Innovation in Motion

Bearing solutions

The use of hydrodynamic bearings opens up new opportunities for our customers in many industries. We develop and produce bearings for con rods and main shafts in a wide range of applications:

- High pressure plunger pumps
- High speed conversion presses
- Reciprocating piston compressors
- Homogenizers
- Combustion engines

Our bearing offer

Low maintenance costs thanks to Miba's design and manufacturing capabilities.

Expert support and optimization at every project stage through close partnership with Miba.

Simplified process - one partner for a wide range of pump sizes through flexibility in bearing design.

Reliable supply chains and localized service through global footprint.

Miba Bearing Group

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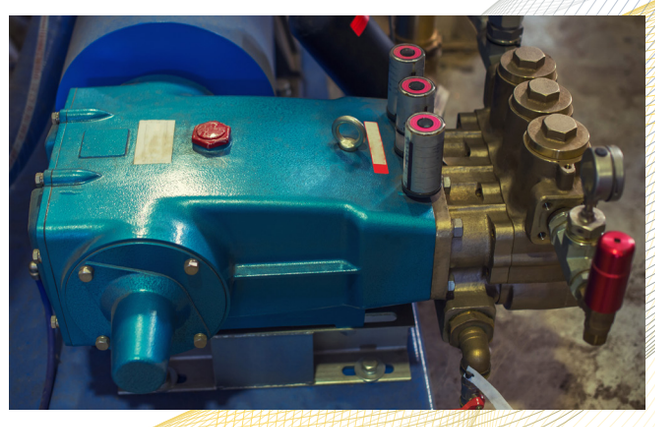
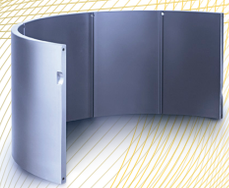
Hydrodynamic Bearing Solutions

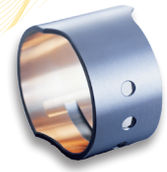
For high pressure plunger pumps





Durability and longevity

High load capabilities



Flexibility in design

Hydrodynamic bearing technology

Added value for our customers

The use of Miba´s hydrodynamic bearings increases the performance and opens up new opportunities for your systems.

- Easy installation and reduced service costs
- Minimizes risk of early failure
- Increases throughput
- Higher load capabilities for higher pressure
- Reduced assembly space and lower weight
- Reduced noise emissions
- Long service life due to hydrodynamic mode

We can actively support you in the realization of your system – starting from the first concept along the whole product lifecycle.

CONCEPT

Feasibility study
- Hydrodynamics
- Technical specifications
- Bearing loading
- Target costs

DESIGN

Bearing design
- Assembly situation
- Hydrodynamic simulation
  - Cranktrain hydrodynamics
  - Housing optimization support
  - Fretting risk
  - Cavitation risk
  - Oil flow system
- Model testing
- Bearing type recommendation
- Tribological calculations and reports (NHD)

PRODUCTION

Bearing supply
- Production of bearing and supply

VALIDATION

Bearing validation
- Prototype supply
- Assembly test
- Bearing inspection
  - Lifetime
  - Phenomena analysis
  - Improvement opportunity
  - Lifetime accompanying program

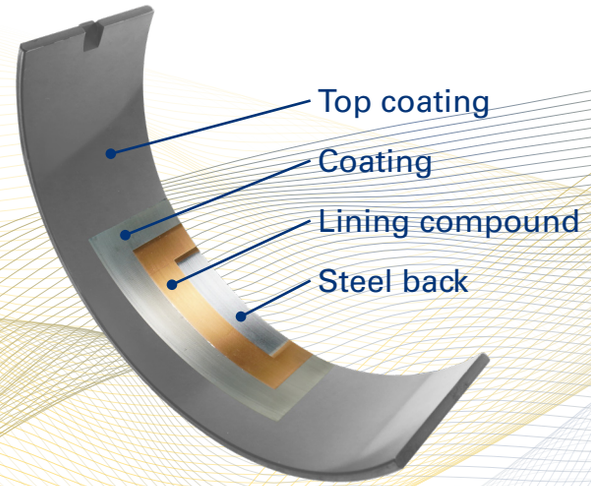
SERVICE

Service
- Remaining bearing life program
- Special investigation services
- Improvement support on demand
- Bearing judgment criteria

Flexible bearing

Design and material options possible

The steel backing is responsible for the strength of the bearing system. The tribological requirements are ideally implemented thanks to the layered structure consisting of lining compound (bearing metal) and coatings.



Miba offers different lining compounds:
Aluminium, Bronze, Babbitt

Miba offers different coatings:
Electroplating, Sputtering, Synthec® Coatings

Depending on the application, the bearing will be designed to the individual functionalities.