands are constantly evolving. Around the world, manufacturers face a variety of challenges. Thanks to its global presence, the Miba Bearing Group offers its customers flexible and customized solutions. From development to the choice of materials and exceptional application engineering, right through to logistics, when it comes to bearings, we stand for innovative problem-solving ingenuity.

Highly advanced CAD-based engineering capabilities ensure consistently high levels of quality. A continuous exchange of ideas with technical universities and institutes, creates the basis for successfully transforming the technical requirements of our customers into high-quality products.

Products for productivity

The Miba global service and support network will keep you up and running with new, high-quality and reconditioned components. Providing unrivalled customer support and a quick turnaround when our customers need us most. Our dedicated facilities provide 24/7 support with service solutions for:

- Sleeve and tilting pad journal bearings with spherical pad support
- Fixed and tilting pad thrust bearings
- Hydrogen Seals
- Thermoplastic or metallic interstage compressor labyrinth seals
- Metallic labyrinth seals and oil deflectors
- Steam-turbine packing
- Bearing-housing oil seals
- Pump wear rings
- Compressor oil-film seals
- Thick-walled bearings
- Housing and pedestal bearings
- Bushing
- Bearing shells
- Turbocharger bearings and thrust bearings





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The Miba industrial bearings edge

Miba Industrial Bearings Service Solutions can make a big difference in the way your rotating equipment performs. Our business is focused on servicing the needs of our customers. Repairing and manufacturing bearings and seals for machinery, either in-kind or customized to your operation. The responsive service and engineering skills of Miba Industrial Bearings have given customers in the petrochemical, refining, oil and gas, power generation and general industries the engineering edge for their rotating equipment.

Why are Miba products and services so important to you now? Take a look at your major business concerns – competition, customer demands, operating costs, fewer people doing more work, and increased environmental and safety regulations. In some way, the efficiency and reliability of your machinery affects all of these issues. Now more than ever, maximum performance is required from your maintenance expenditures.

Applications

- Energy conversion machinery
 - Gas-turbine
 - Steam turbine
 - Turbo-compressor
 - Turbo gearbox
 - Fans
 - Generators
- Marine gearbox
- Mills
 - Cement mills
 - Steel mills
- Hydro power
- Steel industryThermal power
- Nuclear industry
- Coal industry
- Engine and piston-type machines



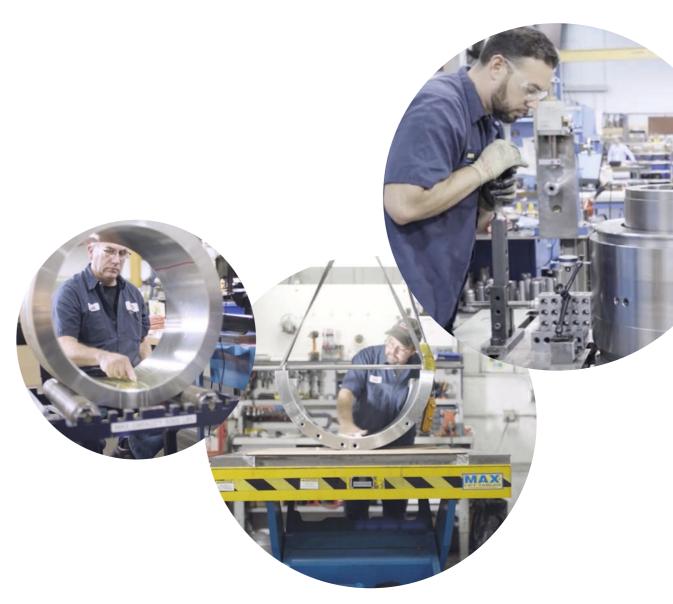
When time matters: Repair of plain bearings

Damage to bearings generally results in machine failure and thus in costly downtimes. This is why Miba has expanded the area of bearing repair, in addition to the specialization in the development and manufacturing of new bearings.

Miba has provided quick turnaround repairs for all types of bearings and seals, including supporting a major utility supplier with a rush repair on a critical gas turbine unit. The bearing was removed, repaired and ready to re-install in three days. Our fast response helped to avoid additional downtime and associated costs from an extended outage.

So, whether you need quick turnaround repairs, solutions to bearing and seal-related problems, or increased efficiency from your boiler feed pumps, we have the power to help.

Please send us the defective bearing, and we will prepare a damage analysis and a resulting cost estimate including a binding deadline within a short period. If the plain bearing cannot be sent in, a number of meaningful digital images will also be sufficient.



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Our engineering is your edge

Our engineering staff represents the leading edge of a host of capabilities that includes a fully tooled manufacturing facility, a committed quality control organization, and an around-the-clock commitment to providing positive solutions to your problems.

The services you need for maximum throughput

- Bearing design and optimization
- Labyrinth seal design and optimization
- Reverse engineering
- Rotordynamics analysis
- Bearing failure analysis
- Just-in-time delivery of parts and supplies
- Technical service
- Training
- On site service
- Localized repairs

Before

























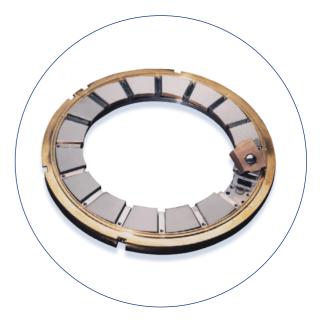
We solve tough customer problems

It would be easy to help our customers maintain their plants by simply performing only direct replacements of bearings and seals. But that is not our philosophy. Customers return to Miba for help with their turbomachinery because we look at things differently – finding new, more cost-efficient ways to tackle old problems. Here are just a few examples:

How often have you heard about or been faced with high thrust-bearing temperatures that ultimately lead to unscheduled maintenance or more frequent overhauls? Miba regularly designs solutions for existing bearings that are used in all types of machinery. Satisfied customers report significant increases in uptime and decreases in maintenance costs.

One common problem we hear about is poor thrustbearing performance in several of the most popular single-stage turbines. We solved this one some time ago by designing a drop-in conversion kit that reduces maintenance costs by extending the mean time between overhauls.





Optimizing thrust-bearing performance

The original bearing was a rolling element thrust bearing that was not capable of handling high thrust loads. This upgraded, drop-in replacement bearing requires only a keyway to be cut into the shaft. This ensures a lifespan of many years instead of just a few months before a replacement becomes necessary.

Reducing bearing temperatures

Utilizing copper pads, an offset pivot and a ball-andsocket design, we were able to drop the bearing temperature and upgrade a non-equalized thrust bearing without having to do costly machine modifications.

If you have a situation like this yourself, or if you think you're facing something completely different, contact us to find out how we can support your needs. Let our spirit of innovation pay off for you.

www.miba.com



Contacts:

Germany

Miba Industrial Bearings Germany Osterode GmbH Rolandsweg 16-20 37520 Osterode, Germany MIBG_sales@miba.com

USA

Miba Industrial Bearings U.S. LLC 1111 Cedar Creek Rd, Grafton, WI 53024, USA MIBUSG_Sales@miba.com

USA

Miba Industrial Bearings U.S. LLC 3300 E 8th St. Columbus, NE 68601, USA MIBUSG_Sales@miba.com

USA

Miba Industrial Bearings U.S. (Houston) LLC 1800 W 13th St, Deer Park, TX 77536, USA Houston.Sales@miba.com

Brazil

Miba Industrial Bearings Brasil Ltda Av. Manoel Inácio Peixoto, 2147 36.771-000 Cataguases, Brazil Vendas.MIBCAT@MIBA.COM