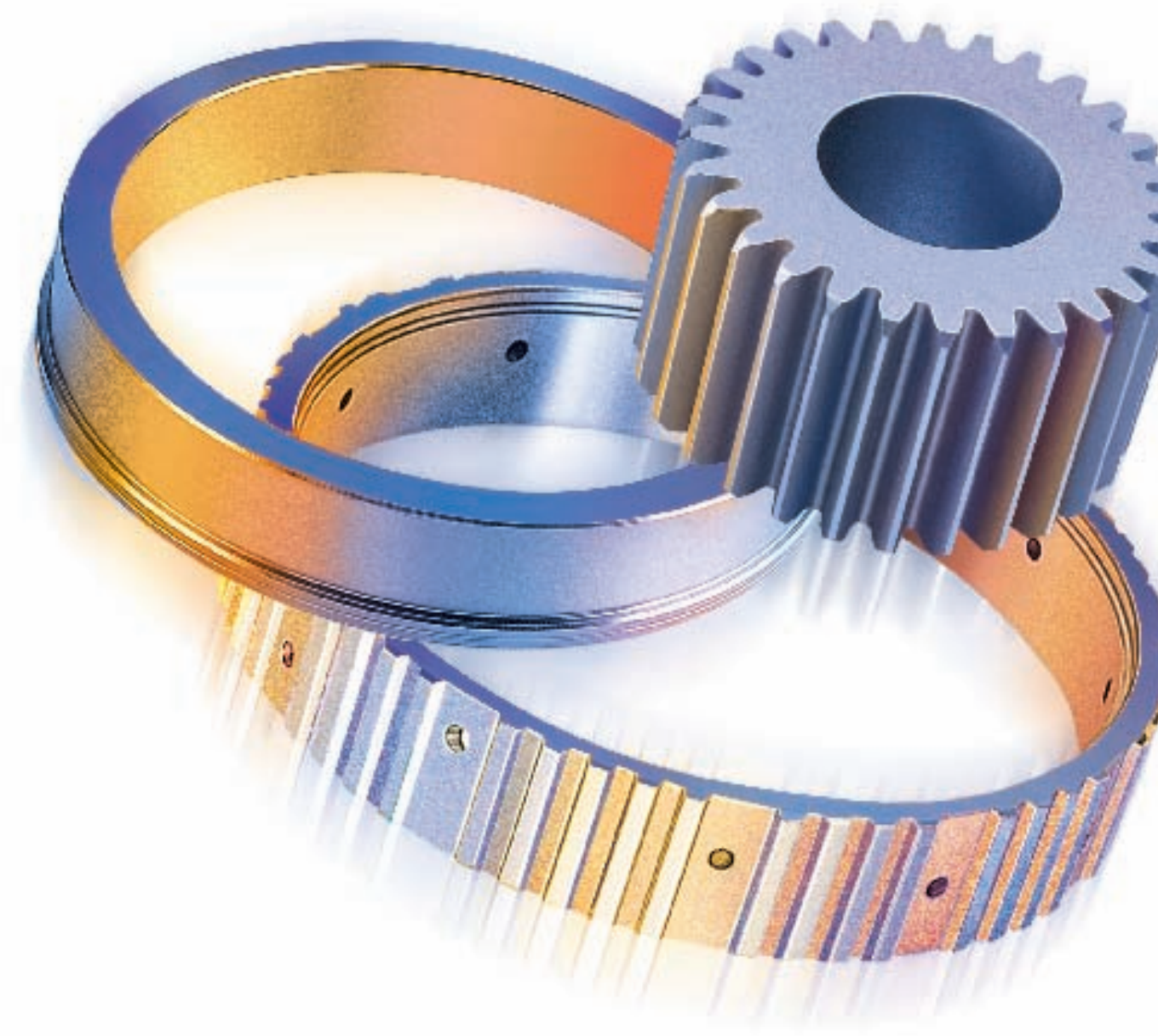
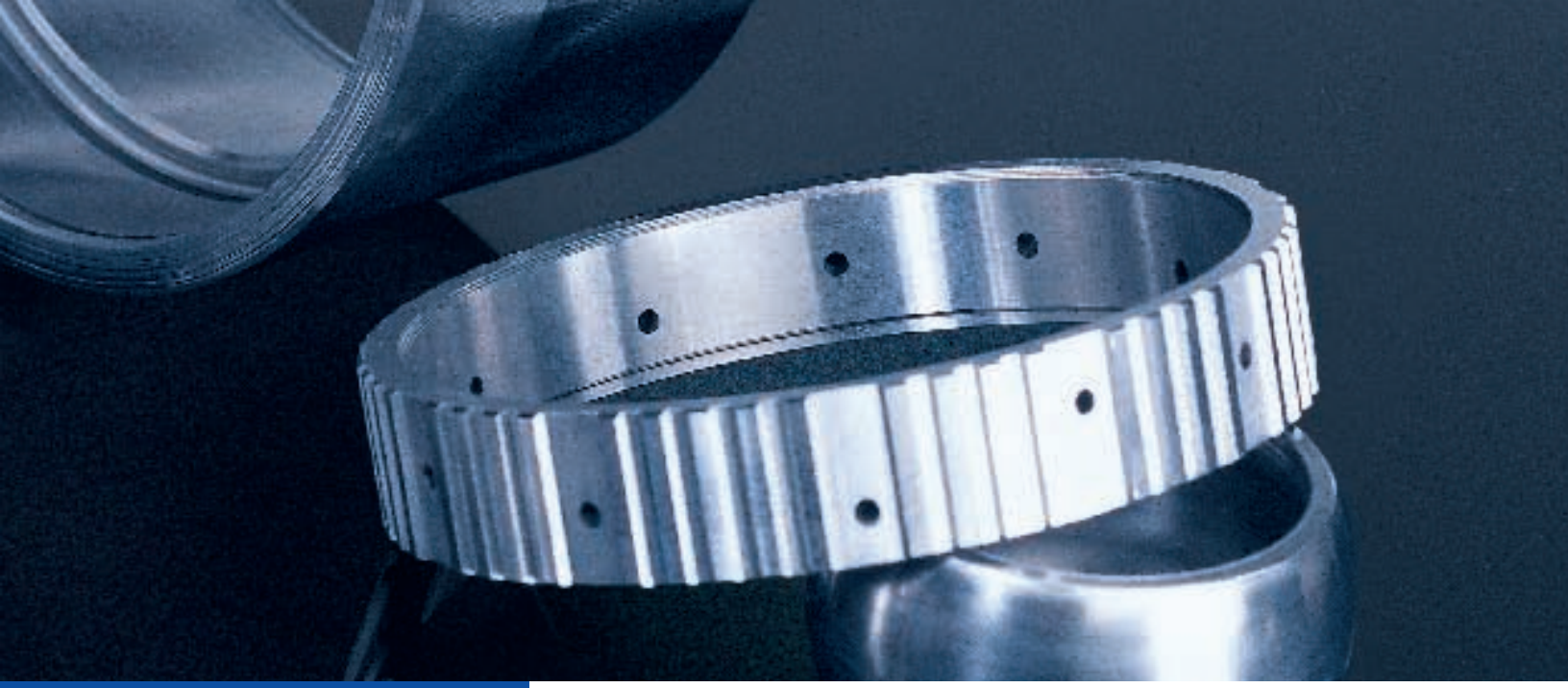
TIMKEN

precision steel components

Innovation in Motion



creating customer value



Timken® precision steel components can make a difference for you. Made from high-quality alloy or carbon steels and other metals, Timken precision steel components are designed to meet the most demanding standards and tolerances and to give you optimum performance.

The high quality of Timken steel components represents a combination of materials and manufacturing expertise gained through many years of bearing and steel production. As the world's largest manufacturer of alloy seamless mechanical tubing, The Timken Company has become a global, broad-based supplier of precision annular components. Timken supplies products for numerous automotive, bearing and industrial applications.

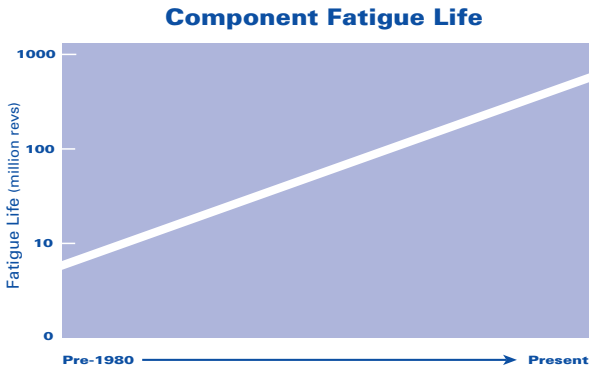
Precision components are a natural progression of the Timken product line. Our manufacturing, materials and design knowledge combine to bring you the latest innovations in power transmission applications from concept through production.

Design Expertise

Precision components are backed by material-science research and engineering support that have earned us our reputation as an industry leader. Our expertise runs much deeper than just machining to certain tolerances. As your partner, we work to specify and produce the dimensional and metallurgical properties that you need in your products.

By tailoring the composition of the steel and subsequent finishing for your application, we help you improve the quality of your end product, streamline your manufacturing operations and reduce total system costs.

Our bearing manufacturing experience has led to a fundamental understanding of product cost and performance drivers. From heat-treat distortion effects on down-stream grinding costs to surface geometry effects on application noise levels, our knowledge base spans the entire process. This enables us to leverage that experience to optimize customers' designs.



The need for power density - maximizing performance while minimizing size and weight - has driven improvements in clean steelmaking practices. Clean steel means decreased inclusion content, which results in superior performance and longer fatigue life.

Value-to-cost performance – We respond to your equipment and resource needs by providing the highest quality product in the most cost-effective manner. That means choosing the correct material and manufacturing process path that gives you the best product cost and system efficiencies.

Our own integrated manufacturing process offers competitive advantages like increased machinability and better material utilization. The flexibility of our business model also allows us to develop and manage a supply chain that best meets your needs.

Research & Development

Industry-leading research capabilities ensure the development and application of new steelmaking technologies. We partner with customers to determine the right steel selection for their application to achieve optimum fatigue life. Seamless mechanical tubing is often the material of choice.

Fatigue-resistant steels are imperative in the initial design of critical components to provide a quality base from which to build a bearing, gear or component with optimum performance. High performance means power density – creating a balanced integration of materials, manufacturing and design to deliver an end product with the highest performance in the smallest package.

You can generate savings by using Timken precision steel components. We offer you:

- Committed engineering support
- Better material utilization
- Less labor intensity
- Capital expense avoidance
- Improved quality levels
- Better utilization of plant floor space
- Elimination of material handling, inventory management and scrap removal costs
- High performance through power density

Timken brings knowledge and expertise in optimizing component performance within customers' manufacturing operations. A recent customer identified a 25 percent scrap rate of components for which Timken provided gear preforms. Timken recommended a change in steel specifications to achieve enhanced machinability that would increase tool life during broaching. This resulted in less distortion during heat treating and reduced scrap cost. As a result of the steel grade change, the customer's scrap rate dropped 78 percent, saving nearly $1 million.

Flexibility – Timken gives you flexibility. We work with you to decide the most cost-effective process – or combination of processes – to yield the best value. Our processes include:

- Sawing
- Deburring
- Chamfering
- Green machining
- Grinding
- Drilling
- Hobbing
- Shaving
- Broaching
- Milling
- Hardening
- Carburizing
- Hard turning
- Tempering
- Cold forming
- Hot forming

Improved Efficiency

Profiled rings – Our unique profile ring mill at our Columbus, North Carolina plant offers you another option to improve efficiency and reduce cost. The hot-forming process produces near-net shape annular components with the capability of total customization of steel grade, size, design and finishing.

Profiled rings save you money through higher material yield and less machining needed in your processes. Ideal for high-volume automotive, bearing and industrial applications, the process requires no inside diameter (I.D.) taper, generates no I.D. waste material and can produce complex outside diameter (O.D.) contours. For the first time in North America, you can achieve the benefits of tube manufacturing and high-speed hot forming combined into one process.

Profiled rings provide:

- Better material utilization
- Nontraditional O.D. contours
- Customized material grade and design
- Chemistry control
- Consistent as-rolled properties
- Better finishing operations

committed to quality worldwide

The Timken Company has sold precision components and preform parts since 1985. In 1993, the company formalized this business by creating the Precision Steel Components business unit and developing the breadth of capabilities needed to help customers gain increased business advantages.

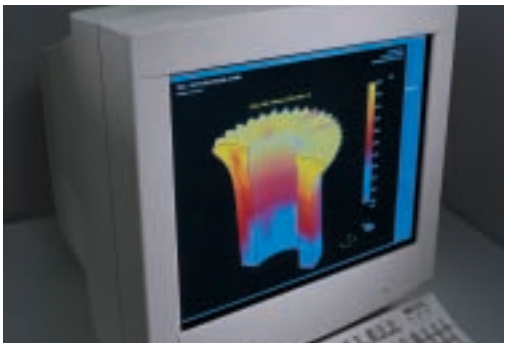
It was in 1993 that we invested in the St. Clair Precision Tubing Components Plant located in Eaton, Ohio. Then, in 1995, we opened our Tryon Peak Plant in Columbus, North Carolina. Today, our Precision Steel Components business spans the United States, Europe and South America to meet your component needs.

Our global research and development facilities ensure the use of new technologies and the expansion of our parts-making capabilities in the future. Our ongoing investment in research has resulted in a reputation of problem solving and quality product production.

The Timken Company's Precision Steel Components business offers a variety of services to customers, ranging from development of prototypes to management of inventory that supports just-in-time shipments.

Our goal is to provide you with the highest quality and most cost-effective solutions today and in the future.

Gearing Systems



Technical capabilities developed over the past 100 years have built the foundation for the Timken gearing business – an integration of materials and systems expertise to produce high-performing gearing products. Our gearing capabilities for automotive and industrial applications offer improved noise level, sound quality, power density, fatigue life and condition monitoring with greater efficiency.

***Partnering** with customers is what The Timken Company does best. When a large industrial customer let Timken expand its supplier role to manage a portion of its supply chain, the company no longer had to worry about inventory management of those components. Instead, it could now focus all of its resources on product manufacturing and delivery.*

In addition to supplying components, Timken now assumes the responsibility of ensuring that all components meet the customer's quality standards and are delivered on time. Customers trust Timken to choose and certify suppliers and as a result, save money with reduced inventory, improved quality and delivery, and fewer suppliers to manage.

The Timken Company (NYSE: TKR) is a leading international manufacturer of highly engineered bearings, alloy and specialty steels and components, as well as a provider of related products and services. The company produces more than 1.5 million tons of premium alloy steels each year and more than 30,000 different inch- and metric-based antifriction bearings. With operations in 24 countries, the company serves virtually every major industry and employs more than 19,000 people worldwide.

The Timken Company makes precision annular components to exact customer specifications. Our advanced steelmaking capabilities allow us to tailor the composition of the steel, thermal treatment and finishing to meet your needs.

For more information contact your local sales engineer, call **1-877-899-5592** or visit us at **www.timken.com**.

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10M-12-01-5 Order No. 4171

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