

*Ameridrives*

*Boston Gear*

*Kilian*

*Matrix*

*Nuttall Gear*

*TB Wood's*

*Warner Electric*

*Warner Linear*

*Wichita Clutch*

# Power Transmission Solutions for the Road and Bridge Construction Industry



## THE INDUSTRY LEADING BRAND NAMES OF ALTRA INDUSTRIAL MOTION OFFER POWER TRANSMISSION SOLUTIONS FOR A WIDE VARIETY OF CONSTRUCTION APPLICATIONS

While applications vary widely, equipment in the road and bridge construction sector is built for specific commercial work, typically used in harsh environments, resulting in specialized machines that are custom-designed. Altra Industrial Motion provides precision engineered components to support the critical needs of OEMs and end-users in construction equipment, heavy-duty truck, mobile signs & lights, and mobile lift & crane industries. Where reliability of power transmission components



### Couplings and U-Joints

**Ameridrives & TB Wood's**

**Form-Flex®** metal disc couplings consist of two hubs, a spacer and two high strength carbon or stainless steel flexible discs. Available in carbon steel, stainless steel or with corrosion resistant coatings. No maintenance required. Torque up to 270 kNm; 2,400,000 in.lbs.

**Turboflex GC®** couplings feature unitized, straight-sided flexible discs for ease of installation. These couplings provide increased torque capacity per size by taking advantage of the latest materials and design technologies. Torque up to 180 kNm; 1,600,000 in.lbs.

**Americardan®** U-joints are designed for operation at high misalignment angles up to 15°. Bearing and seal design resists lubrication loss and contamination. Ideal for use in severe atmospheric conditions. One-piece, yoke and bearing housing construction. Units provide a high degree of strength with minimum distortion under load. Round bearing and wing style designs are available. Torque up to 4,800 kNm; 42,450,000 in.lbs.

**Amerigear** couplings feature fully-crowned gear teeth which provide maximum load-carrying capacity with minimum size, maximum reliability and long life. Both "O" ring and metal seal models are available. Units also feature a strong, rigid floating sleeve, precision-machined identical hubs, and positive dust-tight seals.

**SM Series** gear spindles are designed for medium to high torque applications which require rugged strength. Units can operate at high misalignment angles. Advanced gear design increases torque capacity for a given diameter. Models feature fully crowned hub gear teeth and one-piece, molded lip-type seals. Torque up to 7,350 kNm; 65,000,000 in.lbs.



### Clutches & Brakes

**Warner Electric & Matrix**

**SAE "Bolt-On"** brakes are spring-applied, hydraulically released multi-disc brakes with industry standard SAE A, B, C, and D input and output flanges enabling these brakes to be 'bolted on' to a wide variety of applications. Fully enclosed brakes are suitable for harsh working environments and are available in wet and dry versions with static torque ranging from 50 to 1600 Nm; 500 to 14,000 in.lbs.

**Fractional HP** packaged SFP Clutches, Electro Clutches, and Electro Brakes feature precision centered sleeve and ball bearings designed for long life in heavy use conditions. Zero-backlash armature assemblies provide a spring release for reliable and precise disengagement. Torque range from 16 to 465 lb.ft.

**1EB Series** are spring-applied, electromagnetically released multi-plate brakes. Models available with torque ratings from 1 to 4425 in.lbs. (0.1 to 500 Nm) and diameters from 0.86 in. (22mm). Coil Voltages from 6 to 240 VDC.

**ERD Series** line of electrically-released, dynamic, spring-set brakes offers a high-performance, cost-effective solution for power-off load holding applications. Designed for dry environments where a severe and dependable braking action is required. Torque range from 4 to 220 lb.ft.

is important to avoid costly downtime and maximize operational efficiency, many of the world's largest OEM's choose the proven products and innovative engineering support offered by Altra brands such as Ameridrives, Wichita Clutch, TB Wood's, Boston Gear, Warner Electric, Warner Linear, Matrix, Nuttall Gear, and others.



**Gearing**  
*Boston Gear & Nuttall Gear*

**800 Series** helical reducers contain a focused selection of compact, heavy duty helical gear drives that offer long-life performance and simplified maintenance.

**Open Gearing** including thousands of spur, helical, miter, bevel, worms and worm gears, are available for immediate shipment. Custom gears can be designed and manufactured to the strictest standards for the highest quality.

**TDS Reducers** are designed for heavy duty applications such as moveable bridge drives. Units feature hardened, precision helical gearing, cast iron housings, and tapered roll bearings. Torque ratings up to 6,000,000 in.lbs. and gear ratios up to 1500:1. Custom engineered drives can be designed to meet specific application requirements.



**Sheaves**  
*TB Wood's*

**Variable Pitch V-Belt Drives** feature all cast iron construction with capacities from fractional to over 600 HP. Drives will not freeze or stick and allow for easy, accurate speed changes. Utilizes light duty, classical and narrow V-belts.

**Classic and Narrow V-Belt Drives** are carefully engineered to assure maximum performance over a long life span. Units are constructed of fine grain, high tensile cast iron. Capacities up to 600 HP from stock, even higher HP with special belts, sheaves, and materials. Bore sizes from 1/2 to 8-1/2 inches. Utilizes single or banded V-belts with either wrapped or cog construction.

**Synchronous Drives** combine the best of both chain and belt drives, providing positive power transmission and accurate speeds while requiring little maintenance. Load capacities scale up to 1200 HP at 1750 RPM.



**Actuators**  
*Warner Linear*

**B-Track** linear actuators are completely sealed, and designed for tough, high-load applications while providing years of trouble-free performance. Models feature a ball nut screw drive with integral load holding brake and overload clutch. Efficient power use, compact package size, excellent corrosion protection, and rugged spur gearing, provide maximum capability and value. Units available with 2 to 24 inch stroke lengths, up to 2200 lb. load capacity, and up to 2.7 in./sec travel speeds.



**Bearings**  
*Kilian & Boston Gear*

**Custom-engineered bearings and bearing assemblies** significantly reduce cost by reducing the number of components. Assemblies also solve difficult, tolerance stack-up problems. Customized bearing shapes and materials, including engineered plastics, are available.



**PTOs**  
*Wichita Clutch*

**Air PTO's** are powered by our heavy-duty Standard Vent clutch. With large friction areas for high energy starts and an air actuated clutch for remote or automatic control of the PTO. Bearing supported shaft eliminates sideload on the crankshaft. There are no o-rings or diaphragms to wear out. 14" and 18" 1, 2 & 3 plate clutches available.



**Overload Clutches**  
*Boston Gear*

**Series CCC** (Centric centrifugal overload clutch) features controlled, soft-start acceleration with automatic engagement and disengagement. Delayed engagement produces a "no load start" with no slippage at full running speed. Protects against shock loads during start-up. 100% efficient at rated speed.



**A Global Footprint to Support Customers Around the World**

- ★ Altra Headquarters
- Altra Manufacturing Facilities
- Light Manufacturing, Assembly, Regional Warehouse
- ▲ Altra Shared Services and ECB Technology Center

**The Brands of Altra Industrial Motion**

**Couplings**

- Ameridrives**  
www.ameridrives.com
- Bibby Turboflex**  
www.bibbyturboflex.com
- Guardian Couplings**  
www.guardiancouplings.com
- Huco**  
www.huco.com
- Lamiflex Couplings**  
www.lamiflexcouplings.com
- Stromag**  
www.stromag.com
- TB Wood's**  
www.tbwoods.com

**Geared Cam Limit Switches**

- Stromag**  
www.stromag.com

**Electric Clutches & Brakes**

- Inertia Dynamics**  
www.idicb.com
- Matrix**  
www.matrix-international.com
- Stromag**  
www.stromag.com
- Warner Electric**  
www.warnerelectric.com

**Linear Products**

- Warner Linear**  
www.warnerlinear.com

**Engineered Bearing Assemblies**

- Kilian**  
www.kilianbearings.com

**Heavy Duty Clutches & Brakes**

- Industrial Clutch**  
www.indclutch.com
- Twiflex**  
www.twiflex.com
- Stromag**  
www.stromag.com
- Svendborg Brakes**  
www.svendborg-brakes.com
- Wichita Clutch**  
www.wichitaclutch.com

**Belted Drives**

- TB Wood's**  
www.tbwoods.com

**Gearing**

- Bauer Gear Motor**  
www.bauergears.com
- Boston Gear**  
www.bostongear.com
- Delroyd Worm Gear**  
www.delroyd.com
- Nuttall Gear**  
www.nuttallgear.com

**Overrunning Clutches**

- Formsprag Clutch**  
www.formsprag.com
- Marland Clutch**  
www.marland.com
- Stieber**  
www.stieberclutch.com

