

Eaton

EXPANDS REMANUFACTURING PROGRAM TO INCLUDE ELECTRONIC CLUTCH ACTUATORS

Eaton has announced its Vehicle Group is expanding its remanufacturing program to offer remanufacturing of electronic clutch actuators used on Eaton UltraShift PLUS transmissions. Eaton remanufactures thousands of transmissions and clutches annually to maximize the reuse of materials, keep them out of landfills, save energy and reduce emissions and waste.

Eaton's remanufacturing business recovers core product components from customers across North America and returns them to "like new" performance. Using improved cleaning processes and advanced inspection techniques to validate weld integrity, components in good working condition are reused whenever possible.

"Remanufactured products provide customers with a cost-effective solution while offering a sustainability advantage," said Tim Bauer, vice president, Aftermarket, Eaton's Vehicle Group. "In addition, remanufacturing options carry market competitive warranties, providing additional peace of mind for fleet operators of all sizes."

By expanding its remanufacturing business and remanufactured product portfolio, Eaton strives to minimize the environmental impacts from manufacturing new parts. The remanufacturing strategy aligns with Eaton's recent announcement to join the global movement to limit the increase of the world's temperature to 1.5 degrees Celsius by committing to science-based targets. In support of this effort, Eaton has a target to have remanufactured products account for up to 80 percent of its aftermarket transmissions by 2023.

All factory remanufactured products are backed by Eaton's Roadranger sales and service network, the nation's leading support system for drivetrain components, which provides unequaled protection, support, and training from experienced professionals.

In addition to its efforts to service the market with factory remanufactured transmission products, Eaton



Eaton has expanded its remanufacturing to provide customers with a sustainable alternative.

has established a network of authorized rebuilders across North America. The authorized rebuilders have specific training, parts, testing, and validation requirements designed to provide consistent quality of remanufacturing transmissions to fleet operators.

Authorized rebuilders are regionally located across North America to provide a broad coverage of products to maximize fleet uptime. These authorized rebuilders have similar part reuse criteria and provide the same environmental benefit as buying a factory remanufactured transmission. Eaton's authorized rebuilder remanufacturing programs are designed to have an inventory of remanufactured products strategically stocked throughout North America to maximize vehicle up-time.

"Our remanufacturing strategy will continue to evolve to ensure we minimize our environmental footprint on the environment long-term, and we've already identified additional electronics products to be launched through the remainder of 2020 and 2021," said Bauer.

For more information:

Eaton
Phone: (248) 226-6462
Eaton.com

Regal's SS Hera is a hassle-free replacement option for worm speed reducers.



Regal Beloit

EXTENDS HERA RIGHT ANGLE GEAR DRIVE SERIES

Regal Beloit Corporation has announced a line extension of the Hub City SS (stainless steel) HERA High Efficiency Right Angle Gear Drive.

Regal has added two new sizes to the IP69K certified SS version of this helical-hypodial gear drive to this product suite with the stainless steel 55 and 75, taking the torque range to 8,500 in-lbs. Worm gear drives are generally not as efficient as helical gears and become less efficient the higher the ratio. The SS HERA Gear Drive is 90% efficient, regardless of ratio.

“The line extension of the SS Hub City HERA Gear Drive is designed to be a no-hassle replacement of major brands of worm speed reducers and also provides a highly efficient right angle gear solution for new applications,” said Mike Suter, vice president, marketing, Regal. “SS HERA offers four models that can replace up to a dozen sizes of worm reducers. This interchangeability can help with inventory consolidation.”

The SS HERA, with polished 316 stainless steel housings, is IP69K-certified to withstand sustained high-temperature, high-pressure washdown.



It is also HACCP-compatible and BISSC-certified.

The SS HERA can be bundled with Leeson Stainless Washguard all-stainless motors. It is available with the HubLoc keyless bushing system and new stainless steel, HubCap bolt-on split covers.

Regal offers online tools and apps for both iPhone and Android users to

assist with SS HERA selection. Users may select the right product using physical parameters and by entering a competitive worm gear model number. The product search and 3D configurator are user-friendly, quick to navigate, and provide native CAD files.

For more information:

Regal Beloit Corporation
Phone: (630) 364-8800
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Gearbox repair, rebuilding and reverse-engineering.

Tolomatic

SERVOWELD ACTUATORS DELIVER COMPACT FOOTPRINT

The latest generation of Tolomatic high-force actuators for seventh-axis robotic spot-welding is now designed on a compact footprint in Tolomatic's most power-dense actuator for weld-gun designs. Compact ServoWeld actuators, available in two patent-pending models, are designed for automotive body-in-white resistance spot welding as well as high-production sheet-metal

welding applications. The compact servo motor and high-force actuator combo can deliver up to 30 million welds (CSWX model) in typical robotic welding applications along with increased force and speed capabilities.

Force range and speed easily adapt to increases in production demand. The Compact ServoWeld CSWX, for both steel and aluminum weld



applications, features Tolomatic's specially designed roller nut to handle 95+ percent of welding applications with C, X, and pinch weld guns. The CSWX can provide up to 18kN of pressing force (4,047 lbf.) in a compact 90 mm frame. Top-speed C-gun performance is 10.5 kN of force (2,023 lbf.) and 700 mm/sec (27.5 in/sec). Options include integrated force feedback, manual override, and long stroke.

"The Compact ServoWeld continues to use Tolomatic's best-in-class skewed winding technology to provide industry leading consistent force repeatability," said Andy Zasko, vice president, sales and marketing, Tolomatic.

Model CSW is designed for lower force (15.6 kN [3,500 lbf.]) and lower duty cycle applications (20 million+ welds) for C, X, and pinch weld guns. Top speed C-gun performance is 7.9 kN (1,641 lbf.) and 700 mm/sec (27.5 in/sec).

Both models include mid-trunnion mounting to easily adapt to a variety of mounting locations, four standard stroke lengths, and force repeatability of plus or minus three percent for the life of the actuator. Integrated anti-rotate and integrated water-cooling options are available.

Tolomatic ServoWeld actuators, validated and specified at the largest global OEMs, are known for superior tip-dressing performance and exceptional sensitivity during robot equalization.

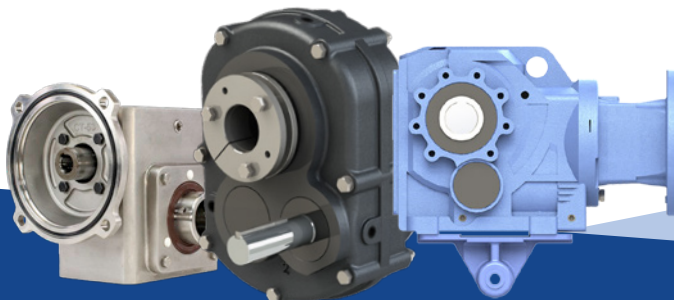
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Harmonic Drive

RELEASES ULTRA-LIGHTWEIGHT GEARHEAD

The CSF-ULW gearhead series from Harmonic Drive features a newly engineered lightweight structure with an ultra-compact shape. The CSF-ULW is a housed zero backlash Harmonic Drive component gearset combined with a precision cross roller output bearing and flange. The CSF-ULW is available in two sizes, with three reduction ratio's per size. The ULW series maintains the same performance standards as the popular CSF-2UH series. Ideal for use on end of arm axes for small industrial and collaborative robots, the CSF-ULW is also well suited for general industrial machinery where weight is a critical factor.

For more information:

Electromate (Harmonic Drive)
Phone: (877) 737-8698
www.electromate.com



Goodyear

INTRODUCES LINE OF BRAKING COMPONENTS

In a licensing deal with FDP Virginia, Goodyear Brakes announced that it is introducing a full line of braking components. Goodyear Brakes was created to address a critical need in the automotive aftermarket for a trusted brand of high-quality brake pads and bundles which are backed by a national warranty, decades of production experience and one of the best-known names in automotive excellence.

“There is a tremendous opportunity for a trusted brand of braking components in the market today,” said Wally McCarty, senior vice president of business development for Goodyear Brakes. “While OEM braking systems have improved and advanced, driver assistance systems (ADAS) have reduced extreme brake wear and increased the brakes’ lifespan. There are very few well-known brand names in the brake category, so this makes it difficult for consumers to determine what are premium quality brake system components

and fair prices when replacing brakes on their vehicle.”

Goodyear Brakes strives to help ensure that drivers are selecting the safest solution for their vehicle. Premium quality brake bundles, calipers, rotors, brake pads and all the hardware for today’s most popular vehicles, from daily drivers to SUVs as well as light trucks are manufactured by Goodyear Brakes. The product lineup offers the ideal solution for almost every braking need – whether drivers are looking to save money on their vehicle repairs, upgrade their performance or restore their perfect car.

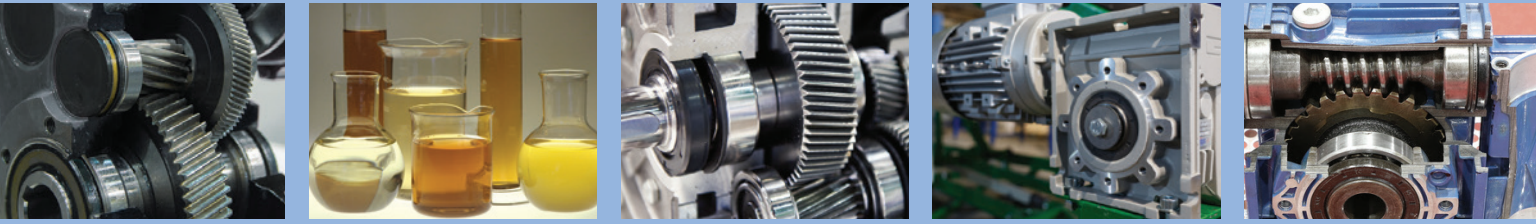
“The Goodyear Brakes mission is to provide the most trusted brand of braking components that make your vehicle as safe as possible,” noted Bob Bouwma, director of engineering and advanced technologies for Goodyear Brakes. “Our team of engineers and scientists work every day to improve the quality, performance and durability of each set of brakes

we provide. Using the most advanced technology available in friction science today, the brake bundles are designed to be safe, quiet and long lasting.”

Goodyear Brakes will be sold through www.GoodyearBrakes.com on Amazon and CARid. The portal is designed to give consumers a direct channel to identify their braking system needs using their VIN and license plate information, then order all of the components online. The website also provides expert advice, “How To” videos and proper guidance for brake maintenance and replacement projects.

Aftermarket demand for brake systems and components in North America is forecast to advance 2.6% per annum through 2021 to \$4.3 billion, according to the Freedonia Group research. More than 90 percent of the brake pad market is private label products.

Goodyear Brakes are offered through a licensing collaboration



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with Goodyear, one of the world's most trusted automotive brands. The brake pads are manufactured in the USA using a proprietary green production process by a company with more than 50 years of experience in friction science. The rotors are made to OEM standards by OEM-approved manufacturers around the world. Calipers are remanufactured in North America, and a majority of that manufacturing process has returned to the United States, bringing important manufacturing jobs back to the American economy.

The Goodyear Brakes product line was developed through decades of friction science experience, advanced engineering and thorough laboratory and on-road testing. Testing was performed at the company's labs in Virginia, and third-party testing was conducted by Link Engineering Company (LINK) in Detroit. Testing included Dynamometer Tests, Independent Laboratory Tests, Environmental Tests and Certification, Analytical Tests, Vehicle Traffic Tests and Performance Vehicle Tests.

Goodyear Brakes braking systems offer superior braking performance and consistent braking through all temperature ranges, as well as excellent corrosion prevention through its proprietary Antiox Max coating for maximum rust and corrosion protection. This is a critical protection needed for driving in inclement weather and brine-treated streets.

The full product line includes:

- Goodyear Brakes premium brake pads manufactured in the USA and specifically formulated to provide maximum stopping effectiveness, control and durability.



- High-performance Goodyear Brakes rotors that are CNC-machined to build maximum performance, durability and safety into every rotor and feature a proprietary Antiox Max coating for maximum rust and corrosion protection, a critical protection needed for driving in inclement weather and brine-treated streets.
- High-performance Goodyear Brakes calipers that are built using exacting standards to match original equipment manufacturer (OEM) requirements, feature Antiox Max coating and come with the correct brackets and hardware to ensure a perfect installation. Goodyear Brakes calipers are remanufactured in North America, and a majority

of that manufacturing process has returned to the United States, bringing important manufacturing jobs back to the American economy.

- Goodyear Brakes hardware accompanies every brake bundle to ensure you have all of the high-quality parts to successfully complete your brake installation.

For more information:

Goodyear
Phone: (877) 438-2757
www.goodyearbrakes.com

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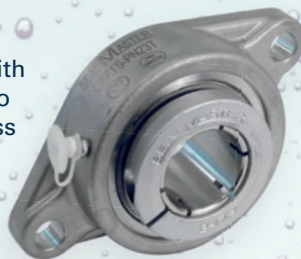
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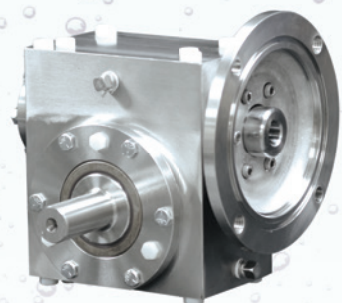


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Kollmorgen

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Kollmorgen's R2A rodless actuators offer smooth operation with a low-friction carriage bearing design available in belt drive models for rapid index moves or screw driven models for high thrust capacity and excellent repeatability. The R2A Series offers a low-cost system to both position and guide a load and can also be configured as a cartesian system utilizing multiple actuators. Integrated motor options include Kollmorgen's AKM family of brushless servo motors paired with AKD series servo drives or optional NEMA 23, 34 hybrid stepper motor mounts.

- Maximum stroke length to 1,830 mm (72 in.)
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- Maximum thrust forces up to 450 N (100 lbf)
- Maximum velocity of 2,000 mm/s with belt drive models
- Optional single or dual carriages

R2A Series Rodless Actuators are designed for a wide variety of industrial, scientific, and commercial applications requiring control of linear thrust,



speed, and position. Rodless actuators are preferred in applications desiring the elimination of guides and ways.

For more information:

Kollmorgen
Phone: (540) 633-3545
www.kollmorgen.com

Bonfiglioli

PRESENTS EVOX PLATFORM

Bonfiglioli, announces the launch of the new helical in-Line geared motor under the newly born EVOX Platform.

Efficiency, reliability, modularity and performance were the drivers behind the development of the EVOX geared motor platform. Thanks to an enhanced modularity concept, EVOX represents a step forward for Bonfiglioli's product range, with solutions for a wide spectrum of applications. The uncompromised selection of commercial components, the broad use of gear grinding processes, and specific "low noise" gear design make EVOX a benchmark product in terms of reliability and efficiency.

The first products of the EVOX geared motor platform are the new Helical In-Line Gearmotor CP combined with the new Asynchronous IE3/NEMA premium high efficiency electric motors.

The synergies between these two new concepts create an efficient, strong, small and simple gearmotor ecosystem. The in-line gear units will be first released in 6 different sizes: 55, 100, 200, 335, 500, 650 Nm with motor power between 0.12 and 15 kW IE3.

The EVOX Platform is characterized by a new simple and clean design, suitable for any application environment furtherly featured by optional C3/C4 surface protection or by ATEX rating (explosion proof protection).

The EVOX CP gear unit is ideal also for higher precision demanding applications, thanks to the reduced backlash configuration available in the standard catalogue. EVOX CP also helps eliminate any customer experienced friction, thanks to an innovative lubrication concept that allows the gearmotor to be

used in any mounting position, thus overcoming the need of changing oil level and oil plugs configuration. This will give our customers the freedom and flexibility to use the product in any orientation.

The geared motors will be available both in compact and IEC flanged versions, allowing customers to choose between a standardized motor and a dimensionally optimized configuration. BXN motor, the IEC standard, and MXN motor, the compact version, share most of the configuration and options, including dynamic brake, incremental and absolute encoders, thermal sensors and switches. The new standard motor terminal box is shaped with its 9 PIN connectors, for up to 8 different voltages at 50Hz or 60Hz power supply with a single winding, making it suitable for the EU, US, Indian and Australian market. Further 6 windings cover the rest of the world.

Bonfiglioli's research and development team designed the entire EVOX platform to enable condition



monitoring and predictive maintenance, both sensed and sensorless. During the development of the EVOX CP gearmotor, a complete mathematical model relating thermal behaviors of the gearmotors to the electrical variables has been developed. This will enable effective sensorless condition monitoring and predictive maintenance directly managed by our AxiaVert

Inverters acting as an edge computer.

In the near future, the EVOX Platform will include other product range extensions.

For more information:

Bonfiglioli
Phone: (853) 334-3333
www.bonfiglioli.com

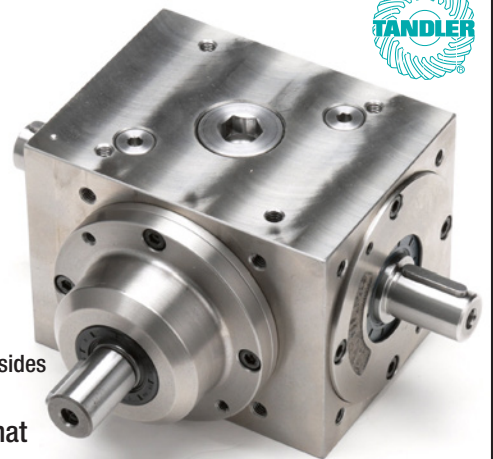


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Haydon Kerk Pittman

LAUNCHES MINISLIDE MSA SERIES

Haydon Kerk Pittman, a business unit of AMETEK Advanced Motion Solutions division, is pleased to announce the release of the new MiniSlide MSA series.

Today more than ever, lab equipment and automation designers must fit sophisticated motion control solutions into compact spaces. These device makers need solutions that are uniquely suited for their application while being economically priced. The MiniSlide can solve these demanding challenges while reducing the time, cost, and performance concerns associated with developing guided linear assemblies from individual components. The MiniSlide assemblies are highly configurable, simple to integrate, and offer a compact low profile with a stable platform, all at an economical price point. The MSA series is small in size, but big in power!

The MiniSlide series offers tremendous design flexibility with two motor options: a 21 mm, size 8 hybrid linear actuator, and a 20 mm, 19000 series can stack linear actuator. In addition, there are

nine different lead screw options ranging from ~0.3mm to 8 mm – providing resolution down to 0.001524 mm (0.00006 inches) per step, axial forces up to 45N and accommodating stroke lengths of up to 150 mm. Finally, four different lubrication options, a rotary encoder feedback option, as well as English or metric mounting hardware standards are available.

The MiniSlide series provides pre-engineered versatility for a variety of single and multi-axis applications. By providing a compact, cost effective, and highly customizable linear motion solution, the MSA is ideally suited for use in lab equipment applications such as sample handling, spectrometers and chromatographers, molecular analyzers, optical microscopes, and other inspection equipment.

For more information:

Haydon Kerk Pittman
Phone: (203) 756-7441
www.haydonkerkpittman.com

Voith

IMPLEMENTS BELTGENIUS ERIC SYSTEM

The mining industry is facing serious challenges, including declining ore concentrations, harsh weather conditions at remote locations and a growing interest in environmental protection. Voith is responding with new digitalized solutions to meet these challenges and to permanently increase mine productivity. Voith has been successfully running a first prototype of the digital twin BeltGenius ERIC at a renowned European mine operator for some time now.

The project has now reached a relevant milestone, with all the key figures announced at the beginning of the prototype run having been realized for the customer since the start of the project. BeltGenius ERIC analyzes and compares on the basis of standardized values how respective belt conveyor systems of a mine perform. By means of these key figures, Voith is able to identify physical deviations of the belt system, which serve as an early indicator

of failures. In addition, the mine operator is given a starting point for determining how efficiently the respective system transports material. With the help of this key figure, conveyors can be compared with each other.

In this case, the newly defined data made it possible to take measures that led to improved uptime and reduced energy consumption. The prototype is used in a belt conveyor system with a capacity of 37,500 tons per hour and a speed of 7.5 meters per second. The belt of the system is 2.2 kilometers long and 2.7 meters wide and is completely digitally mapped by the system.

“BeltGenius ERIC has achieved all planned key figures at the customer’s site,” says Dr. Manfred Ziegler, business development manager of belt conveyor systems at Voith. “The exact image of the belt conveyor system generated by the digital twin enables us to create



further added value for our customers and thus maximize productivity.”

Voith BeltGenius is the product family used for monitoring, benchmarking and optimizing belt conveyors and conveyor systems. BeltGenius ERIC is a digital twin of the conveyor belt. It processes sensor data in real time to calculate the Performance Indicator of the respective conveyor belt and to point out possibilities for performance improvement.

For more information:

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