

*Warner Electric*

*Twiflex Limited*

*Bauer Gear Motor*

*Ameridrives Couplings*

*TB Wood's*

# Power Transmission Solutions for the Overhead Crane & Hoist Market



 **Altra**<sup>®</sup>  
Industrial Motion  
*The Power of Experience*

## ALTRA INDUSTRIAL MOTION IS AT THE FOREFRONT OF THE LEADING POWER TRANSMISSION TECHNOLOGY PROVIDERS FOR OVERHEAD CRANE AND HOIST APPLICATIONS

Altra Industrial Motion, as a leading multinational designer and producer of advanced electromechanical power transmission components, has the technology and engineering capability to provide state-of-the-art drive and braking solutions for all configurations of overhead cranes and hoists. Altra's demonstrated expertise in this industry positions its multiple brands to meet the needs of this demanding marketplace.

### Extensive Application Experience

Bauer Gear Motor is a leading supplier of high quality gear motors with extensive success in the crane & hoist market. Utilizing Bauer's application expertise, customers can work with Bauer to choose the correct gear motor that enables Bauer to deliver a complete solution to fit all types of environments and demands for standard cranes or custom cranes.

With in-house motor manufacturing, special motor characteristics can be designed and optimized for the demands of the application.

Warner Electric's line of spring set electromagnetic released brakes are proven performers on hundreds of cranes throughout the world. Warner Electric's experience with major crane OEMs over the years has enabled them to develop reliable products for very demanding environments such as offshore and nuclear applications.



For decades, Twiflex Limited has provided crane manufacturers with reliable caliper braking solutions. With a large range of standard products combined with a strong engineering bias, Twiflex provides leading engineered solutions to address customer specific requirements. Twiflex can package brakes, discs, mounting pedestals, and power packs in house from within the Twiflex' product portfolio.

For the high load that crane applications demand, Ameridrives Amerigear Couplings are your ideal choice. Fully crowned gear teeth provide the highest misalignment and torque ratings. This design also allows for smooth axial travel required in most crane applications. Ameridrives Couplings provides standard catalog design product along with custom engineered products to address all crane/hoist application and design requirements.

The global presence of these brands enables Altra to provide reliable support and service in all relevant regions of the world.

### Advanced Testing and Research

Altra group companies have the capability to rapidly produce prototype units for test and evaluation by customers or by using our own computer-controlled testing equipment to simulate the operating conditions of a specific client-defined application. Specifically, Twiflex has extensive test facilities for the validation of products and friction materials and comprehensive test regimes for pre-dispatch for large brakes. Ameridrives also has a test lab that provides testing capabilities for crane applications to test static torque for gear couplings.

### Worldwide Customer Support

Altra engineering teams, manufacturing facilities and commercial offices are strategically located around the world to provide exceptional customer service, engineering and product support.

### World Class Engineering

Our dedicated teams of market-focused engineering and manufacturing staff provide innovative solutions to the technical challenges faced by overhead crane and hoist manufacturers. We utilize a flexible approach to problem solving such challenges, enabling our teams to provide application and technical support from concept to completion.

Many of the power transmission products in our comprehensive range can be customized to meet specific and unique requirements of individual crane and hoist designs.



### State-of-the-Art Manufacturing Technology

Altra's ISO Certified manufacturing facilities feature the latest technology including precision machining centers.

Our highly skilled manufacturing teams utilize the 'Altra Business System' to ensure that they are focused and aligned around key improvement priorities. ABS tools (e.g., continuous flow, standardized work and kanban) provide the means by which we achieve the improvements as we engage our entire workforce (via Total Associate Involvement) to actively and aggressively drive us towards world-class performance.





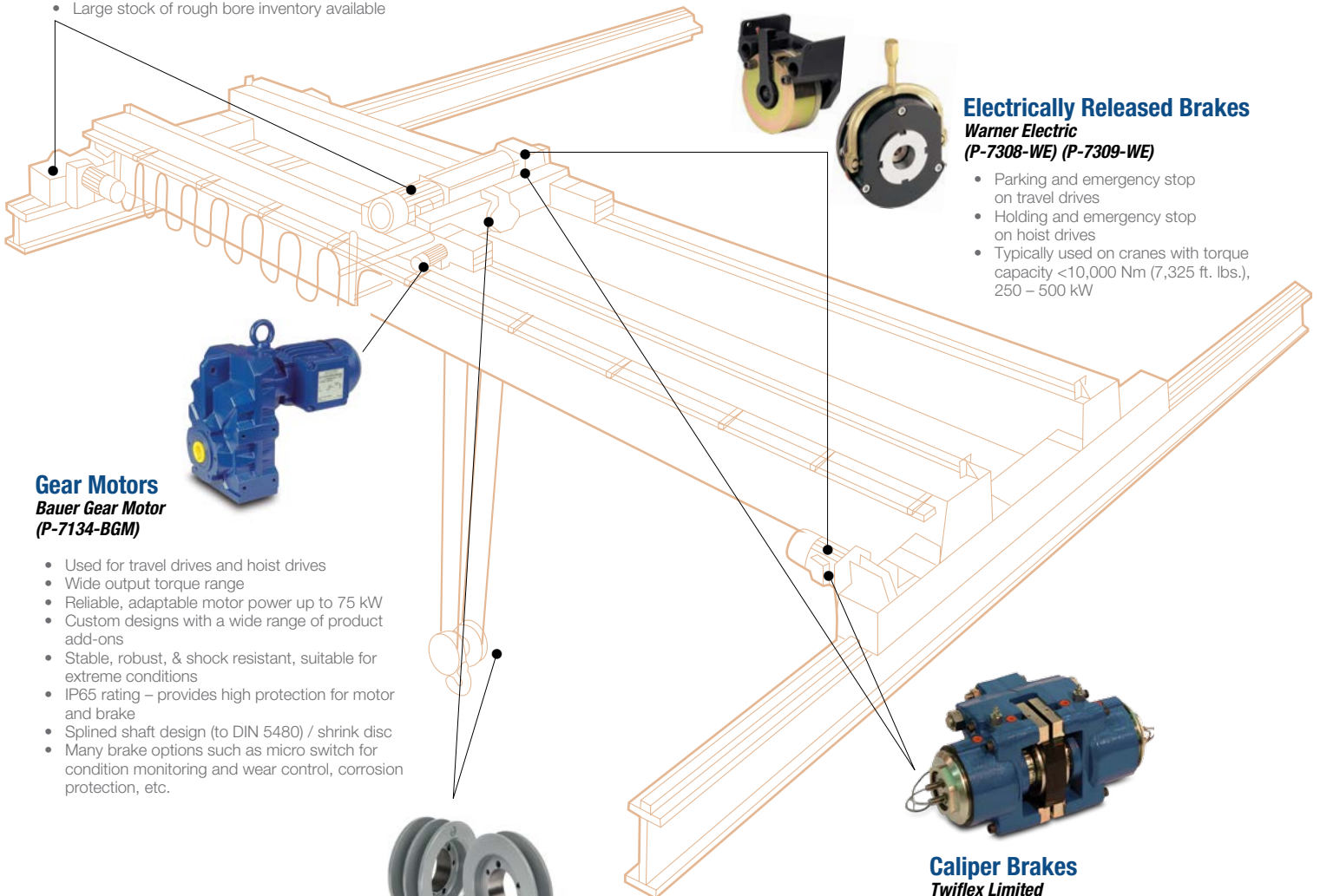
## Amerigear Gear Couplings

### Ameridrives

- Connects motor and gearbox on hoist drives, bridge drives, and long travel drives
- The torsional stiff design of a gear coupling is ideal for positive engagement required in crane applications
- Over 10" diameter bore capacity
- Highest torque ratings at a full 1-1/2 degree of misalignment
- Torque capacity of over 1,000,000 in-lbs
- High axial capacity
- Standard design allows for installation flexibility (reverse mount hubs for unexpected shaft gaps)
- AGMA standard design for interchangeability
- Large stock of rough bore inventory available

The leading brands of altra industrial motion offer expertise in standard and custom product solutions for main hoist drives, bridge drives, and long travel drives for all types of crane & hoist designs

- Overhead Traveling Bridge Cranes (Single and double girder designs)
- Gantry Cranes
- Jib Cranes
- Monorail Lifting Systems
- Top Slewing Cranes
- Chain and Wire Rope Hoists



## Gear Motors

### Bauer Gear Motor (P-7134-BGM)

- Used for travel drives and hoist drives
- Wide output torque range
- Reliable, adaptable motor power up to 75 kW
- Custom designs with a wide range of product add-ons
- Stable, robust, & shock resistant, suitable for extreme conditions
- IP65 rating – provides high protection for motor and brake
- Splined shaft design (to DIN 5480) / shrink disc
- Many brake options such as micro switch for condition monitoring and wear control, corrosion protection, etc.

## Electrically Released Brakes

### Warner Electric (P-7308-WE) (P-7309-WE)

- Parking and emergency stop on travel drives
- Holding and emergency stop on hoist drives
- Typically used on cranes with torque capacity <10,000 Nm (7,325 ft. lbs.), 250 – 500 kW

## Sheaves

### TB Wood's

- Used in upper and lower blocks
- Constructed of fine grain, high tensile cast iron and carefully engineered to assure maximum performance over a long life span
- Stock and MTO sheaves
- Integrated foundry and machining
- Pour multiple grades of Cast iron and Ductile iron

## Caliper Brakes

### Twiflex Limited

- Parking and emergency stop on long travel motion and bridge drives
- Holding and emergency stop on hoist drives
- Electric, pneumatic and hydraulic actuation
- Unit braking forces from 80 N to 800 kN
- Custom finishes and protection to suit the installed environment

**Belted Drives and Sheaves**

**TB Wood's**

*Belted Drives*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5  
*For application assistance:*  
1-888-829-6637 – Press #7

**Couplings**

**Ameridrives Couplings**

*Mill Spindles, Ameriflex, Ameridisc*  
Erie, PA - USA  
**1-814-480-5000**

*Gear Couplings*  
San Marcos, TX - USA  
**1-800-458-0887**

**Ameridrives Power Transmission**

*Universal Joints, Drive Shafts, Mill Gear Couplings*  
Green Bay, WI - USA  
**1-920-593-2444**

**Bibby Turboflex**

*Disc, Gear, Grid Couplings, Overload Clutches*  
Dewsbury, England  
**+44 (0) 1924 460801**  
Boksburg, South Africa  
**+27(0) 11 918 4270**

**Guardian Couplings**

*Engineered Flywheel Couplings, Engine Housings and Pump Mounts, Flexible Shaft Couplings*  
Michigan City, IN - USA  
**1-219-874-5248**

**Huco Dynatork**

*Precision Couplings and Air Motors*  
Hertford, England  
**+44 (0) 1992 501900**  
Chambersburg, PA - USA  
**1-888-829-6637**

**Couplings Cont.**

**Lamiflex Couplings**

*Flexible Couplings, Bearing Isolators, and Coupling Guards*  
Cotia, SP - Brasil  
**+55 (11) 4615-6300**

**TB Wood's**

*Elastomeric Couplings*  
Chambersburg, PA - USA  
**1-888-829-6637** – Press #5  
*For application assistance:*  
1-888-829-6637 – Press #7  
*General Purpose Disc Couplings*  
San Marcos, TX - USA  
**1-888-449-9439**

**Electromagnetic Clutches and Brakes**

**Inertia Dynamics**

*Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes*  
New Hartford, CT - USA  
**1-800-800-6445**

**Matrix International**

*Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes*  
Brechin, Scotland  
**+44 (0) 1356 602000**  
New Hartford, CT - USA  
**1-800-825-6544**

**Warner Electric**

*Electromagnetic Clutches and Brakes*  
New Hartford, CT - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-825-9050  
Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**  
*Precision Electric Coils and Electromagnetic Clutches and Brakes*  
Columbia City, IN - USA  
**1-260-244-6183**

**Engineered Bearing Assemblies**

**Kilian Manufacturing**

*Engineered Bearing Assemblies*  
Syracuse, NY - USA  
**1-315-432-0700**

**Gearing**

**Bauer Gear Motor**

*Geared Motors*  
Esslingen, Germany  
**+49 (711) 3518-0**  
Somerset, NJ - USA  
**1-732-469-8770**

**Boston Gear**

*Enclosed and Open Gearing, Electrical and Mechanical P.T. Components*  
Charlotte, NC - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-816-5608

**Nuttall Gear and Delroyd Worm Gear**

*Worm Gear and Helical Speed Reducers*  
Niagara Falls, NY - USA  
**1-716-298-4100**

**Heavy Duty Clutches and Brakes**

**Industrial Clutch**

*Pneumatic and Oil Immersed Clutches and Brakes*  
Waukesha, WI - USA  
**1-262-547-3357**

**Svendborg Brakes**

*Industrial Brakes and Brake Systems*  
Vejstrup, Denmark  
**+45 63 255 255**

**Twiflex Limited**

*Caliper Brakes and Thrusters*  
Wichita Falls, TX - USA  
**1-844-723-3483**  
Twickenham, England  
**+44 (0) 20 8894 1161**

**Heavy Duty Clutches and Brakes Cont.**

**Wichita Clutch**

*Pneumatic Clutches and Brakes*  
Wichita Falls, TX - USA  
**1-800-964-3262**  
Bedford, England  
**+44 (0) 1234 350311**

**Linear Products**

**Warner Linear**

*Linear Actuators*  
Belvidere, IL - USA  
**1-800-825-6544**  
*For application assistance:*  
1-800-825-9050  
Saint Barthélemy d'Anjou, France  
**+33 (0)2 41 21 24 24**

**Overrunning Clutches**

**Formsprag Clutch**

*Overrunning Clutches and Holdbacks*  
Warren, MI - USA  
**1-800-348-0881** – Press #1  
*For application assistance:*  
1-800-348-0881 – Press #2

**Marland Clutch**

*Roller Ramp and Sprag Type Overrunning Clutches and Backstops*  
South Beloit, IL - USA  
**1-800-216-3515**

**Stieber Clutch**

*Overrunning Clutches and Holdbacks*  
Heidelberg, Germany  
**+49 (0) 6221-30470**

For information concerning our sales offices in Asia Pacific check our website [www.altramotion.com.cn](http://www.altramotion.com.cn)

