# **POVER REVIEW** THE POWER BRANDS IN POWER TRANSMISSION

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Watertight Gearheads





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## Micron AguaTRUE<sup>™</sup> Corrosion Resistant, Watertight Gearheads

Micron's AquaTRUE gearhead combines the high performance and torque capacity of Micron's TRUE Planetary gearheads with features specifically designed to meet the strict requirements of applications such as food and beverage handling, packaging and dispensing. The AquaTRUE's IP66/IP67 and IP69K protection is able to handle caustic cleaning chemicals as well as high pressure washdown. Until now, manufacturers have been unable to use gearheads in many applications involving harsh environments because there was not a product available that met those needs. The AquaTRUE is engineered to be placed anywhere in the application's design, regardless of environmental factors. This eliminates the cost of additional components such as enclosers, shielding or mechanical transmissions.

The gearhead's 304 stainless steel housing eliminates the concern for rust or any type of corrosion. The AquaTRUE has a laser etched permanent product label and a smooth, round external housing that is designed without any external seams or corners for bacteria to collect. This makes the AquaTRUE very easy to clean and a perfect fit in any washdown environment.

- Frame Sizes: 60, 80, 120 and 160 mm
- Precision: 13 arc-min max
- Torgue Capacity: up to 876 Nm
- Ratio Availability: 3:1 to 10:1 (single stage), 15:1 to 100:1 (double stage)



Micron Boston Gear

For more information, download P-8741-BG from www.AltraLiterature.com

## Bauer Gear Motor Stainless Steel HiflexDRIVEs are Specially Designed for Washdown Applications

The stainless steel HiflexDRIVE design eliminates hygiene risks due to a highly suitable and sustainable design in areas that require routine intensive cleaning. The motor does not require a cooling fan or ribs, allowing for a completely smooth outer casing with a sealed non-drive end. This eliminates any dirt or particle traps on the motor casing and also prevents re-contamination of the processing environment caused by air movement from a fan.

All geared motors are IP67/IP69K certified for high pressure, high temp washdown applications. The AISI 316-grade (CF8) stainless steel drives can withstand the commonly used cleaning solutions and disinfectants without affecting performance.

Choose from 3 gearbox sizes and 7 possible motor designs to meet your specific application requirements.

- AISI 316-grade (CF8) stainless gearbox and motor housing
- IP67/IP69K certified; CIP (Clean-In-Place) compatible; Washdown-Readv
- Smooth, non-ventilated motor for optimum hygienic design
- 316L stainless output shaft (solid or hollow)
- Face mounting standard; other options available
- Inverter-duty asynchronous motor or permanent magnet motor for highest operating efficiencies



Altra Industrial Motion

- · Stainless watertight cable connection for motor power
- Chemical-resistant and watertight cable optionally available

A Alto

- Thermistor temperature safeguard
- Fully-encapsulated brakes or encoders are available



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## MEA Clutches & Periflex<sup>®</sup> VN Couplings for Uninterruptible Power Supply Systems

A leading designer and manufacturer of dynamic uninterruptible power supply (UPS) systems needed a reliable clutch solution for its line of UPS systems. The systems range in size up to (18 kNm) 3300 kVA, to provide backup power in the case of main supply fluctuations or failures in a variety of critical applications including hospitals and data centers.

When a power interruption or failure is detected, the system's diesel engine automatically starts. Once the engine reaches 1500 RPM, the clutch engages/connects the engine to a flywheel which takes over to supply power to the generator. In an emergency, the clutch is also used to start the engine if the starter is not functioning.

The Stromag team worked closely with the OEM's engineers to ensure that the clutch shaft connection could transmit the full amount of torque required. The level of magnetic flux that passes through the drivetrain components (including bearings) was also analyzed.

Ultimately, custom MEA electromagnetic single-disc, dry running friction clutches were supplied. The clutches featured a modified flange on the engine side to align with the customer's interface. The clutches were also modified to allow the friction linings to be removed/replaced without removing the entire clutch.





For more information, download P-8522-SG from www.AltraLiterature.com

## Altra's Application Profile Videos on YouTube

Visit Altra Motion on YouTube to see our newest videos including our recently added Application Profile Video Series.

The AP Video Series features success stories for a variety of industrial applications. We upload new videos routinely, so check back often.

These micro videos comprise the Problem | Solution Playlist and are ideal for sharing with others.

Share your favorite videos via email or various other social media sites. Videos can also be added to custom playlists or saved to a "Watch Later" list.

For more information, visit Altra's YouTube channel at www.YouTube.com/AltraIndMotion



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Scan to visit the Problem Solution Playlist on YouTube



# Power Transmission Solutions for the Metal Mills Market

As industry leaders in electromechanical power transmission products, the companies of Altra Motion have been helping metal mill equipment manufacturers, metal producers and metal processors worldwide achieve great success by increasing their efficiency while at the same time reducing their costs and downtime.

Altra engineered power transmission products are installed in a wide array of mill applications from continuous casters, roughing mills and finishing mills, to annealing, pickling and coating lines, levelers, slitters, accumulators, cold forming mills, coilers and uncoilers.

Altra companies provide a comprehensive offering of mill spindles, couplings, U-joints, gear motors, speed reducers, brakes, torque-limiting devices and backstopping clutches to meet the specific needs of the metal mill industry. Altra products are designed to withstand harsh mill environments including dirt, dust and high temperatures, while providing exceptional personnel safety and equipment protection.

#### For more information, download P-8850-C from www.AltraLiterature.com



www.AltraMetalProducers.com www.AltraMetalProcessing.com

## **Altra OnDemand Webinars**



#### **OnDemand Webinars:**

- Formsprag Backstops for Shaft Mount Gearboxes
- Key Steps to Getting the Most from your Synchronous Belt Drive Installation
- Proper Torque Arm Use
- Two Ways to Reduce Backstop Maintenance, Time and Expense
- Altra Wastewater Solutions
- Helping Us Help You: Product Identification

#### **Fast Facts Webinars:**

- Clutch/Brakes: Heavy Duty or Normal Duty Explains the differences in Normal Duty and Heavy Duty product configuration
- Power Supplies: AC or DC Side Switching A review of why an application will most easily use either switching on the AC or the DC side of the power supply.
- Magnetic Particle Clutches and Brakes
  A review of magnetic particle design considerations and constraints.
- Electromagnetic Clutches/Brakes: Why DC? An explanation of why electro-magnetic friction clutches and brakes use DC power to operate.
- Warner Electric Clutches and Brakes: Why not below 100 RPM? This presentation explains why Warner Electric clutches and brakes operate best at speeds above 100 RPM.
- Burnishing Electromagnetic Clutches and Brakes An explanation of burnishing and why it is important to proper operation of clutches and brakes.

#### For more information, visit www.AltraWebinars.com

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High Capacity Gearboxes and

Open Gearing Capabilities: Standard & Custom

Calculator

Applications

Precision Torque: Warner Electric Smooth

New TB Wood's Sure-Flex Plus® Savings

Bauer Gear Motor Solutions in Metal Mill

Torque Capping Clutch Technology

Overrunning Clutches



#### The Next Generation Electromagnetic Braking System

Usage of electromagnetic brakes is becoming more common in demanding applications. From heavy duty electrified vehicles to outdoor equipment, the traditional limitations of electromagnetic brakes are being overcome to deliver weight, performance and maintenance advantages.



#### Stromag Complete IIoT Braking System for Port Container Gantry Crane

The Port of Duisburg in Germany, recently upgraded the entire braking system on one of it's large rail-mounted gantry cranes. The executive management of the port met directly with Stromag to determine if an advanced braking system could be developed. Ultimately, Stromag was selected to deliver a customized IIoT solution that interfaced with the customer's dashboard.



Ameridrives Custom U-Joints for Steel Plate Mill Leveler

A large steel producer was experiencing failures of the U-joints on a plate mill leveler at their Indiana plant. Mill operators wanted a drop-in replacement for the existing U-joints so they would fit seamlessly with the other units on the leveler. Ameridrives determined that they could easily manufacture completely new drop-in replacement U-joints to meet the customer's requirements.

Ameridrives Bauer Gear Motor Bibby Turboflex Boston Gear Delevan Delroyd Worm Gear Formsprag Clutch Guardian Couplings Huco Jacobs Vehicle Systems Kilian Kollmorgen Lamiflex Couplings Marland Clutch Matrix Nuttall Gear Portescap Stieber Stromag Svendborg Brakes TB Wood's Thomson Twiflex Warner Electric Wichita Clutch