



High-Performance Engineered Bearings for Today's Construction Challenges

Strengthening equipment performance amid evolving industry pressures

The construction industry faces increasing pressure to perform. Demand rises and falls with economic cycles. Equipment requires significant upfront investment. Advancements like automation and electrification accelerate product-development timelines. Additionally, sustainability expectations continue to tighten, adding complexity to every machine design. These challenges place new demands on reliability, efficiency, and lifecycle value.

Timken®, GGB®, and Aurora® engineered bearings are ideal for this environment. Our engineered roller bearings, bushings, rod ends, and motion products help OEMs and operators improve productivity and overall machine performance and help reduce downtime, extend component life, and lower total operating costs.

Our global application engineering teams work directly alongside customers to help accelerate innovation and ensure equipment is ready for the regulatory, economic, and technological realities shaping the construction market.

Timken Advantage

- **Engineering expertise that keeps you ahead.** We partner with OEMs early, applying advanced simulation tools and field experience to optimize performance and accelerate innovation, which is essential in an era of rapid tech disruption.
- **Best-in-class products that lower lifecycle costs.** Every product is engineered with premium materials and designed for durability, helping reduce maintenance spend and protect high-capital equipment investments.
- **Operational excellence that protects against supply volatility.** A global manufacturing footprint and integrated quality systems deliver consistent, responsive supply through economic cycles.
- **Real-world impact that supports sustainability goals.** From improved efficiency to reduced waste and longer part life, Timken solutions help customers meet rising regulatory and environmental expectations.

Gain Solutions That Can Help:

Improve Uptime in Uncertain Market Cycles

Timken delivers debris-resistant, long-life bearings that help equipment stay productive even as market conditions fluctuate. Our material and heat-treatment technologies reduce unplanned downtime and extend service intervals.

Lower Total Cost of Ownership for High-Capital Equipment

Power-dense designs, optimized geometries, and protective coatings extend bearing life to help safeguard major equipment investments. Customers gain longer machine life and lower maintenance costs over time.

Support Rapid Technology Adoption

Timken engineers collaborate early with OEMs to right-size bearings for evolving loads, power profiles, and electrified or automated platforms. Our advanced geometries and cage designs enable next-generation equipment performance.

Help Meet Sustainability and Regulatory Requirements

Cooler running, wear-resistant designs were created to reduce energy loss, extend lubrication life, and support reduced environmental impact. Maintenance-reducing plain bearings and bushings help lower waste and improve regulatory compliance.

Applications Built for Today’s Construction Challenges

Our global application engineering teams work directly alongside customers to help accelerate innovation and ensure equipment is ready for the regulatory, economic, and technological realities shaping the construction market.

Excavation Equipment	Earthmoving Equipment	Building Construction Machines
Track excavators and dozers rely on debris-resistant, power-dense components to withstand extreme loads, shaft deflection, oscillation, and direction changes.  Timken solutions include tapered and cylindrical roller bearings with enhanced surfaces, spherical roller bearings for misalignment, Aurora spherical plain bearings, and GGB DX®/GAR-MAX® bushings. 	Wheel loaders, motor graders and pavers operate under high loads, variable speeds and extreme contamination.  Timken supports these demands with enhanced internal geometries, ES coatings, advanced bushings and high-temperature sealed bearing units designed for long-lasting, reliable performance. 	Backhoe loaders, telehandlers, and skid steer loaders need reliable pivot-point, swing-drive, and wheel-end components to perform diverse tasks with precision.  Timken solutions include surface-enhanced tapered rollers, fuel-efficient cylindrical bearings, power-dense geometries, Aurora® rod ends, and GGB® composite bushings. 

Construction challenges are complex and growing. The right engineering partner makes all the difference. Timken, GGB and Aurora strengthen the machinery that builds our world, delivering reliability and performance where it matters most.



The Timken Company partners with customers to design and manufacture advanced motion technology systems and components for critical end markets including aerospace and defense, power and electrification, and automation and industrial solutions. With more than 125 years of specialized engineering expertise, we power performance across the application lifecycle.