

Block-Type
Universal
Joint Rebuild
and Repair
Service



# AMERIDRIVES... A LEGACY OF LEADERSHIP

For more than 90 years, Ameridrives has been an industry leader in the supply of flexible power transmission gear couplings and spindles for the most critical and demanding applications. Ameridrives began manufacturing industrial universal joints in 1978 and quickly became the North American market leader.

Today, we pride ourselves on being able to offer one of the most comprehensive lines of universal joints in the industry. We are the only American manufacturer of large universal joints up to 1300 mm in diameter with local sales and engineering support along with a comprehensive rebuild and repair program.

# NORTH AMERICAN MILL OPERATORS CAN SIGNIFICANTLY REDUCE DOWNTIME AND COSTS WITH SERIES 7000 **BLOCK-TYPE U-JOINT REBUILD AND RETROFIT SERVICES** BY AMERIDRIVES, AVAILABLE IN THE U.S.

Now, mills in North America can save time and money since they no longer need to wait for months while they ship their block-type U-joints to an overseas manufacturer for rebuild and repair services.

The major competitor U-Joint design utilizes bolts to connect the bearing blocks to the shaft. Unfortunately, after only a few years of service, the bolts start to come loose under high mill torque loads causing the U-joints to fail.

North American mill operators, with an eye on increasing output while reducing costs, can now send their damaged competitor block-type U-joints directly to our Ameridrives facility in Erie, Pennsylvania.

Our complete block-type (Series 7000) U-Joint repair and rebuild service options include:

- Service sizes 315 mm to 600 mm
- Manufacturing and installing completely new blocks on existing customer shafts with no modifications to the existing shaft.
- Manufacturing entirely new dimensional drop-in replacement U-Joints, utilizing Ameridrives mill-proven cross and bearing design vs. competitor's bolt system.

Reduced shipping costs combined with reduced lead times and rebuild costs is a win/win for North American mills.



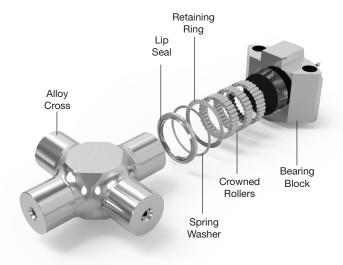
Damage due to bolts coming loose on competitor block-type U-Joint.

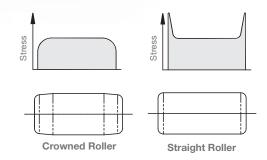




www.ameridrives.com P-8858-AC 9/20

# AMERIDRIVES MILL-PROVEN CROSS AND BEARING DESIGN





Inner Bearing Race – Replaceable inner bearing race manufactured from bearing steel fits over forged alloy cross in select sizes. This design provides long bearing life and permits for economical replacement of bearing assemblies.

**Radius Shoulder Trunnions** – Shoulder has generous radius at base of cross trunnion to reduce stress concentrations.

**Double-Lip Seal** – Abrasion resistant multi-lip extruder type seals to insure integrity of the bearing lube reservoir. 4 Point lubrication with lube fittings on each bearing housing.

**Thrust Bearings** – Each cap has a filled nylon compound thrust washer to prevent steel on steel contact of the trunnion to minimize friction and prevent galling under heavy loads. Filled nylon thrust bearings automatically adjust themselves to compensate for minor deflections.

**Crowned Rollers** – Eliminates stress concentrations at the ends of the rollers. The reduction in stress contributes significantly to increased bearing (B10) life. Three rows of rollers are used to distribute load over length of trunnion.

**Zero Clearance Assembly** – Cross and bearing assembled for zero radial clearance for optimum thrust and radial bearing performance and elimination of radial whirl associated with vibrations.

**Contoured Bearing Caps** – Allows for longer cross journals for increased torque and bearing capacity.

**Flanges** – Commonly supplied with face pad or hirth flanges to provide a backlash free connection capable of transmitting high torques.

# AMERIDRIVES PROVIDES TOTAL REBUILD AND RETROFIT SERVICES

Comprehensive services include the inspection, remanufacturing and repair of all original equipment manufacturers' shafts, spline sections, yokes, flanges, knuckles and journal cross assemblies.

## **Ameridrives is capable of repairing:**

Koyo® • Maina • Voith® • Najico™ • GWB™ • Morgan Koelling

## **Total services offered include:**

**Engineering** Ameridrives is a true OEM of a complete line of Universal Joint parts, so we can offer full engineering services to address all your application needs and improve performance

**Repair Program** We become your partner to maximize your driveshaft life and performance. Detailed inspection and repair reports let you know exactly what options you have. Comprehensive programs will help reduce overall costs and reduce unnecessary downtime.

**Inspection** Evaluate the condition of the gears, shafts, bearings and seals during a visual and dimensional inspection.

**Bearing Replacement** Capable of replacing other manufacturer's bearings with interchangeable components or retrofitting with a standard Ameridrives bearing assembly package.

**Yoke Repair** Restore quality of yoke to "Like New" for various OEM yokes.

**Spline Repair** Fix minor gouges and cracks along length of spline as well as the cap ability to replace completely damaged spline sections.

**Welding** Re-weld existing flanges, shafts and yokes on any number of reusable pieces of equipment.

**Non Destructive Testing** Mag penetrant testing for cracks in the yoke, flange, journal cross and spline.

**Painting** Complete painting of the shaft and joint assembly in any color the user requests.

**Lubrication** Routine lubrication for shipping and storage (priming) as well as full lubrication for immediate use.

**Training Seminars** Covers all phases of repair and rebuild in a hands-on program: inspection, teardown, reassembly and testing.

# Expedited and emergency service available from our OEM stock and manufacturing capability

## QUALITY ASSURANCE

From inspection and teardown to reassembly and complete unit testing, each step is planned and executed within the requirements of our Quality Management System.

# Rebuilt Ameridrives units include a "Factory New" warranty

P-8858-AC 9/20 www.ameridrives.com

#### **Ameridrives Facilities**

#### **North America**

1802 Pittsburgh Avenue Erie, PA 16502 - USA 814-480-5000

Mill Spindles, Ameriflex, Ameridisc, Universal Joints, Driveshafts, Mill Gear Couplings

2000 Clovis Barker Road San Marcos, TX 78666 - USA 888-449-9439

Gear Couplings, Small Industrial Driveshafts

300 Indiana Highway 212 Michigan City, IN 46360 219-874-5248 Irrigation Universal Driveshafts

#### The Brands of Altra Motion

### Couplings

Ameridrives www.ameridrives.com

**Bibby Turboflex** www.bibbyturboflex.com

**Guardian Couplings** 

www.guardiancouplings.com

www.huco.com

**Lamiflex Couplings** www.lamiflexcouplings.com

Stromag

www.stromag.com

TB Wood's www.thwoods.com

**Linear Systems** 

Thomson

www.thomsonlinear.com

**Geared Cam Limit Switches** 

Stromag

www.stromag.com

**Engineered Bearing Assemblies** 

Kilian

www.kilianbearings.com

**Electric Clutches & Brakes** 

Matrix

www.matrix-international.com

Stromag www.stromag.com

Warner Electric

www.warnerelectric.com

**Belted Drives** 

TB Wood's www.tbwoods.com **Heavy Duty Clutches & Brakes** 

Twiflex www.twiflex.com

Stromag

www.stromag.com

**Svendborg Brakes** www.svendborg-brakes.com

Wichita Clutch

www.wichitaclutch.com

#### **Gearing & Specialty Components**

**Bauer Gear Motor** 

www.bauergears.com

Boston Gear

www.bostongear.com

Delevan www.delevan.com

Delroyd Worm Gear

www.delrovd.com

Nuttall Gear

www.nuttallgear.com

**Engine Braking Systems** 

Jacobs Vehicle Systems

www.jacobsvehiclesystems.com

**Precision Motors & Automation** 

Kollmorgen

www.kollmorgen.com

**Miniature Motors** 

Portescap

www.portescap.com

**Overrunning Clutches** 

Formsprag Clutch

Marland Clutch

Stieber

www.stieberclutch.com

Neither the accuracy nor completeness of the information contained in this publication is guaranteed by the company and may be subject to change in its sole discretion. The operating and performance characteristics of these products may vary depending on the application, installation, operating conditions and environmental factors. The company's terms and conditions of sale can be viewed at http://www.altramotion.com/terms-and-conditions/sales-terms-and-conditions. These terms and conditions apply to any person who may buy, acquire or use a product referred to herein, including any person who buys from a licensed distributor of these branded products.

©2020 by Ameridrives LLC. All rights reserved. All trademarks in this publication are the sole and exclusive property of Ameridrives LLC or one of its affiliated companies.

Koyo® is a registered trademark of JTEKT Corporation Voith® is a registered trademark of Voith GmbH & Co. KGaA GBW™ is a registered trademark of Spicer Gelenkwellenbau GmbH; Dana Inc. najico<sup>™</sup> is a registered trademark of Nakamura Jico Co.,Ltd. Morgan Koelling is a brand of Morgan Construction Co.



www.amerdrives.com P-8858-AC 9/20