

# TIMKEN

## Timken Power Systems



## Supplying and Servicing the Drivetrain

# Timken Power Systems

The Timken Company, drawing on a **global pool of engineering expertise** and **technological advancements**, provides a **comprehensive suite of industrial repair, upgrade and service solutions**. When viewed as an integral part of your operations, these solutions can **reduce downtime** and your **total cost of operation**.

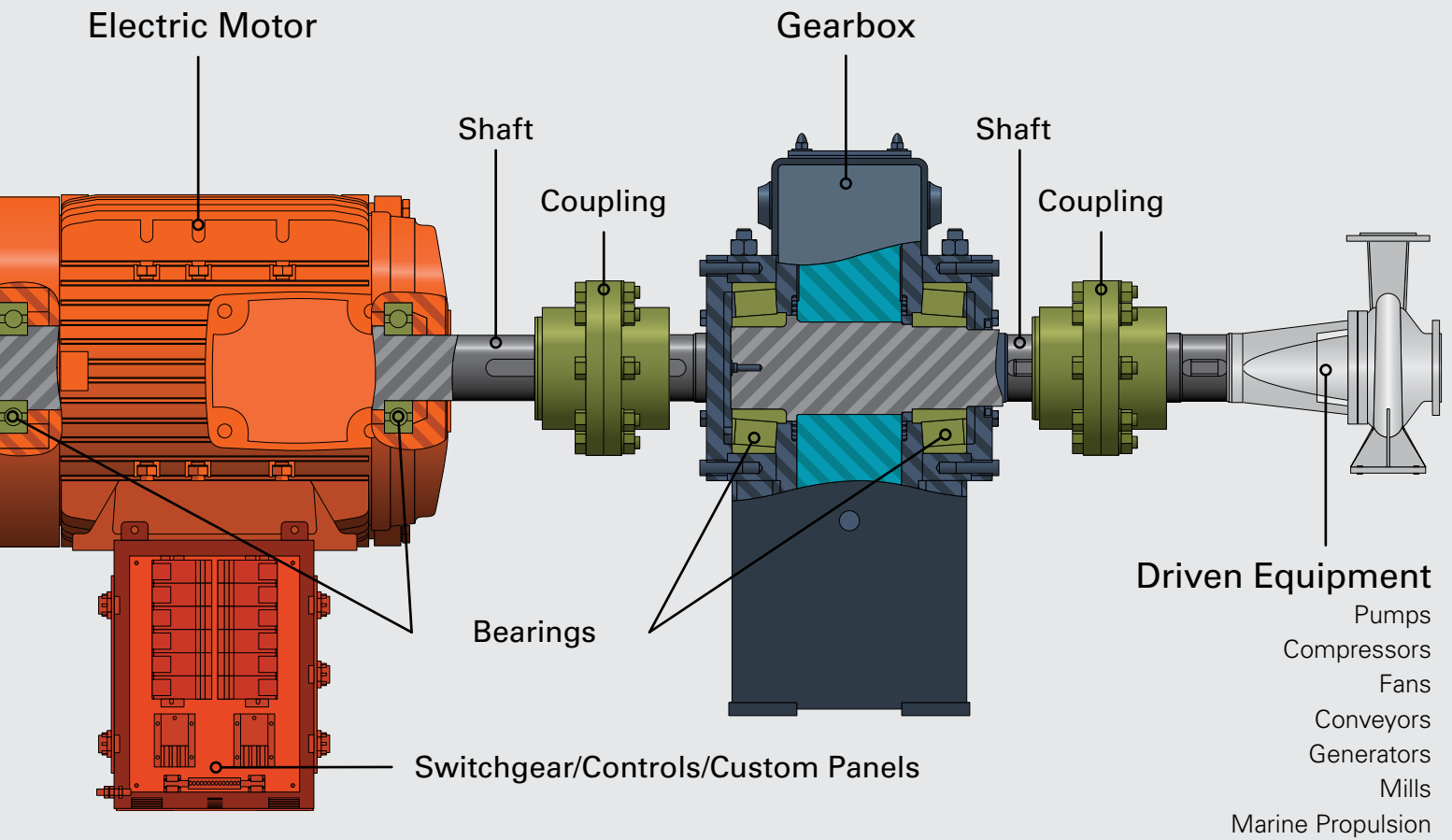
From electrical to gearbox to bearing repair solutions, **trust Timken Power Systems** to help **maximize** your powertrain and rotating equipment's **reliability** and **performance**.

## **Greater Reliability and Performance**

- Advanced Technologies
- Aggregate Cost Savings Achieved with a Comprehensive Service Partner
- Comprehensive Repair, Upgrade and Service Solutions for Industrial Powertrains
- Engineering Expertise
- In-depth Knowledge Base
- Network of Regional Service and Manufacturing Centers

## Performance. Renewed.





# The Drivetrain



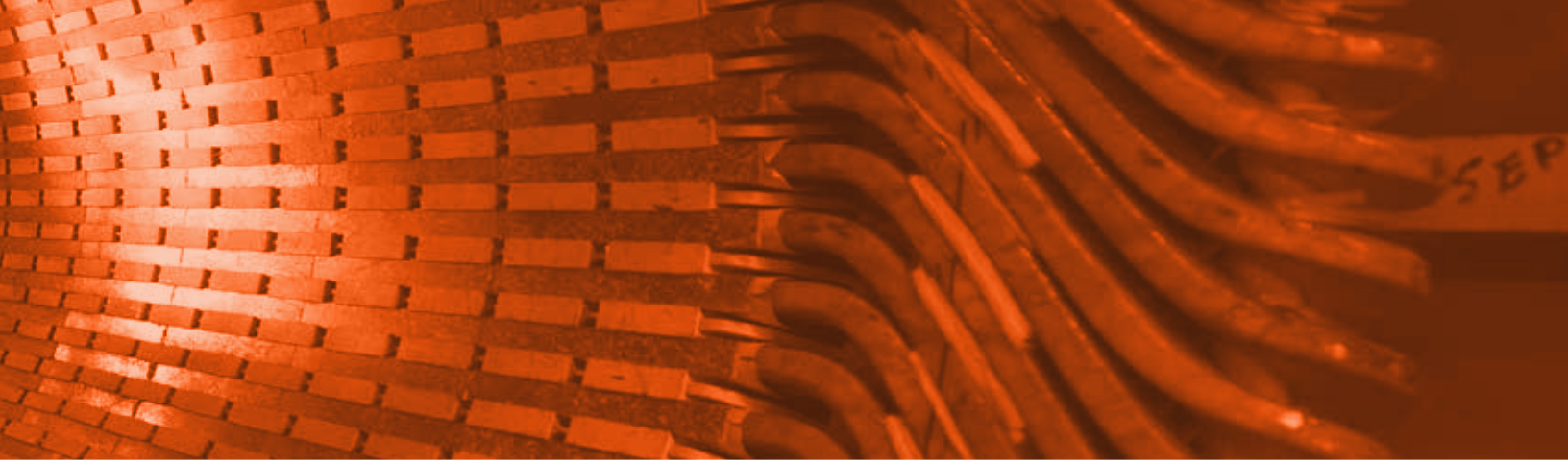
# electric motor services

Expert motor and electrical engineers use advanced diagnostics and technologies to keep motors and generators operating smoothly. On-site electrical engineers can increase equipment performance with customized design solutions.

- AC/DC Motor and Generator Repair & Rewinds
- VFD & Electronic Controls Repair
- Motor Redesigns & Custom Controls
- New Motor, Coil, Controls & Generator Sales
- Critical Spares Storage Program
- 24/7/365 Emergency Service





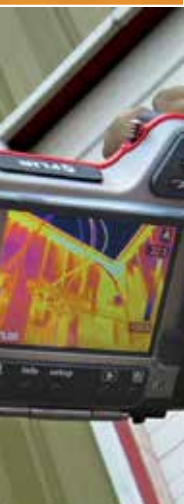


## Timken Team Climbs 3,000 Feet to Install VFD

A Rocky Mountain ski resort contacted Timken Power Systems while they were performing summer maintenance activities to prepare for the next ski season. They had a requirement for a new variable frequency drive (VFD) for a snowmaking pump station located at an elevation of approximately 11,000 feet.

The ski resort purchased the 300-horsepower drive from Timken and had it delivered by snowcat equipment while snow was still on the ground.

When the resort was closed for summer maintenance, our team installed and programmed the VFD. No roads lead to the ski slope, so the two-man team climbed 3,000 feet with the tools, fixtures and rigging equipment necessary to perform the installation, start-up and programming.



# gear repair services

The gear repair services team, with unparalleled knowledge of engineering and precision manufacturing, is ready to handle the toughest repair challenges in the most demanding industries.

- Expert in All Gearing Types and Applications
- On-site Assistance 24/7/365
- New & Replacement Gear Drives
- In-Place Overhauls
- Reverse Engineering and Upgrading
- Inspections, Repairs and Upgrades
- Parts Manufactured to OEM Specs
- Earned ISO 9001:2008 Quality Management System Certification





## OTS Team Repairs Turbine Ahead of Schedule

A power plant in the Northeast region of the United States developed an oil leak on the accessory drive inside one of its Frame-6 turbine compartments. Because of the turbulence inside the compartment when the turbine was running, it was impossible to determine the exact location of the leak.

During a scheduled 14-day outage, the Onsite Technical Services (OTS) team was charged with identifying and fixing the leak, changing out all the bearings and seals, and machining shaft journals as appropriate to ensure the seals were seated as designed.

Eight days later, and six days ahead of schedule, the OTS team finished its work, documented the “as found” and “as left” conditions of the equipment, then waited for the plant staff to bring the unit back online for testing. The turbine was run at full speed and the compartment remained dry, eliminating both the operational and safety concerns the leak had been causing.







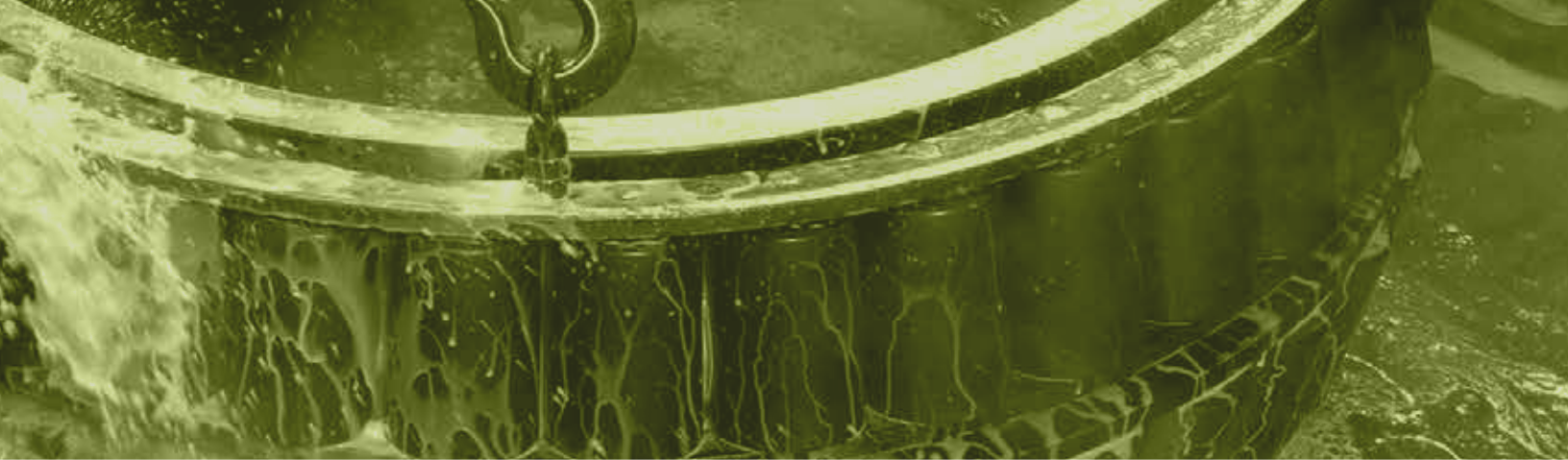
# bearing repair services

The bearing remanufacturing program provides customers with the best service options available, returning bearings to like-new specifications for less time and money than purchasing new.

- Any Bearing Type, Any Manufacturer
- Size Ranges 254 to 6069 mm (10 to 204 in.)
- Reduced Lifecycle Cost
- On-Site Inspection
- Repair Transportation and Logistics
- Expedited Lead Times
- Earned ISO 9001:2008 Quality Management System Certification







## Bearing Repair Quickly Returns Mill to Service

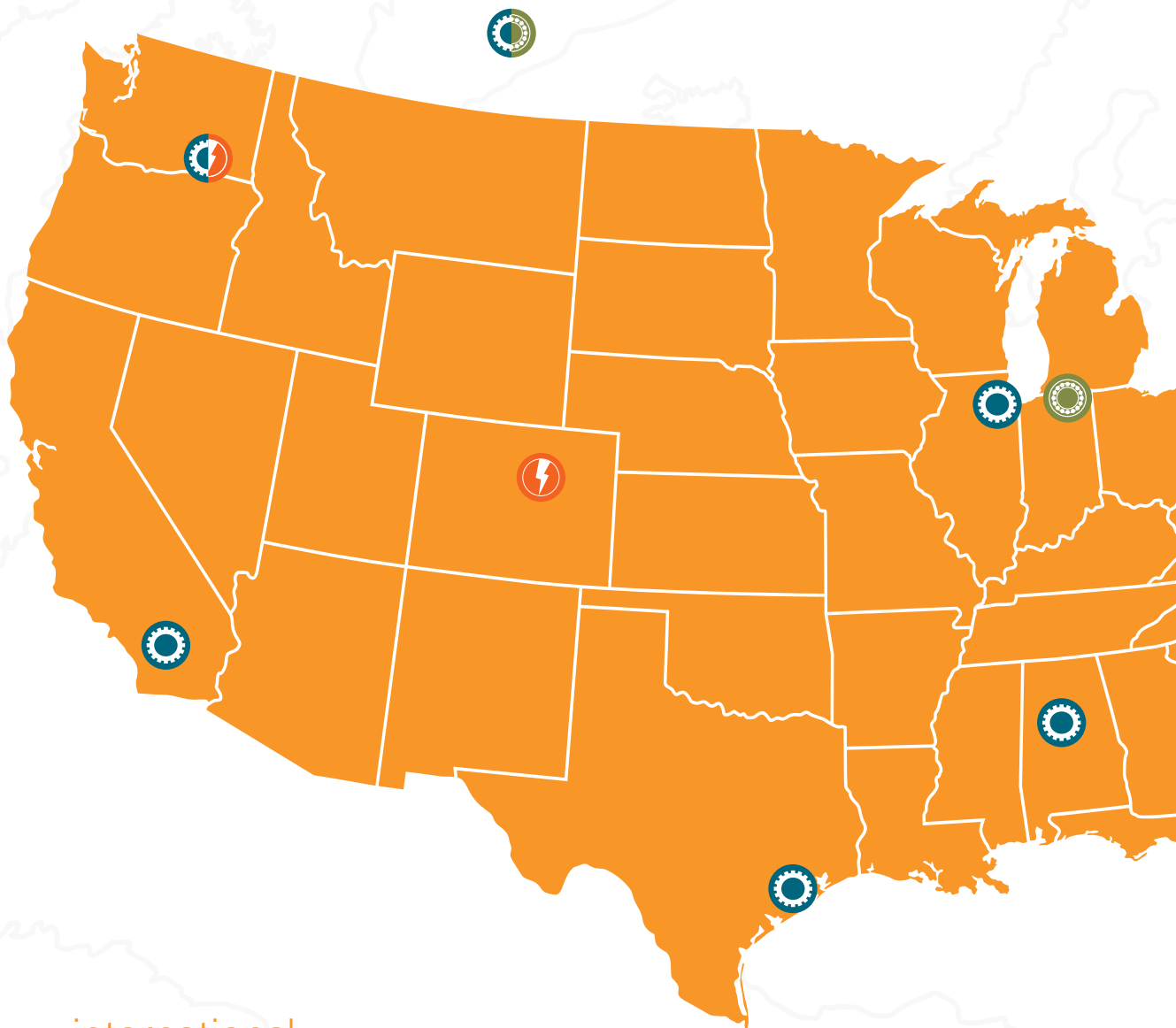
A cement plant in the Midwest lost 30 percent of its production when a roll press went down unexpectedly. Timken identified the problem – a damaged double-row, spherical roller bearing and housing. The components were removed from the roll press and repairs completed at a Timken reconditioning facility. Service engineers were back on-site to assist with the installation of the repaired components, and the roll press was operational in a fraction of the time it would have taken for new components.

“Timken has the most reliable field services any mill could ask for,” said the maintenance supervisor. “From the sales representative to the engineers, they supported our mill through the situation to restore the unit to full operation. I know their service is excellent because there was a true partnership to provide the custom solution for our mill.”



local service.  
national support. global expertise.

north america



international

germany



romania



south africa



india



china



# regional service and manufacturing centers



## Electric

H&N Electric  
Pasco, WA / 800-795-3537

Maine Industrial Repair Services  
Augusta, ME / 207-623-7500

Schulz Electric  
New Haven, CT / 203-562-5811

Smith Services  
Princeton, WV / 304-431-2446

Stultz Electric Motor & Controls  
Portland, ME / 207-699-2501

Wazee Electric  
Denver, CO / 800-299-8658



## Gear

Main Office and Technical Center  
King of Prussia, PA / 800-766-5120

Canada Service Center  
Saskatoon, SK. Canada S7K / 800-329-4327

Gulf Coast US Service Center  
Houston, TX / 800-874-0270

H&N Electric  
Pasco, WA / 800-795-3537

Midwest US Service Center  
Mokena, IL / 800-833-4429

Northeast US Service Center  
New Castle, DE / 800-388-1824

Smith Services  
Princeton, WV / 304-431-2446

Southeast US Service Center  
Hueytown, AL / 888-742-2476

Western US Service Center  
Santa Fe Springs, CA / 800-605-1002



## Bearing

Canada Service Center  
Saskatoon, SK. Canada S7K / 800-329-4327

Carolina Service Center  
Union, SC 29379 / 864-424-1601

Indiana Service Center  
Mishawaka, IN / 574-288-7188

## industries served

Aerospace  
Aggregate  
Agriculture  
Cement  
Chemical  
Defense  
Food Processing  
Heavy Industry  
Manufacturing  
Marine  
Mining  
Nuclear  
Oil & Gas  
Power Generation  
Pulp & Paper  
Steel & Metals  
Transportation  
Wind





# Timken Brands



Philadelphia Gear offers expertise in power transmission. Solutions include a full-range of services for Onsite Technical Services - OTS; inspect, repair and upgrade capabilities, renewal parts and new enclosed drives.



Standard Machine supplies solutions to natural resource and manufacturing industries. Capabilities cover design and manufacture of quality parts including mechanical power transmission drives and complete gearbox repair.



Electric motor repair and field technical services to end-users are available through Smith Services. Markets served include power generation, petrochemical, paper, steel, nuclear and mining.



Wazee and H&N Electric service electric motors and generators; offering diversified services including motor rewind, generator rebuilds, electric controls, and uptower wind maintenance and repair.



Schulz Electric, Maine Industrial Repair Services, and Stultz Electric Motor & Controls, provide high quality electric motor repair, generator rewinds and control services. The business also serves nuclear power, hydro and fossil fuel, water management, paper and general manufacturing sector customers.

## TIMKEN

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 mechanical components, including bearings, gears, chain and related mechanical power transmission products and services.

Stronger. **Commitment.** Stronger. **Value.** Stronger. **Worldwide.** Stronger. **Together.** | Stronger. **By Design.**

[www.timken.com](http://www.timken.com)