Power Transmission Group

Universal Driveshaft Technology
for Heavy Duty Industrial Applications
Our Experience

We use lessons learned from 100+ years of experience to embrace the increasingly complex, fast-paced manufacturing world of today.

Our vision of the marketplace is that never before has full service capability been as necessary as it is today. Xtek realizes that you have choices of suppliers and levels of service and it is our conviction that Xtek’s brand of full services is best aligned to serve your needs.

Xtek’s deep knowledge of heavy duty industrial products means we are well positioned to rapidly respond to customer needs while seeking to identify problems in advance, offering solid solutions to improve operating performance.

Xtek Quality

*Designed to Perform….Built to Last.*

Xtek’s continuing success can be attributed to their ability to execute with every application, every universal joint, every day. This is what provides value to our customers well beyond the sale. Partnering with customers and knowing their expectations are the keys to proper execution. The Xtek Power Transmission Group sales, technical and operations groups work as a team, performing to ISO-9001 standards of quality, to find solutions that exceed these expectations and build lasting relationships with their customers. This partnering has become the basis of the compelling value proposition that distinguishes Xtek from its competition.
U-Joint Features

Demanding operating conditions require the best in design, metallurgy and manufacturing. Xtek universal drive shafts and components are manufactured from the highest quality alloy steels and heat treated in our own furnaces to deliver extended wear with exceptional performance. Closed Eye, Split Eye & Block Type sizes are available from 220-800 mm. Most sizes are outfitted with our exclusive four-lip cup sealing design which provides an extra measure of protection with regard to preventing leakage and contamination.

Four-point lubrication is standard to provide adequate lube to all four bearings. A variety of flange connections; face key, integral face pad, welded and hirth serration are available. For telescoping applications, take advantage of Xtek’s internal manufacturing capabilities which allow us to supply long travel (slip) requirements.

Past the sale, Xtek will support all applications with a balance of inventory and repair services dedicated to supporting a customers needs.
Cross & Bearing Kit Design

Xtek cross and bearing kits are designed and manufactured to handle the loads and operating conditions in a variety of heavy duty industrial applications. Our crosses are made from carburized and heat treated alloy steel while all crown rollers are made from 52100 steel and hardened to 62-65 HRC. All crosses are outfitted with four separate lube points to ensure proper lubrication to all bearing cups and rollers for smooth, trouble-free operation. Our multi-lip bearing cup sealing system eliminates the normal problems associated with leakage and contamination and most sizes are outfitted with our 4-lip configuration.

Flange Connections

Xtek offers four standard flange connections; Face Key, Integral Face Pad, Welded and Hirth Serration. We will carefully consider the operating requirements of each and every application allowing us the ability to offer the best possible flange connection designed to maximize your operating performance.

Yoke Design

The Xtek one piece, closed eye design is made with a reliable and robust yoke manufactured from specialty heat treated alloy steel. Our one piece yoke has the advantage of no maintenance to verify if bolted connections have loosened and the elimination of precision matching of components.
Roll end casings are a critical link in the power transmission line of heavy duty industrial applications. The durability of the casing is a function of metallurgy, geometry and application with casing wear being inversely proportional to the hardness level of the casing spade bore.

Xtek offers our integral spade TSP roll end casing featuring a deep, case hardened spade bore which is finished to specified tolerances, keeping roll neck clearances to a minimum. All material is carefully chosen to provide the best case and sub-surface qualities for the application. The opening of each casing spade bore has a large chamfer to aid in the roll insertion during roll change.

While we offer alternate designs (see opposite) our TSP one piece casing provides a stronger, more reliable casing than casings with wear pads. The TPS process equates to longer life and reduced downtime...both of which improve operating efficiency.

When giving consideration to the selection of a roll end casing, the following factors should always be considered:

- Hardness
- Cycles
- Case Depth
- Load – Contact Stress
- Surface Finish
- Pilot Stabilizing Configuration
- Operating Environment
- Roll Neck / Casing Bore Configuration

Xtek’s TSP process offers the best combination of surface hardness, case depth and surface finish which provide the longest life for casing bores.

Xtek’s TSP Advantage
Roll End Casing Design Options

Integral Spade Bore Casings with Replaceable Pilot Rings (optional)

Casings with Replaceable Keys and Pilots Rings (optional)

Casing with a Detent Assembly
Xtek is dedicated to customer service. Our technical excellence with attention to detail on new universal joint driveshaft assemblies carries through to our reconditioning and service programs. Allow our team of experienced engineers, metallurgists, machinists, assembly technicians and inspectors to enhance the operating performance of your universal drive shaft in one of the world's largest and most modern reconditioning facilities. We invite you to take advantage of our employee's knowledge base, inventory systems and flexible manufacturing processes to find solutions that exceed your expectations.

**Special Designs**

Xtek provides engineering solutions for specially designed unique applications. Our closed eye (one piece yoke) design includes features such as angled bolts and “pockets” under the ears of the yoke, both of which make assembly and disassembly much easier and faster to accomplish.

**Reconditioning & Service**

Xtek is dedicated to customer service. Our technical excellence with attention to detail on new universal joint driveshaft assemblies carries through to our reconditioning and service programs. Allow our team of experienced engineers, metallurgists, machinists, assembly technicians and inspectors to enhance the operating performance of your universal drive shaft in one of the world's largest and most modern reconditioning facilities. We invite you to take advantage of our employee's knowledge base, inventory systems and flexible manufacturing processes to find solutions that exceed your expectations.
Note: Special designs are identified by the letter “X” at the end of the size number (XT 48-89 X). Examples of special designs include:

- Fixed
- Compact Double Flange Type
- Oversized Tube
- Custom Flange
- Short Coupled
- Greater Deflection Angle
- Hole Type Yoke
- Long Slip
## Universal Joint Driveshaft XT Series Heavy Duty

### Torque Ratings

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### Standard Dimensions

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<th>XT 68-68</th>
<th>XT 70-70</th>
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### Part Number Designation: Example XT 22-20

- XT = Xtek Torque Series
- 22 = Flange Diameter (Øa)
- 20 = Tight Joint Swing (Øs)
Power Transmission Group
- Geared Spindle Couplings
- Universal Joints
- Main Mill Drives & Mill Pinions
- Lubrication
- DriveWatch™ - On Line Power Train Monitoring System

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