

Benefit from our expert knowledge

Miba Sinter Group is the technology leader in powder metal applications. Working closely with our customers, we meet the challenges of making products with unique characteristics more economical, efficient and environmentally friendly.

- Strong partnership early in the development phase
- Tools are developed and produced internally using the latest technologies and with cost efficiency in mind
- Quick prototype solutions to prove process and design
- Individual material combinations for optimum products
- R&D and testing facilities in-house to deliver optimal results
- State of the art production equipment for automated line production and global footprint to ensure local-to-local manufacturing with highest quality standards



Technologies for a Cleaner Planet

Miba develops and produces functionally critical components along the entire energy value chain. Our products make an important contribution to the efficient and sustainable generation, transmission, storage and use of energy. Miba sintered components, engine and industrial bearings, friction materials, power electronics components and coatings are used around the world in motor vehicles, trains, ships, aircraft, power plants, refineries, compressors and industrial pumps.



AMERICA
1,350 employees
9 sites

EUROPE
4,900 employees
17 sites

ASIA
1,300 employees
5 sites

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Sinterize your components

Improve the performance of your components with powder metal technology



Advantages of the powder metal technology

Compared to other manufacturing processes, powder metal technology enables maximum utilization of material with lowest possible energy input. At the same time complex shapes and geometries can be mass manufactured with reliable and economic processes.



Customized products

- Complex geometries
- Optimization in terms of strength and weight
- Tailor-made materials for different requirements
- Excellent NVH (Noise, Vibration, Harshness) properties
- Unique magnetic properties
- Excellent wear resistance
- Controlled porosity
- Isotropic properties as well as selectively compacted component areas



High torque capacity through surface densification

- Various compaction technologies to increase component strength and weight



Cost efficient solution

- Maximum utilization of raw materials with lowest energy consumption compared to other technologies
- A production close to the final contour ("net shape") avoids additional machining steps
- High process stability in serial production



Green Technology

- Metal powder made from recycled steel scrap
- Maximum raw material utilization, less waste
- Low energy consumption

Benefit from a wide range of Miba powder metal products

Miba Sinter Group offers a wide range of function-critical components for different areas of application such as robotics, hydraulics, industrial and building automation or mobility applications.



Gears

- Net shape gears with NVH performance
- High strength and precision
- Spur and helical gears available
- High mechanical properties similar to solid steel
- Cost optimized design and production



Sprockets

- Conversion of fully machined sprockets to net shape
- Highly complex geometries
- High mechanical properties equivalent to solid steel
- Improved wear and rust resistance
- Cost-effective production concepts



Compressor Components

- Elimination of secondary operations for connecting rods, such as: turning, honing, oil hole drilling and phosphating, etc.
- Conversion of aluminum rods to powder metal using our fracture split technology (eliminating bolt fixations)
- Conversion of fully machined steel blades to net shape powder metal blades
- Cost-effective production concepts



Hydraulic Components

- New materials improving product strength
- New leakage sealing method eliminating expensive operations
- Wear resistance through surface treatment
- Precision components reducing the need for secondary operations



Soft Magnetic Composite Components

- Compact design – both size and weight of the components can be reduced
- Optimized performance – high power and torque density
- Cost efficiency – net shaping production process with minimum waste and no need for rework
- 3-dimensional magnetic flux: By compaction and heat treatment, the particles can be formed into complex shapes, allowing a three-dimensional magnetic flux
- Serial production of e-motor components, subassemblies and frameless motors for eg axial flux and transverse flux motor designs