

Power REVIEW

THE POWER BRANDS IN POWER TRANSMISSION

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Altra Brands Provide IIoT Solutions

IIoT
Industrial Internet of Things

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For more information, download P-8666-MC from www.AltraLiterature.com

Stromag Complete IIoT Braking System

The Port of Duisburg, located on the Rhine River in Germany, recently upgraded the entire braking system on one of its large, rail-mounted gantry cranes.

The port operators wanted to install a new, state-of-the-art IIoT braking system that would allow a predictive maintenance solution on the older container crane.

Port management selected Stromag to provide a customized IIoT solution based on their superior service support, design flexibility and technologies. The new system included a thruster service brake, an emergency brake, an HPU, a Series 51 geared cam limit switch with a multi-turn absolute encoder, a SIMAN monitoring system, and disc/hub assemblies.

The advanced IIoT braking system utilizes artificial intelligence to provide many convenience and cost-saving advantages, including remote and augmented maintenance, increased crane availability due to planned downtimes and extended system life due to careful maintenance monitoring.



IIoT
SOLUTIONS

For the full article, visit the Altra Newsroom at www.AltraMotion.com/Newsroom

Smart Marland Monitoring System

The Smart Marland Monitoring System provides up to the minute access to critical system operating conditions including Vibration, Temperature and Oil Level. The IIoT solution allows users to remotely monitor the condition of their equipment from anywhere using a computer or cell phone.

Performance Capabilities:

- Monitor up to 6 devices from a single gateway
- Set desired report intervals
- Perform statistical analysis to identify maintenance and repair needs
- Alarm notifications

Reporting Capability:

- Current measurements
- Historic trending
- Vibration analysis

Simple System Requirements:

- Power supply (24VDC, 120/240 VAC, 50/60 Hz)
- Less than 200m line of site between gateway and devices
- Access to local network or cellular signal



For more information, download P-8211-SG & P-8867-SG from www.AltraLiterature.com

Svendborg IIoT-driven Predictive Maintenance Finds the Needle in the Minestack

Bucket wheel excavators (BWEs) need robust and reliable braking systems to withstand the harsh operating and environmental conditions they are exposed to. The right solution helps them handle power cuts while protecting the BWE's components from shock loads. By offering an innovative braking control setup that features Cloud computing and data analytics, Svendborg Brakes supported a premier lignite mining company in Bílina, Czech Republic, to slashing maintenance costs and downtime.

The innovative IIoT solution installed for the K 2000 BWE has been running smoothly and successfully for over six months. Pleased with the results, the mining company has decided to install the system on every new installation from Svendborg Brakes.

www.Svendborg-Brakes.com

Ameridrives Block-Type Universal Joint Rebuild and Repair Service

North American mill operators can significantly reduce downtime and costs with series 7000 Block-type U-joint rebuild and retrofit services by Ameridrives, available in the U.S.

Now, mills in North America can save time and money since they no longer need to wait for months while they ship their block-type U-joints to an overseas manufacturer for rebuild and repair services.

The major competitor U-Joint design utilizes bolts to connect the bearing blocks to the shaft. Unfortunately, after only a few years of service, the bolts start to come loose under high mill torque loads causing the U-joints to fail.

North American mill operators, with an eye on increasing output while reducing costs, can now send their damaged competitor block-type U-joints directly to our Ameridrives facility in Erie, Pennsylvania.

Our complete block-type (Series 7000) U-Joint repair and rebuild service options include:

- Service sizes 315 mm to 600 mm
- Manufacturing and installing completely new blocks on existing customer shafts with no modifications to the existing shaft.
- Manufacturing entirely new dimensional drop-in replacement U-Joints, utilizing Ameridrives mill-proven cross and bearing design vs. competitor's bolt system.



For more information, download P-8858-AC from www.AltraLiterature.com

Boston Gear Original "Domed Crown™" Stainless Steel 700 Series

Utilizing the often imitated but never equaled 700 Series worm gearing combined with new exterior designs, the new stainless steel 700 Series performance has been optimized to withstand the harshest washdown conditions!

The Boston Gear Service Advantage

- Standard 2 day delivery on any cataloged SS700 Series product
- Same day break down service
- After hours/holiday hotline
- Stocked at local and regional distribution centers



The Stainless Speed Reducer is NSF International certified and the Stainless Gearmotor is UL / ULc Certified.

For more information download P-1998-BG & P-7756-BG from www.AltraLiterature.com or visit www.BostonGear.com



Laser marked nameplate provides worry-free part identification while maintaining a smooth, unetched surface. Rounded housing prevents foreign matter adherence and fluid accumulation.



Warner Electric Introduces New ERX Brakes Range and the WES Contactless Sensor

Warner Electric has released a new range of pre-assembled electromagnetic brakes that offer superior performance for stopping and parking applications. The brakes can be specified in standard, high-torque or high-speed configurations and with a selection of accessories included. Thanks to its modular design and efficient stock holding, Warner Electric is able to offer thousands of variations with a very short lead time. Additionally, the integrality of the brakes range offered by Warner Electric is now equipped with the latest contactless sensor WES. Warner has developed this innovative technology for monitoring electromagnetic brakes in elevators and stage/theatre applications. Backwards compatible with conventional electromechanical microswitches, but with none of their inherent limitations, the patent-pending WES contactless sensor brings improved reliability to electromagnetic brake monitoring and adds the capability for predictive maintenance, eliminating unscheduled downtime.

For more information, download P-8705-WE and P-8692-WE from www.AltraLiterature.com



"WES" for monitoring of brake state



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
- 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

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.

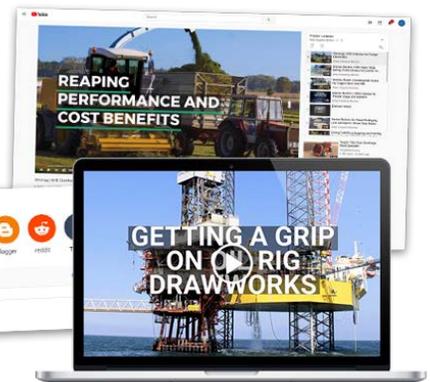
These micro videos comprise the Problem I Solution Playlist and are ideal for sharing with others.

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Twiflex Brakes for Bay Bridge Maintenance Travelers



Amerigear Couplings for Steel Rod Mill



TB Wood's Sheaves for One World Trade Center Elevators

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
Matrx

Nuttall Gear
Portescap
Stieber
Stromag
Svendborg Brakes

TB Wood's
Thomson
Twiflex
Warner Electric
Wichita Clutch