

### Miba Industrial Bearings







### 100 years of experience

Our brands (Orion, Sartorius Bearings, Zollern Plain Bearings and TCE) date back to the year 1918, when the bearing production first started in Germany. More than 100 years of experience make us a reliable partner.

### **Best Solution Source**

From standard to advanced applications. Our global engineering team helps to solve advanced technical challenges, while our product excellence ensures that our standard solutions are excellent.

### Responsiveness

Our agile organization reacts quickly to solve customer problems and provides professional advice.

### Your reliability is our passion.

Our inspired people make the difference.

Miba Industrial Bearings produces hydrodynamic bearings and labyrinth seals for use in high-performing rotating equipment, such as turbines, compressors, generators, motors, and industrial pumps. Our people and their know-how are our priority. We take pride in what we do and therefore solve our customers' problems better. What you can expect is a partner who gives you confidence and trust to grow.



### Miba Bearing Group

It is no secret that markets remain in a constant state of flux. Around the world, manufacturers of high-performing rotating equipment, such as turbines, compressors, and industrial pumps face a variety of challenges.

As an international specialist for engine and industrial bearing application and production, the Miba Bearing Group is able to offer its clients flexible and customized solutions for all eventualities. From development, material choice and exceptional application engineering, right through to final logistics – we stand for innovative problem solving skills. We take every opportunity to work

side-by-side with our valued partners around the globe, supporting them through our products and services. By providing reliable products with long service lives at competitive prices, we are able to ensure a high level of customer satisfaction.

The Industrial Bearing Branch produces hydrodynamic bearings used in industrial rotating equipment, while the Engine Bearing Branch focuses on components that significantly affect combustion engine functionality and service life. Together, they form the Miba Bearing Group, a reliable partner with over 100 years of combined research and development experience.



Miba Engine Bearings

Miba Industrial Bearings

# Former Bearing Markings

Miba has acquired bearing manufacturers with a long history. Therefore, your machine may be running with bearings marked with the manufacturing site's former name. The picture shows all the markings you might encounter, indicating that you are using an old Miba bearing. If you see one of these bearing markings, please feel free to contact us.





### Miba Industrial Bearings Products



# Products TILTING PAD JOURNAL BEARINGS

Journal bearings with tilting pads for greater load carrying in heavy-duty rotating machinery.







### MATERIALS

- Steel/Babbitt
- Steel/Bronze
- CuCr/Babbitt
- Alternate materials available



### APPLICATIONS

- Gas & Steam Turbines
- Compressors
- Expanders
- Pumps
- Turbo Gearboxes

### **Products**

## TILTING PAD THRUST BEARINGS

Thrust bearings with titling pads for supporting greater axial loads in heavy-duty rotating machinery.







### **MATERIALS**

- Steel/Babbitt
- Steel/Bronze
- Bronze/Babbitt
- CuCr/Babbitt
- CuCr/AlSn40
- PEEK
- Alternate materials available



- Gas & Steam Turbines
- Compressors
- Expanders
- Pumps
- Turbo Gearboxes

# Products HOUSING BEARINGS

Smart modular system pedestal, end flange, and center flange bearings built to the standards of DIN 31 690, 693 and 694.





### MATERIALS

- Nodular Cast Iron EN-GJS-400-15 (GGG40)
- Upon request Grey Cast Iron EN-GJL-300 (GG30)
- Upon request EN-GJS-400-18 LT (GGG40.3)



### APPLICATIONS

- Generators
- Blowers
- Large electric machinery
- Hydro Turbines
- Synchronous Condensers
- Test Rigs
- Turbogenerators

### **Products**

### **FIXED PROFILE BEARINGS**

Sleeve bearings with different bore profiles and thrust face design for optimized performance.

Cylindrical	Lemon- bore	3 Lobe	Offset Halves	4 Lobe







### **MATERIALS**

- Steel/Babbitt
- Steel/Bronze
- Bronze
- CuCr/Babbitt
- Polymer
- Alternate materials available



- Blowers
- Gearboxes
- Large electric motors
- Pumps
- Refrigeration Compressors
- Gas & Steam Turbines
- Turbochargers

# Products HYDRO BEARINGS

Miba Hydro Bearings are used in turbines and generators for small (below 30 megawatts), medium-sized (31 and 80 megawatts), and large (above 80 megawatts) hydropower plants.





### MATERIALS

- Steel/Babbitt
- Alternate materials available



### APPLICATIONS

- Generators
- Kaplan Turbine
- Kaplan STurbine
- Francis Turbine
- Pelton Turbine
- Reversible Turbines
- Bulb Turbine
- Open PitTurbine

# Products VERTICAL BEARINGS

Vertical housing bearings for demanding applications. In addition to standardized vertical bearings, tailor-made bearing designs according to customer's needs are available.



### **MATERIALS**

- Pads: Steel/Babbitt
- Housing: Nodular Cast Iron
   EN-GJS-400-15 GGG40



- Pumps
- Kaplan Vertical
- Francis Vertical



# Products **SEALS**

Our business is servicing our customers' needs for the repair and manufacture of labyrinth seals for turbomachinery, either in-kind or customized to your operation.





### MATERIALS

- Aluminum
- Bronze: Bronze/Babbitt
- Felt Metal
- Fluorosint
- Nickel Graphite; Nickel Silver
- Ni-resist
- PEEK
- Steel: Steel/Babbitt
- TORLON/DURATRON
- VESPEL



### APPLICATIONS

- Gas & Steam Turbines
- Compressors
- Expanders
- Generators
- Turbo Gearboxes

### **Products**

### HYDRAULIC COMPONENTS

The ready-to-install elements stand out due to their high-precision geometry and plane parallelism, achieved through double-sided grinding and lapping, as well as computer-measured analysis. Including: Valve Plates, Down-hold segments, Face plates, Port plates, Retainer segments and plates and Slipper retainers.







### **MATERIALS**

- C22/ CuPb10Sn10
- C10/ CuPb10Sn10
- St37 / CuPb22Sn2
- 100Cr6
- 34CrNiMo6L



- Axial Piston Motors
- Axial Piston Pumps
- Bent Axis Motors
- Heavy Duty Pumps
- Hydraulic Motors

### Service Portfolio

From designing, material choice and exceptional engineering, right through to service and repair – we stand for innovative problem solving skills.



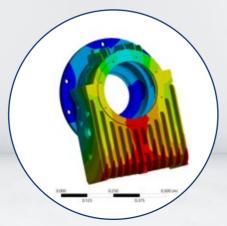


### MANUFACTURING

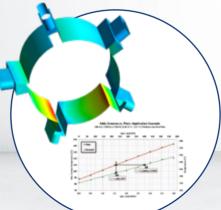




### FAILURE ANALYSIS & REENGINEERING









### MIBA TEST STANDS





REPAIR &



# Miba Industrial Bearings Sites

You need a partner you can completely rely on. Miba employs a global team of experts, who deal with a large number of customer challenges and a variety of applications and specifications worldwide. This broad wealth of experience is the core of our work.

### Miba Industrial Bearings U.S. LLC

Columbus, NE, USA 3300 East 8th Street, Columbus, NE 68601, USA

Founded: 1979
Formerly known as Orion Bearings. The plant joined the Miba Group in 2018.

### Get in touch:

T +1 262 377-2210 mibusg\_sales@miba.com

#### - Miba Industrial Bearings U.S. LLC

Grafton, WI, USA 1111 Cedar Creek Rd, Grafton, WI 53024, USA

Founded: 1968

Formerly known as Orion Bearings. The plant joined the

Miba Group in 2018.

#### Get in touch:

T +1 262 377-2210 mibusg\_sales@miba.com

### Miba Industrial Bearings U.S. (Houston) LLC

Bearing repair and service business
Deer Park, TX, USA
1800 W 13th St, Deer Park, TX 77536, USA

Founded: 1991

Former TCE (Turbo Components and Engineering). The plant in Texas joined the Miba Group in 2018.

#### Get in touch:

T +1 713-943-9100 houston.sales@miba.com

### Miba Industrial Bearings Germany Osterode GmbH

Osterode, Germany

Rolandsweg 16-20, 37520 Osterode am Harz, Germany

The plant combines the former Sartorius Bearings (founded 1948) and Zollern Plain Bearings (Founded 1918 under the name BHW).

#### Get in touch:

T +49 (0) 5522 31 27-0 mibg\_sales@miba.com

#### Miba Industrial Bearings Brasil Ltda.

Cataguases, Brazil

Av. Manoel Inácio Peixoto, 2147 36771-000 Cataguases MG, Brazil

Founded: 1978

Formerly operating as Zollern Transmissoes Mecanicas.

The plant joined the Miba Group in 2019.

#### Get in touch:

T + 55 (32) 3429-5302 vendas.mibcat@miba.com

### Miba's Global Presence

### **MIBA SINTER GROUP**

Miba Sinter Austria GmbH

Vorchdorf, Austria

Miba Sinter Slovakia s.r.o.

Dolný Kubín, Slovakia

Miba Sinter USA LLC

McConnelsville, OH, USA

Miba Sinter Brasil Ltda.

Indaiatuba, Brazil

**Miba Precision Components** (China) Co. Ltd. - Sinter Branch

Suzhou, China

Sintercom India Pvt. Ltd.\*

Pune. India

### MIBA BEARING GROUP

#### ENGINE BEARING BRANCH

Miba Gleitlager Austria GmbH\*

Laakirchen, Austria

Miba Bearings Materials GmbH\*

Aurachkirchen, Austria

Miba Bearings US LLC\*

McConnelsville, OH, USA

ABM Advanced Bearing Materials LLC\*

Greensburg, IN, USA

Miba Precision Components (China) Co. Ltd. - Bearing Branch\*

Suzhou, China

INDUSTRIAL BEARING BRANCH

Miba Industrial Bearings U.S. LLC

Grafton, WI, USA

Miba Industrial Bearings U.S. LLC

Columbus, NE, USA

Miba Industrial Bearings U.S. (Houston) LLC

Deer Park, TX, USA

Miba Industrial Bearings Germany Osterode GmbH\*

Osterode, Germany

Miba Industrial Bearings Brasil Ltda.\*

Cataguases, Brazil

### MIBA FRICTION GROUP

#### Miba Frictec GmbH

Roitham, Austria

Miba Steeltec s.r.o. Vráble, Slovakia

Fibertec Štětí s.r.o.

Štětí, Czech Republic

Miba HydraMechanica Corp.

Sterling Heights, MI, USA

Miba Precision Components (China) Co. Ltd. - Friction Branch

Suzhou, China

Miba Drivetec India Pvt. Ltd.

Pune, India

### **MIBA POWER ELECTRONICS GROUP**

#### EBG Elektronische Bauelemente GmbH

Kirchbach, Austria. St. Stefan, Austria

DAU GmbH & Co KG

Ligist, Austria

EDMS d.o.o.

Šentiernei, Slovenia

**EBG Resitors LCC** 

Middletown, PA, USA

Guangdong EBG Electronics\*

Qinaxi, China

### MIBA STRATEGIC UNITS

### STRATEGIC UNIT COATING

HighTech Coatings GmbH Vorchdorf, Austria

Miba Coatings U.S. LLC McConnelsville, OH, USA

**Miba Precision Components** (China) Co. Ltd. - Coating Branch Suzhou, China

### STRATEGIC UNIT MIBA **AUTOMATION SYSTEMS**

Miba Automation Systems Ges.m.b.H.

Aurachkirchen, Austria

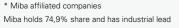
### STRATEGIC UNIT EMOBILITY

Miba eMobility GmbH

Vorchdorf, Austria

Miba Battery Systems GmbH\*

Bad Leonfelden, Austria



### www.miba.com/en/product-areas/industrial-bearings







**Power Generation** 



**Chemical Industry** 



**General Industry** 



Website

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Brazil: vendas.mibcat@miba.com

YOUR RELIABILITY IS OUR PASSION. OUR INSPIRED PEOPLE MAKE THE DIFFERENCE.