**Gearboxes** 





# Market Gearboxes

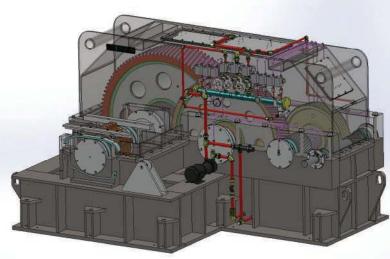




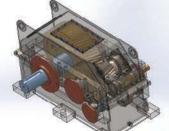


Whether you need a single replacement gear, a set of gears, or a complete gearbox, you need Xtek's expertise in the design and manufacturing of those gears. Our experienced engineers use the latest engineering software to evaluate and design custom gearing for your application. Couple this with our metallurgical and manufacturing experience of over 100 years, add in quality that is unparalleled, and you get Xtek gearing and gearboxes.













### **Engineering**

Xtek manufactures new, high quality, custom engineered industrial gearboxes. We specialize in reconditioning gearboxes, which includes offering our customers material and design options to upgrade the capability of their gearboxes.

Every Xtek gearbox is designed in accordance with AGMA (American Gear Manufacturers Association) and AIST (Association for Iron and Steel Technology) specifications. Our engineers participate on committees that shape standards and define the best practices for manufacturing or reconditioning gearboxes.

We utilize state of the art engineering tools to model and evaluate each gearbox that we process. Xtek employs a team of experienced mechanical, manufacturing and metallurgical engineers that allow us to be your complete gearbox solution company.



### **Heat Treatment**

Requirements for increased productivity are common and require a fresh look at your gearbox requirements. Xtek specializes in improving gearbox performance by evaluating the material and heat-treatment of the entire drive train. The Xtek Tool Steel Process (TSP) is a special in-house heat treating process that significantly improves the strength and durability of your gearing, thus greatly improving the load capability of your gearbox. Xtek has the ability to make material and heat-treat recommendations based on specific problems you may be experiencing and the application. This is what Xtek has provided our customers for over 100 years!



### **Additional Services**

- Reverse engineering
- Gear rating analysis
- Shaft analysis
- Bearing analysis
- Root cause analysis
- On-site engineering support
- DriveWatch™ Mill Monitoring System









### **Gearbox**Reconditioning Services

Many shops can disassemble and reassemble an industrial gearbox and call it Gearbox Repair. However, few can do it with the resources and quality that Xtek provides. No matter the original equipment manufacturer or whether or not drawings are available; our service engineers will evaluate each mechanical component of the gearbox and provide a complete analysis and gearbox repair plan.

From failure analysis (FEA) to reverse engineering, from on-site gear inspections to installation support, our service engineering team will work with you to not only repair, but to improve the performance of your gearboxes.

Xtek dedicated service facilities are located in Cincinnati, Ohio and Hammond, Indiana. These facilities are supported by inhouse gear manufacturing and heat treating. Xtek provides 24 hour emergency service to our customers by simply calling **513.733.7984**.

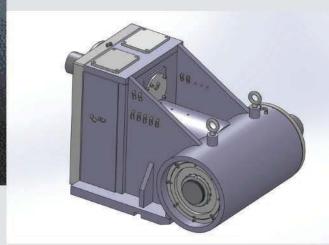
Our focus is on industrial gearboxes weighing from 1,000 to 100,000 pounds and operating at speeds of 1800 RPM or less. We service and repair all types of gearboxes (spur, helical, herringbone, bevel and worm).

### **Reconditioning Procedure**

- Photograph upon receipt
- Disassemble complete
- Perform inspections
  - Dimensional
  - Photogammetry
  - Wet magnetic particle (on-site certified inspectors)
  - Hardness
- Detailed inspection report including:
  - Upgrade options
  - Engineering analysis
- All components to be manufactured or repaired on-site, to include heat-treatment
- Assembly and final inspection to include the following:
  - Record bearing end play, gear backlash and gear contact pattern
  - Perform no-load run test monitor bearing temperatures, vibration and gear noise
- Paint per customer specifications
- Prepare for shipment



Before Reconditioning



Engineering Drawing



After Reconditioning

## **Xtek:** A Trusted World Leader in Heavy Industry Components for Over 100 Years.



### **Rope Drums**

- · Hardened to 60 Rc.
- Case depth of .100-.150"
- Solid through shaft
- · New and reconditioned

### Gear Spindle Couplings & Universal Joints

- · World leader in couplings
- All driveshaft products are custom designed for your application
- All wear components TSP carburized to 58-62 Hrc
- · Reconditioning specialists



### Hardened Steel Wheels & Wheel Assemblies

- Xtek crane, brake and sheave wheels are the industry's longest lasting wheel products
- Proprietary heat treatment provides industry's best performing wheels
- Emergency breakdown services available



### Below-the-hook Lifting Products

- Design & manufacturing of heavy duty lifting equipment
- Multiple options for handling coil, slab, sheet, ingot, tube and specialty products
- Licensed, professional engineers on staff
- · Lifter inspection services
- Repair and retrofitting of all lifter brands



**Solutions in Motion** 

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