

# Power REVIEW

THE POWER BRANDS IN POWER TRANSMISSION

Vol. 10 | No. 4 | 2021

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## Altra Brands Provide Certified Rebuild & Repair Services

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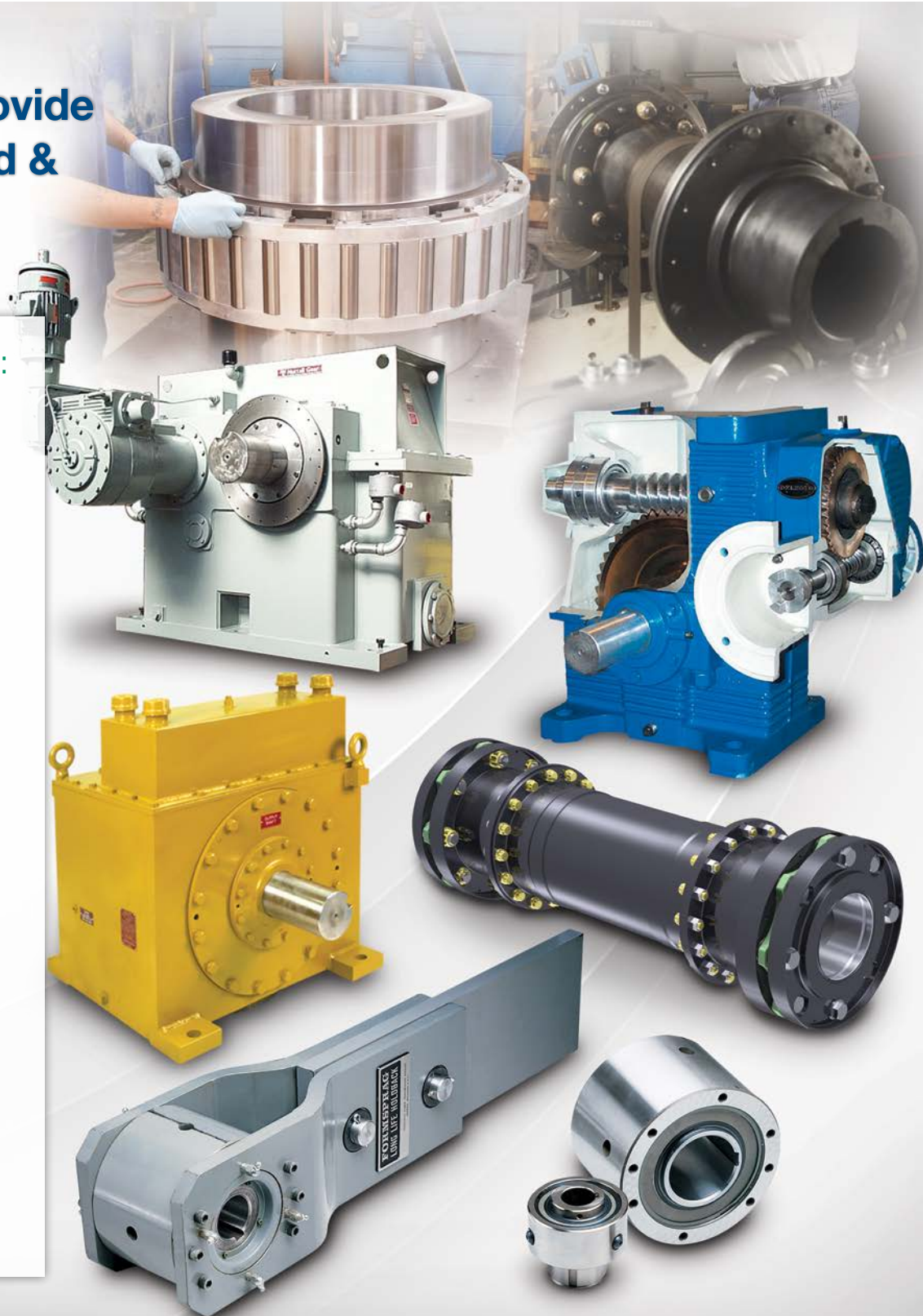
Warner Electric  
Electromagnetic Spring-Set  
Pulse™ Brakes



For more information contact us at:  
[info@altramotion.com](mailto:info@altramotion.com)



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## Altra Certified Rebuild & Repair Services – Ameridrives, Formsprag, Marland, Nuttall & Delroyd

**MARLAND:** Your old, worn Marland clutches can be refurbished for substantially less than the cost of a new replacement clutch. Our economical rebuild service applies to all Marland Clutch BCMA, CECON and CEBMAG models. The local Marland Rebuild Service team will perform the following to restore your clutch to like-new condition: Inspect and replace seals, energizing springs, alloy steel rollers, aluminum cages, bearings and fasteners as required, inspect and precision grind the outer race and cam if required, assemble and test to meet Marland original design and performance specifications, paint and prepare for shipment. **For more details on our cost saving certified Marland Rebuild Program, call 1-888-216-3515 or download P-8117-MC from [www.AltraLiterature.com](http://www.AltraLiterature.com).**



**FORMSPRAG:** Send Formsprag your old clutches to make them like new again. The difference is not just cosmetic. Consider these advantages: **Price** – A guaranteed savings of at least 30% or more versus new product, **Speed** – Clutches are received, inspected and rebuilt in the shortest possible time frame, **Warranty** – 1 year on labor and materials, same as new clutches, and **Emergency Breakdown Program** – All products that are air freighted into the Warren plant are processed immediately and, in most cases, are able to be rebuilt within a 24-hour period. **For more information, call 1-800-927-3262 or download P-1060-FC from [www.AltraLiterature.com](http://www.AltraLiterature.com).**

**AMERIDRIVES:** Ameridrives Rebuild Service can refurbish your old, worn couplings for substantially less than the cost of a new replacement coupling. The economical rebuild service applies to all Ameridrives couplings including Ameridisc®, Ameriflex® and Amerigear® high performance, high speed couplings used primarily on turbomachinery, compressor and pump applications in the power generation, oil & gas and marine industries. Other coupling brands are accepted on a case-by-case basis. **For details on the rebuild program, call 1-814-480-5095, download P-7948-AC from [www.AltraLiterature.com](http://www.AltraLiterature.com).**



**NUTTALL & DELROYD** have extensive experience in gear drive applications, combined with the total manufacturing and design capabilities that enable them to provide a single, comprehensive source for improving productivity, and offers a cost-effective repair solution for any manufacturer's gear drive. **All complete rebuilds include new factory warranty.**

- Repair and Rebuild
- Redesign and Replicate
- System Analysis
- Quality Assurance
- Load Testing
- Field Service
  - 24-Hour Emergency Service
  - Mill Outage Support Services
  - Predictive Maintenance Services
  - Repairs
  - Torque Measurements
  - Training Seminars



**For more information, download P-7010-ND from [www.AltraLiterature.com](http://www.AltraLiterature.com)**

## Boston & Bauer Washdown Gear Drives & Gear Motors for the Food & Beverage Industry

As the leading innovators in gearing and gear motor technology, Boston Gear and Bauer Gear Motor present a full line of Stainless Steel and Aseptic products that provide sanitary protection and optimal performance in the toughest caustic environments.

### Distinct Advantages of the Boston Gear and Bauer Gear Motor offering:

1. Wide Breadth of Products
  - Worm / Helical-Worm / Helical-Bevel or Helical / Parallel Shaft
  - Gear Drives (Speed Reducers) / Gear Motors / Shaft Accessories
  - Reductions of 3:1 thru 10,000:1
  - Output Torque from 100 lbf-in thru 7,500 lbf-in
2. Critical Product Features for Washdown Suitability and Sustainability
  - NSF International Certified (Worm Gear Drives)
  - UL/ULc Certified (Gear Motors)
  - IP67 / IP69K Compliance
  - The Original Domed Crown™ Technology
  - 316SS Cast Housings
3. Performance Competitive Advantages
  - Proven: Longer Product Life
  - Proven: Higher Motor Efficiency
  - Proven: Higher Gearing Operating Efficiency
  - Proven: Lower Gearing Operating Temperature
  - Proven: Reduced Installation Time & Maintenance Cost



Scan to watch  
Boston & Bauer  
Washdown video



**For more information  
download P-8026-BBG from  
[www.AltraLiterature.com](http://www.AltraLiterature.com)**



## Nuttall Gear Rail Station Escalator Speed Reducers

Nuttall Gear has grown to become a leading manufacturer of reliable heavy-duty speed reducers for a wide range of industrial applications.

Nuttall has recently introduced a new line of enclosed helical gearboxes designed as drop-in replacements for popular Westinghouse Modular 100, 220 and 250 escalator gearboxes.

### FEATURES:

- Carburized and ground gearing for enhanced wear resistance and improved shock load capacity
- Heavy-duty cast iron or fabricated steel housings
- USA steel
- High-quality, anti-friction bearings
- Extended high-alloy steel input shafts
- High-alloy steel or hollow output shafts
- Proven engineered seals to keep oil in and contaminants out



For more information, download P-8908-NG  
from [www.AltraLiterature.com](http://www.AltraLiterature.com)



## Stromag Product Solutions for Industrial Applications

**Vertical Lift Bridge Brakes** – The elaborate drive system, enclosed in the bridge's upper super structure, utilizes two electric motors that drive a single gearbox with dual output shafts. Each of these shafts connect to a secondary gear reducer to turn pinion shafts that move vertical gear racks which raise and lower the bridge span.

**Aluminium Mill Pot Tending Machine Brakes** – The compact NFF4F-LS brake was designed specifically for crane and other heavy industrial applications that require slow running drives with very high brake torque and a closed design. Built to perform in harsh environments, major brake components feature a special nitrocarburized and postoxidized surface treatment with an overall protection rating up to IP66.

**Series 51 Limit Switches for Cruise Ship Ladder Systems** – Limit switches, installed on both of the ladder's winch cable drums, set the exact stopping points for the ladder (in both stowed and lowered positions). The switches ensure the safe stopping of the ladder's cables, preventing potential damage.

**2in1 Coupling/Clutch for Passenger Ship Hybrid Propulsion System** – The ship's hybrid drive system combines two 405 kW diesel engines and a pair of 180 kW electric motors that are connected to the vessel's twin propeller shafts. A unique parallel hybrid transmission unit is positioned between the diesel engine and the marine gear on each of the two propeller shaft drives. The coupling connects to the diesel engine flywheel while the clutch engages and disengages the diesel engine from the driveline.

For more information, download Stromag  
literature from [www.AltraLiterature.com](http://www.AltraLiterature.com)



## Warner Electric Electromagnetic Spring-Set Pulse™ Brakes

Warner Electric Electromagnetic Spring-Set Pulse Brakes require NO ELECTRICAL POWER to hold in either a clamped or released model.

**Warner Electric can make all sizes and custom fit to meet specific application requirements.**

- Brake remains Locked or remains Released without power consumption.
- Lower release drag allows operation at high speeds.
- Can be made into hundreds of existing configurations.
- Mechanical Springs clamp the brake disc like conventional Spring-Set Brakes.
- Can be custom made to fit most applications.
- Can be Steel on Steel or smooth friction lining.
- Controlled soft stop for sensitive applications.
- Longer wear life.
- Replaceable friction component.
- Uses common DC Voltage. Simply apply a DC pulse to release the brake then a reverse DC pulse to engage the brake.



For more information, download P-8840-WE  
from [www.AltraLiterature.com](http://www.AltraLiterature.com)





## 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
- High Capacity Gearboxes and Overrunning Clutches
- Precision Torque: Warner Electric Smooth Torque Capping Clutch Technology
- Open Gearing Capabilities: Standard & Custom
- New TB Wood's Sure-Flex Plus® Savings Calculator
- Bauer Gear Motor Solutions in Metal Mill Applications

## 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](http://www.AltraWebinars.com)

## Altra 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.

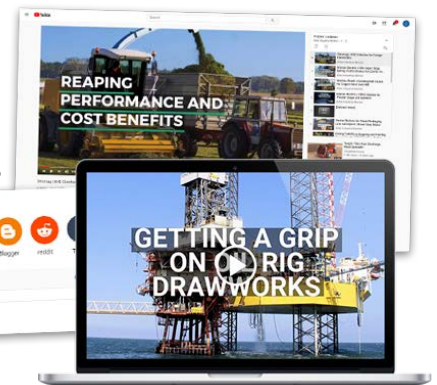
These micro videos comprise the Problem I Solution Playlist and are ideal for sharing with others.

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[YouTube.com/AltraIndMotion](https://www.youtube.com/AltraIndMotion)



Scan to visit the Problem Solution Playlist on YouTube



**TB Wood's Band Saw Wheels**



**Ameridrives US Destroyer Couplings**



**Altra Couplings for Sadara Facility**

**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