

*Ameridrives*

*Matrix*

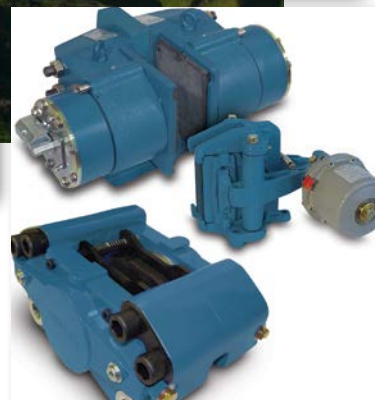
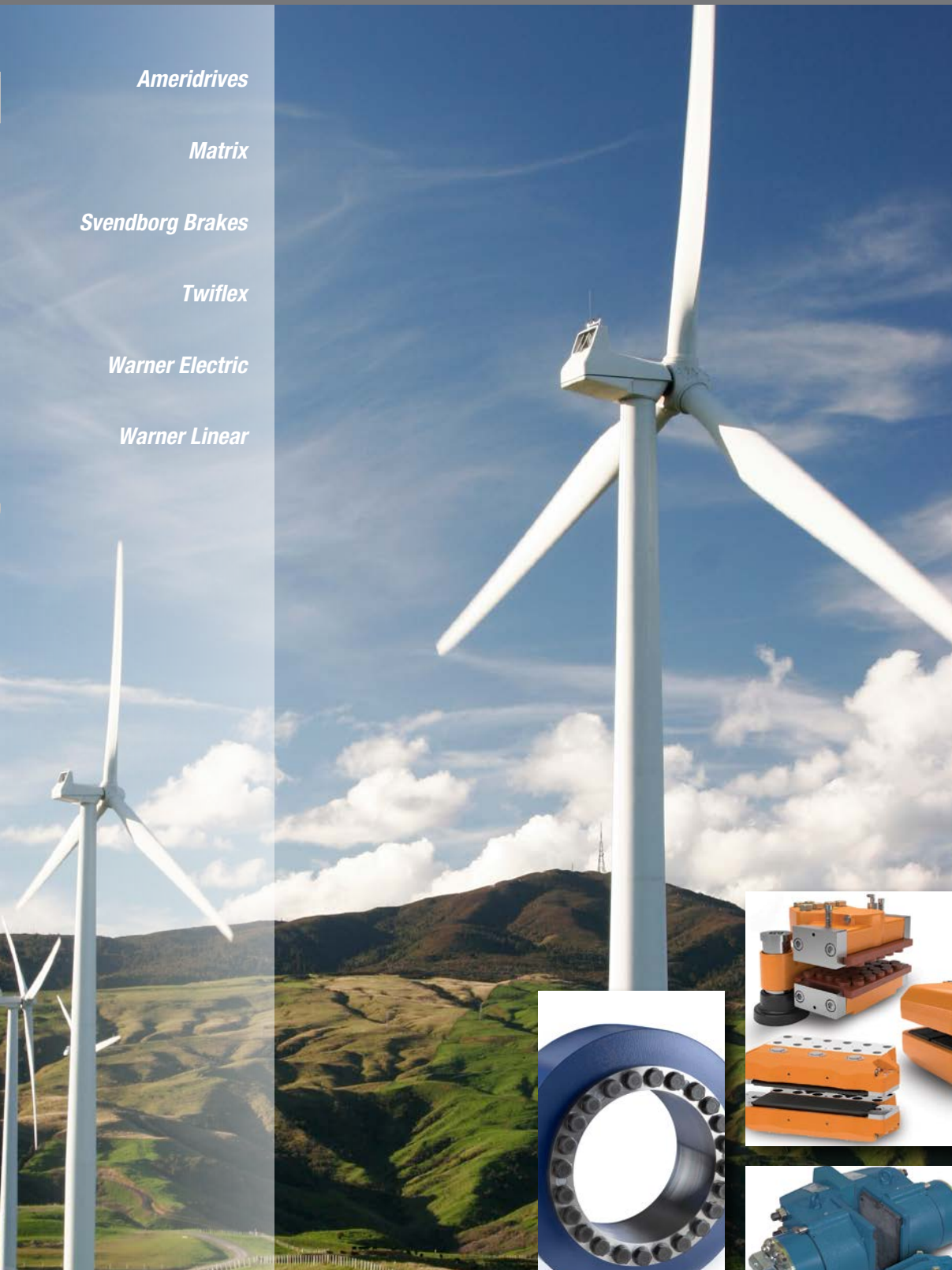
*Svendborg Brakes*

*Twiflex*

*Warner Electric*

*Warner Linear*

# Power Transmission Solutions for the Wind Turbine Industry



THE LEADING BRAND NAMES OF ALTRA WIND TECHNOLOGY CAN OFFER EXPERTISE IN CUSTOM PRODUCT SOLUTIONS FOR A WIDE VARIETY OF WIND POWER APPLICATIONS.

As the world's demand for wind power grows, the infrastructure and equipment necessary to produce and distribute it will come under increasing pressure to perform.

With manufacturing facilities in the US, Europe, China and South America, the companies in the Altra Wind Technology family can provide support to wind turbine OEMs worldwide. Many Altra solutions and plants are GL (Germanischer Lloyd) and DNV (Det Norske Veritas) certified.



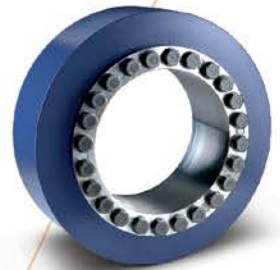
As a leading multinational designer, producer and marketer of a wide range of electromechanical power transmission products, Altra offers products utilized in wind turbine applications where reliability and accuracy are necessary to avoid costly downtime, assure safe operations and consistent production output.



## Blade Pitch Brakes

**By Matrix and Warner Electric**

ERS Series and 1 EB Series are electrically-released, spring-set brakes that offer a high-performance, cost effective solution for applications that require both "static" holding power and the ability to withstand high inertia dynamic stops in an emergency situation.



## Shaft Locking Devices

**By Ameridrives**

Ameriloc hydraulic (HLD) and mechanical (MLD) locking devices are custom-engineered for a lightweight, high torque connection between the turbine main shaft and gearbox. Units are domestically manufactured for wind turbines rated up to 3 MW.



## Yaw Brakes

**By Twiflex and Svendborg Brakes**

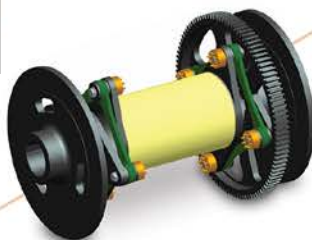
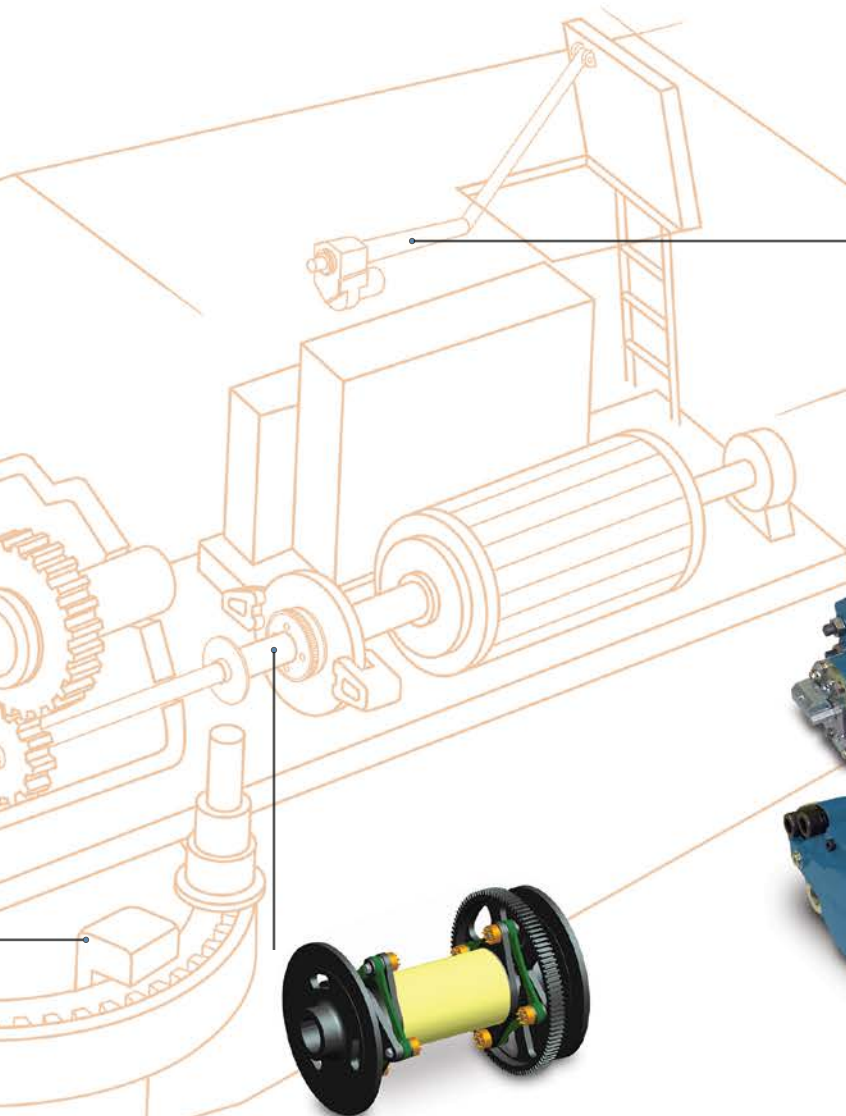
A range of brake solutions for installation on yaw drive or directly on yaw ring. Models are available with spring-applied or direct actuation. State of the art yaw systems specifically designed and developed through significant R&D and testing investment for all modern medium and large wind turbines. Svendborg Brakes yaw systems reduces noise, stress, peak, wear and service, and are documented for 20+ years of life time.





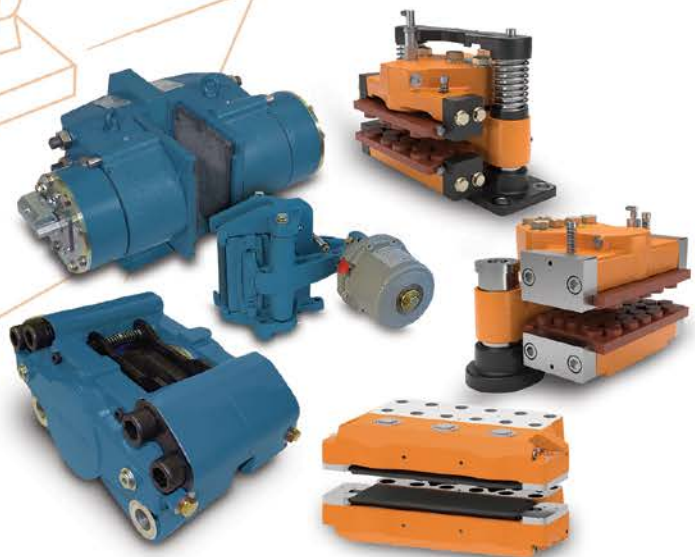
### Access Hatch Linear Actuators By Warner Linear

Our broad range of standard actuators can be custom-configured to meet specific applications including special pin to pin and stroke lengths, special end fittings, mounting brackets, paints, and lead wire lengths. Load capacity up to 12,500 Nm.



### High Speed Shaft Couplings By Ameridrives

Ameridrives provides custom-designed, lightweight couplings that are capable of transmitting high torques at high speeds while accepting significant levels of angular, radial and axial misalignment. Units require no lubrication and can be supplied with composite materials for electrical insulation.



### Rotor Brakes By Twiflex and Svendborg Brakes

Caliper disc brake solutions for dynamic, parking, and emergency stopping duty, in standard and floating configurations.

Engineered to handle large output torque generated by high turbine gearbox ratios. Some of the key benefits are turbine failure control system, service department monitoring and remote control operation. Svendborg Brakes rotor locks are in operation in thousands of wind turbines around the world in cost saving maintenance solutions.

## 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

### Twiflex

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### Svendborg Brakes

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### Warner Electric

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### Warner Linear

1-800-825-6544

### Ameridrives

1-814-480-5000

### Matrix

1-800-825-6544