

We pioneer motion

Schaeffler Solutions for Industrial Applications

SCHAEFFLER

Product solutions



Needle roller bearings

- Leading manufacturer of needle roller bearings - inventor of cage-guided NRB
- Unmatched engineering and application expertise
- Over 1,600 stock parts, incl. inch sizes
- Machined or drawn-cup versions
- Made in USA (Cheraw and Fort Mill, SC) and 9 other countries



Spherical roller bearings

- Comprehensive product range, including versatile split SRBs
- Cages available in brass or steel
- Available in Schaeffler X-life® quality
- Optional coatings improve performance
- Made in USA (Joplin, MO) and 4 other countries



Cylindrical roller bearings

- Outer diameter range: 20 mm to 1600 mm
- Standard X-life on caged CRBs < 320mm OD
- Optional coatings, including ceramic to protect against stray electrical current
- Available “TB” rollers offer more load capacity
- Made in USA (Joplin, MO) and 6 other countries



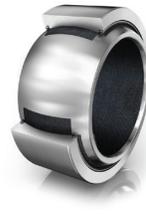
Tapered roller bearings

- Single-, double-, 4-row and thrust versions
- Outer diameter range: 35 mm to 4 meters
- Available in Schaeffler X-life quality
- Inch and metric catalog sizes
- Made in USA (Joplin, MO) and 8 other countries



Ball bearings

- Bore diameter range: 1 mm to > 1 meter
- Full line of cage, grease and seal options
- Available in Schaeffler X-life quality
- Current-insulated versions protect against electrical arcing
- Super-precision and custom designs
- Made in USA (Joplin, MO & Danbury, CT) and 9 other countries



Plain bearings

- Bore diameter range: 3 mm to 1 meter
- Available types include: spherical plain bearings, rod ends, bushings, washers and strips
- Various sealing and sliding layer options, including best-in-class, maintenance-free ELGOGLIDE®



Mounted product

- Full product range, including application-specific housing designs
- Arched base offers improved load distribution
- Many advanced sealing options
- Housings available in cast gray and ductile iron materials



Linear

- Ball screw- & belt-driven linear actuators
- Full line of 4-&6-row ball-type/4-row roller-type linear recirculation profile rail systems
- Precision-hardened round shaft products
- Track roller linear guidance systems
- Full-service Quick Center in USA (Fort Mill, SC) for made-to-order shafting



Condition monitoring/lubrication

- OPTIME™: award-winning, highly scalable wireless IIoT MESH network monitoring system.
- Single- and multi-point automatic lubricators
- Full range of Arcanol™ lubricants, including multipurpose, high-load, high-temp and specialty greases



Mechatronics

- Innovative solutions for the robotics market, including strain wave gearboxes with torque sensing and axial flux motors with PCB stators
- Customized, embedded linear and rotary actuators for high-volume applications via Schaeffler's modular development kit

Value-adding solutions that help ensure lowest TCO

Engineering/Software Design Solutions

With over 75 years of bearing manufacturing know-how and industry experience, Schaeffler has the right solution for your application. We offer best-in-class design support for your unique application:

- **BEARINX®**: Schaeffler's in-house developed calculation software is a powerful tool for modeling rolling bearing arrangements in complex systems, ranging from shaft and linear guidance systems to sophisticated gearboxes.
- **Finite Element Analysis (FEA)**: Schaeffler engineers use state-of-the-art FEA tools to optimize components quickly and economically during the design phase.
- **Tribological analysis**: Schaeffler experts are always focused on optimizing wear and friction to minimize energy losses – critical for your application and a more sustainable world!
- **medias™**: Along with extensive information on rolling and plain bearings, linear systems as well as digital, mechatronic and service solutions, Schaeffler's proprietary medias online platform now also offers product selection, configuration and ordering tools.

Comprehensive product portfolio featuring X-life Schaeffler's seal of quality for ultra-high-performance products from our INA and FAG product brands, X-life bearings offer higher dynamic load ratings than conventional alternatives, resulting in a longer service life under identical operating conditions.

Product Optimization Solutions

Schaeffler has a complete array of industry-leading manufacturing technologies, processing methods, heat treat variations, and/or coating options to provide our customers the best solution at optimal TCO. Everything has been optimized to ensure the most economical method is used based on technical requirements and production volume.

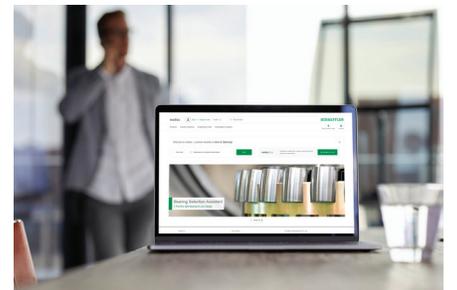
- Forging
- Turning
- Heat Treat
- Finishing
- Coatings
- Assembly

Service Optimization Solutions

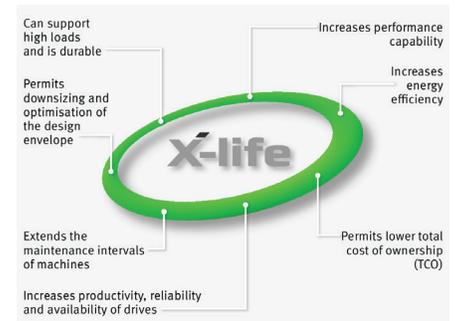
- Flexible business relationships
- Demand-planning options to fit your needs:
 - Made to Order
 - Made to Forecast
 - Made to Stock
- E-commerce solutions
 - Electronic Data Interchange (EDI)
 - Customer Portal interface
 - Schaeffler Portal interface
- Consolidated logistics hub to minimize transportation time and expense



BEARINX calculation software



"medias" online platform



Overview of X-life benefits

About Schaeffler

The Schaeffler Group – together with its INA, FAG and Barden product brands – is one of the world’s leading integrated industrial and automotive suppliers. Schaeffler is synonymous with highest quality, outstanding technology and a singular innovative ability. Industry firsts – such as the development of the needle roller & cage assembly, or the groundbreaking ball grinding machine that is regarded as the foundation of the entire rolling bearing industry – have earned Schaeffler a unique distinction among the world’s great technology companies.

Schaeffler is one of the world’s largest technology firms in family ownership, encompassing a worldwide network of manufacturing plants (including eight in the U.S.), R&D facilities and sales companies at approximately 170 locations in over 50 countries. Schaeffler’s Industrial Division offers a portfolio of over 225,000 products for more than 60 industrial sectors.



Sustainability

Sustainability is an integral part of Schaeffler’s DNA. Our production processes focus on energy efficiency, environmental compatibility and conservation of resources. Schaeffler’s manufacturing processes will be carbon-neutral at all of our production sites worldwide by 2030, representing our company’s contribution to climate protection. At the same time, we are continuously expanding our climate protection ambitions, which we are increasingly incorporating into our entire supply chain.

To learn more, please visit <https://www.schaeffler-sustainability-report.com/2021/>.



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