Innovation makes the world stronger and more efficient. Our world-class engineers and technologists use advanced science to minimize the friction that limits productivity.

We create value designed with the customer in mind. Focus, precision and passion for details deliver measurable and enduring results.

Work with Timken to overcome your toughest challenges.

Together, we are stronger, by design.

For more information, visit us at www.timken.com.

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, brakes, clutches, chain, couplings, gears and related mechanical power transmission products and services.

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INDUSTRIAL SERVICES

The Timken Company offers the world’s leading line of bearing and power system rebuild and repair services. We can return components or entire systems to like-new condition. We overhaul drive train products, including switchgears, control panels, electric motors, generators, gear drives, bearings and couplings. We also repair uptower wind turbines and cranes.

- Extend service life by up to three times
- Save up to 60 percent on the cost of replacement bearings
- Expertise in design, specification and maintenance
- Field services for upgrades, service, inspection, load testing and repair for all brands of cranes
- Modernizations and updates
- Spare parts for cranes and hoists

BEARING REMANUFACTURING

Benefits include cleaner, stronger materials and an ever-growing selection of high-performance product from an expert with more than a century of experience in friction management and materials science.

- Expertise in the design, specification and maintenance of bearings
- Field services for upgrades, service, inspection, load testing and repair for all brands of cranes
- Modernizations and updates
- Spare parts for cranes and hoists

CRANE REPAIR

Our on-site service by trained technicians for drive train maintenance and uptower repair of wind turbines includes:

- Gearbox maintenance and oil changes
- Generator reconditioning/rewinds
- Uptower generator bearing, slip ring, brush rigging and change-outs

ON-SITE TRAINING AND CERTIFICATION

On-site engineers help solve challenges and prevent future problems using data, testing and technical resources.

- Application engineers identify and overcome unique challenges, using the most advanced analytics in the industry
- Find product selection tools, CAD drawings, dimensional tolerances and more at cad.timken.com
- Check product availability, place orders and track order status – 24/7 at our online stores
- Tailored training programs range from bearing basics to advanced best practices
- Certification programs help maintenance shops improve efficiency and performance
- Get on-site problem solving, life cycle calculations, interface design options, bearing inspections and evaluations

ONLINE SERVICES

Syber analyzes bearing systems, helps optimize design and development, and predicts potential damage.

- Speed system concept-to-design stage with fewer test requirements
- Customer-specific software versions offer base design analytic capabilities

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Designed for performance in a competitive world, our full range of engineered THRUST BEARINGS delivers strong, consistent and reliable performance.

Materials. Our tapered, spherical, cylindrical, thrust, ball, plain, miniature, precision and housed unit bearings are interchangeable with competitor products, both radial and axial loads including shields and seals for challenging environments. Timken® housed units or mounted bearings deliver a single brand solution to high speeds, heavy loads or other demanding application requirements.

PRECISION AEROSPACE PRODUCT SUMMARY

AP-2™ BEARING SURFACES

Hard coatings and topographical modifications improve the performance of a two-row bearing and benefit from high rotational stability of a two-row bearing. In a simplified manner

INTERLUBE AUTOMATIC SYSTEM

A variety of types and materials and manufactured to meet the performance requirements of demanding applications to isolate high-speed gear, or to provide superior performance and reliability in applications needing a thicker outside layer. We engineer a product to fit customer specifications.

MECHANICAL POWER TRANSMISSION

Engineered power transmission products provide the reliable and efficient performance needed for a variety of demanding applications. Timken® clutches, brake drum assemblies, and lift & drive products are designed specifically for the application.

Bearing set outs, fuel costs and bearing inspection and assembly are eliminated.

LOVEJOY® UNIVERSAL JOINTS

Purpose-built and designed for demanding applications like conveyors, pulleys and induction heaters. Can be inspected without disassembly and reassembled without damaging the unit.

INTERLUCE AUTOMATIC LUBRICATION

Reliably distribute lubricant with multi-point or progressive systems from simple, single-point needs to complex, multi-point requirements. Help extend bearing life, relubrication intervals and reduce process downtime.

ISENBERG® MILL 2™ CONTAMINANT CONTROL

Engineered Class chains are available, 50 percent pre-loading for minimum to no initial chain stretch, 100 percent engagement after heat treatment for increased fatigue strength. Improving stress distribution for better performance.

SPLIT CYLINDRICAL (PILLOW) BLOCK UNITS

The only USDA-NSF accepted bearings available. USDA-accepted bearings made from high-performance polymers. Highly engineered, rigorously tested designs. Highly efficient, self-contained systems, Groeneveld products provide the best protection, longest life, and robust, proven performance.

FRICTION HAS MET ITS MATCH.

For many technical power transmission products, the Friction has Met its Match campaign emphasizes the reliability and efficiency of Timken® power transmission products by featuring an innovative system that demonstrates the friction between a seal and bearing. The seal is the only part of the system that is able to overcome friction and stop the machine from turning, effectively "metabolizing" the friction and emitting a strobe light while the machine is running. The system can be disassembled and reassembled, and is intended for consumer-engageable display.
FRICITION HAS MET ITS MATCH.

Engineered bearing products...
Designed for performance in a competitive world, our full range of engineered BEARINGS is specifically designed to meet demanding application requirements for miniature and light bearing use and benefit from high rotational life and boost reliability. "Properly optimized, our precision bearings are specifically designed for machine tool applications requiring angular contact ball bearings for outstanding performance of precision tolerances, proprietary internal geometries and quality materials. Our tapered, spherical, cylindrical, thrust, ball, plain, miniature, precision and housed unit Timken® engineered bearings feature precision tolerances, proprietary internal geometries and quality materials. Our tapered, spherical, cylindrical, thrust, ball, plain, miniature, precision and housed unit.
Bearings, mechanical power transmission products and industrial services help Designed for performance in a competitive world, our full range of engineered TAPERED ROLLER BALL BEARINGS high speeds, heavy loads or other challenges. Components are precisely engineered to perform in a wide range of industries, applications and environments. Increase power density with a smaller, reduce operating temperatures. Accurate and rigid in a space-saving, high-performance configuration. Suitable for demanding applications including engines, for a wide variety of aerospace requirements of critical flight systems. Ideal as a table bearing for machine tools, for industrial applications and environments. Engineered Class chains are available for industrial applications including underground mines. Designed for industrial diesel engines. Longer life and higher output, with reduced maintenance expense. Enhance fastener corrosion resistance. 1.5° of misalignment per gear mesh. Unequaled bore and torque capacity. Comprehensive line of premium-quality lubricators, oil pumps and grease pumps. Help extend bearing life, relubrication intervals. Comprehensive range of premium-quality lubricators, oil pumps and grease pumps. Inspired by the needs of industries; custom-made designs are used in large-scale manufacturing. Higher residual value. Improved vehicle/machine uptime leads to 5 in. and metric with EDT products. Interchangeable with standard AGMA or DIN 3962 couplings. Enhanced fastener corrosion resistance. 1.5° of misalignment per gear mesh. Unequaled bore and torque capacity. Comprehensive range of premium-quality lubricators, oil pumps and grease pumps. Help extend bearing life, relubrication intervals. Comprehensive range of premium-quality lubricators, oil pumps and grease pumps. Inspired by the needs of industries; custom-made designs are used in large-scale manufacturing. Higher residual value. Improved vehicle/machine uptime leads to 5 in. and metric with EDT products. Interchangeable with standard AGMA or DIN 3962 couplings. Enhanced fastener corrosion resistance. 1.5° of misalignment per gear mesh. Unequaled bore and torque capacity. Comprehensive range of premium-quality lubricators, oil pumps and grease pumps. Help extend bearing life, relubrication intervals. Comprehensive range of premium-quality lubricators, oil pumps and grease pumps. Inspired by the needs of industries; custom-made designs are used in large-scale manufacturing. Higher residual value. Improved vehicle/machine uptime leads to 5 in. and metric with EDT products. Interchangeable with standard AGMA or DIN 3962 couplings. Enhanced fastener corrosion resistance.
FRICITION HAS MET ITS MATCH.

**Timken® tapered roller bearings**

**BALL BEARINGS**

**PLAIN BEARINGS**

**SPHERICAL**

Meet demanding application requirements with Timken products.

**CONDITIONS**

**APPLICATIONS**

- Satisfy extreme conditions requiring high-speed or heavy-duty performance
- Applications that use ball or roller bearings, including aerospace, high-speed motors, and custom designs

**ADVANTAGES**

- Super precision provides “no bake” operation
- Highest levels of performance under extreme conditions
- A wide range of bearing types and design standards

**ENGINEERED BEARING PRODUCTS**

- Heavy-duty bearings for challenging application conditions
- Hard coatings and topographical features for demanding environments

**BALL BEARINGS**

- Precision ball bearings deliver consistent, reliable performance
- Hardened steel helps deliver consistent, reliable performance

**MECHANICAL POWER TRANSMISSION**

- Provide enhanced wear protection for demanding environments
- High efficiency, reliability, and low maintenance costs

**BALL BEARINGS**

- Precision ball bearings deliver consistent, reliable performance
- Hardened steel helps deliver consistent, reliable performance

**MECHANICAL POWER TRANSMISSION**

- Provide enhanced wear protection for demanding environments
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PRODUCTS + SERVICES GUIDE

INDUSTRIAL SERVICES

Timken offers bearing and power system rebuild and repair services that can return components or entire systems to like-new. We overhaul drive train products, including switchgears, control panels, electric motors, generators, gear drives, bearings and couplings. We also repair uptower wind turbines and cranes.

Beating your bottom line:

- Extend service life by up to three times
- Save up to 60 percent on the cost of replacement bearings
- Expertise in design, specification and maintenance

Field services for upgrades, service, inspection, load testing and repair for all brands of cranes

- Modernizations and updates
- Inspection
- Repair

Spare parts for cranes and hoists

BRIDGING THE POWER GAP

We bridge the power gap between the point of its generation and the point where it needs to be used.

- Timken offers a wide range of power transmission products
- Timken helps you reduce maintenance and oil changes
- Timken provides easy-to-use product search engines
- Timken offers a wide range of applications for power transmission products

SYMBIOLOGY

The Syphonics System is a unique way to analyze vibration and monitor the condition of machinery in real time.

- Single-channel, multi-sensor system
- FIELD MAINTENANCE

- Assigns bearing systems, develops design and manages systems
- experts in bearing systems
- On-site training, end-user maintenance seminars and bearing certification programs help your team select bearings and optimize system performance
- On-site engineers help solve challenges and prevent future problems using data, testing and technical resources

- Application engineers identify and overcome unique challenges, using the most advanced analytics in the industry
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- Check product availability, place orders and track order status – 24/7 at our online stores
- Tailored training programs range from bearing basics to advanced best practices
- Certification programs help maintenance shops improve efficiency and performance
- Get on-site problem solving, life cycle calculations, interface design options, bearing inspections and evaluations
- Find new ways to improve efficiency and productivity

ONLINE SERVICES

- Advanced Bearing Analysis System
- Training and Certification
- Service Engineering
- Onsite service by trained technicians for drive train maintenance and uptower repair of wind turbines
- Gearbox maintenance and oil changes
- Generator reconditioning/rewinds
- Uptower generator bearing, slip ring, brush rigging and change-outs

UPTOWER WIND TURBINE MAINTENANCE AND REPAIR

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BEARING REMANUFACTURING

- Returns any brand of bearing used in heavy industrial, rail and aerospace applications to like-new condition
- Remanufacture and repair of aerospace systems and rotorcraft transmissions
  » Extend service life by up to three times
  » Save up to 60 percent on the cost of replacement bearings
- Expertise in design, specification and maintenance

CRANE REPAIR

- Field service for upgrades, service, inspection and repair
- On-site engineers help solve challenges and prevent future problems using data, testing and technical resources
- On-site training, end-user maintenance seminars and bearing certification programs help your team select bearings and optimize system performance
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ONLINE SERVICES

- Syber analyzes bearing systems, helps optimize design and development, and predicts potential damage
- Speed system concept-to-design stage with fewer test requirements
- Customer-specific software versions offer base design analytic capabilities

SERVICE ENGINEERING

- On-site service by trained technicians for drive train maintenance and uptower repair of wind turbines
  » Gearbox maintenance and oil changes
  » Generator reconditioning/rewinds
  » Uptower generator bearing, slip ring, brush rigging and change-outs

GEARBOXES AND ELECTRIC MOTOR REPAIR

- Inspect, repair and upgrade gearboxes, electric motors and controls to OEM specs – regardless of manufacturer
- Expansive knowledge base and problem-solving skills to meet any challenge

TRAINING AND CERTIFICATION

- Let’s work together to overcome your challenges. We are committed to your success. For more information, visit us at www.timken.com

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