

# Bosch Rexroth

EXAMINES THE FACTORY OF THE FUTURE

Imagine a packaging factory where you can change everything directly from the floor, roof and walls within a few days or even hours. Increasingly short production life cycles, smaller batch sizes, and individual product design and forms mark the requirements for future production, which have full flexibility, and are individual and scalable. Bosch Rexroth showcased this “Factory of the Future” during Pack Expo 2018.

Bosch Rexroth offers maximum flexibility when it comes to (re)configuring production equipment:

and reduced cabinet size and energy consumption. Ideal for all packaging, factory automation and motion logic applications, the intelligent IndraControl XM is easy to commission and features high-performance real-time data processing capabilities, and Rexroth’s Open Core interface allows the integration into a wide range of systems.

Rexroth’s connectivity modules allow end users to communicate with their equipment, production lines and manufacturing facilities. Data collection is done with SCD



greatly reduced set-up times allow for greater variety. As a logical consequence, decentralized automation designs using distributed intelligence and interoperability are necessary.

Rexroth’s Factory of the Future showcase is a multi-technology exhibit featuring intelligent, distributed drive and control components, connectivity modules, compact and versatile linear products, innovative chain conveyors and a wide selection of structural framing. All of which make it possible to expand machines and systems as necessary in a modular fashion.

This motor-integrated drive technology, IndraDrive Mi, reduces machine footprint of packaging and processing machines thanks to reduced components generating savings with up to 90 percent less wiring,

(Sense Connect Detect), a new, low-cost generation of sensors that are particularly easy to integrate. Bosch Rexroth showed how data from a certain number of SCD sensors can be collected, as well as analyzed and managed in the cloud. Products such as the Rexroth IoT Gateway Rack connect all areas of production from sensors to machine data in just a few steps and allow full shop floor transparency and monitoring of the overall production system. Next, Rexroth’s OpenCore Engineering builds the crucial bridge to the world of IT, enabling new levels of engineering flexibility.

**For more information:**

Bosch Rexroth  
Phone: (800) 739-7684  
[www.boschrexroth-us.com](http://www.boschrexroth-us.com)

# Interroll

EXPANDS PRODUCT PORTFOLIO

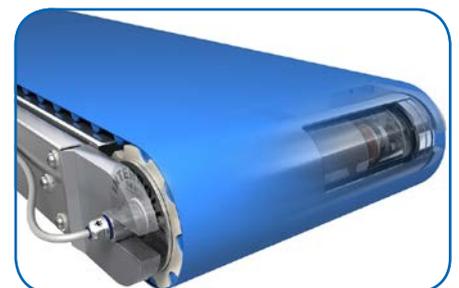
A new generation of drum motors, which Interroll is now expanding with more diameter options were on display at Pack Expo 2018. The DM0113 and the DM0138 offers an impressive range of benefits: Stronger shafts and ball bearings ensure a particularly long service life and the extremely stable design for the planetary gear allows high torques to be transferred with low levels of operating noise. All the drum motors in the new generation comply with the requirements of IP69K, the highest degree of hygiene protection, meaning that they are significantly quicker and easier to clean in comparison to traditional gear motors. Local manufacturing ensures that delivery times of the new drum motors will be kept at a minimum.

Interroll is also invested into new polyurethane coating equipment for producing Interroll Premium Hygienic shells for driving homogeneous belts in Wilmington, USA. This solution is unique in the market.

A further highlight at Pack Expo 2018 was a Modular Conveyor Platform (MCP) Loop display. The MCP is ideally suited to demonstrate the ease of use and flexibility of automatic order-picking systems.

**For more information:**

Interroll Corporation  
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[www.interroll.com](http://www.interroll.com)





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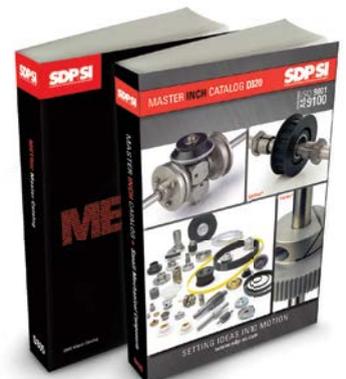
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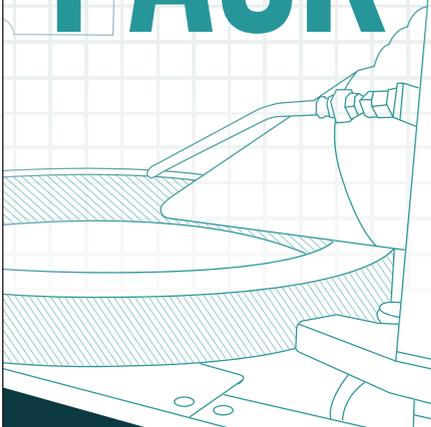
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## ABM

RELEASES PARALLEL SHAFT GEAR

The new FGA 172/173 parallel shaft gear from ABM Greiffenberger meets the stringent demands imposed on materials handling facilities in intralogistics. The drive is compact, works very efficiently and has impressively long operating times.

The parallel shaft gear can continuously transmit torques of up to 170 Nm. It is especially suitable for use in materials handling technology, e.g. as a drive in chain conveyors, conveyor belts, rotary tables and vertical conveyors. The FGA 172/173 features high-quality angled teeth which enable reliable and energy-efficient operation as well as low noise levels. ABM makes the teeth and the light but robust aluminum housing in its in-house production facilities. The new version in the parallel shaft gear series also has a multitude of fastening options. This gives users great installation flexibility. The gearbox can be mounted laterally or with various flanges or can be used as an add-on gear with torque support. In materials handling facilities the drive can be mounted underneath



the conveyor belt for space-saving purposes. The FGA 172/173 can be easily combined with three-phase asynchronous motors as well as with SINOCHRON

Motors from ABM Greiffenberger. The 172/173 version features a very high efficiency, can handle excessive loads and is extremely powerful. The parallel shaft gear is available with two or three stages. It can be used not only for materials handling logistics, but also as a crane travel drive because small gear reductions with the two-stage design can be realized. ABM design engineers have accommodated both designs in their own housings. The drive thus is very compact especially the overall length has been optimized. The new version closes the gap between the FGA 103 and the FGA 283 introduced by ABM in 2014.

**For more information:**

ABM Drives Inc.  
Phone: (513) 576-1300  
[www.abm-drives.com](http://www.abm-drives.com)

## Forest City Gear

ADDS METAL ALLOY ANALYSIS TO GEAR INSPECTION CAPABILITIES

Forest City Gear can now perform fast, comprehensive analysis and verification of metal alloys for quality assurance and control using its new Thermo Scientific Niton XRF Analyzer.

The Niton XRF Analyzer enables Forest City Gear to quickly and easily verify that the metal alloys used in barstock and/or near net shape blanks received from outside suppliers meet specifications before gears are produced. It can also be used to confirm that the chemical composition of metal alloys after heat treat meets requirements. The

Analyzer can even be used to verify the plating thickness over metal to ensure that plating performed by outside vendors conforms to specification.

The lightweight, handheld and



purpose-built construction of the Niton Analyzer makes it ideal for application in a wide range of environments, from shop floor to even outdoors.

**For more information:**

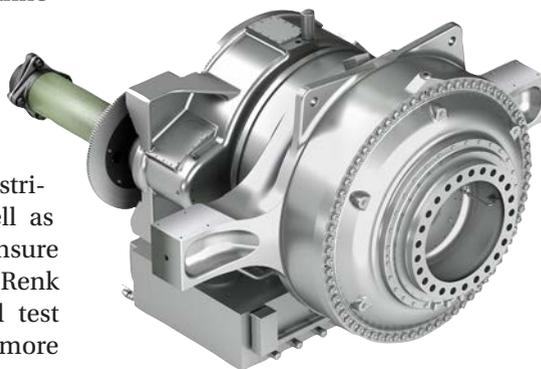
Forest City Gear  
 Phone: (815) 623-2168  
[www.forestcitygear.com](http://www.forestcitygear.com)

## Renk AG

OFFERS INTELLIGENT GEARBOX AND COUPLING SOLUTIONS FOR WIND TURBINES

At WindEnergy 2018 in Hamburg, Renk AG presented two product innovations with the EQ-Gear gearbox and the EQ-Flex couplings. The gearbox with the unique slide bearing technology allows for tremendous power density due to the ideal load distribution. Special materials as well as innovative coating procedures ensure optimal operation. In addition, Renk presented the VIB-Monitor and test systems for wind turbines. For more

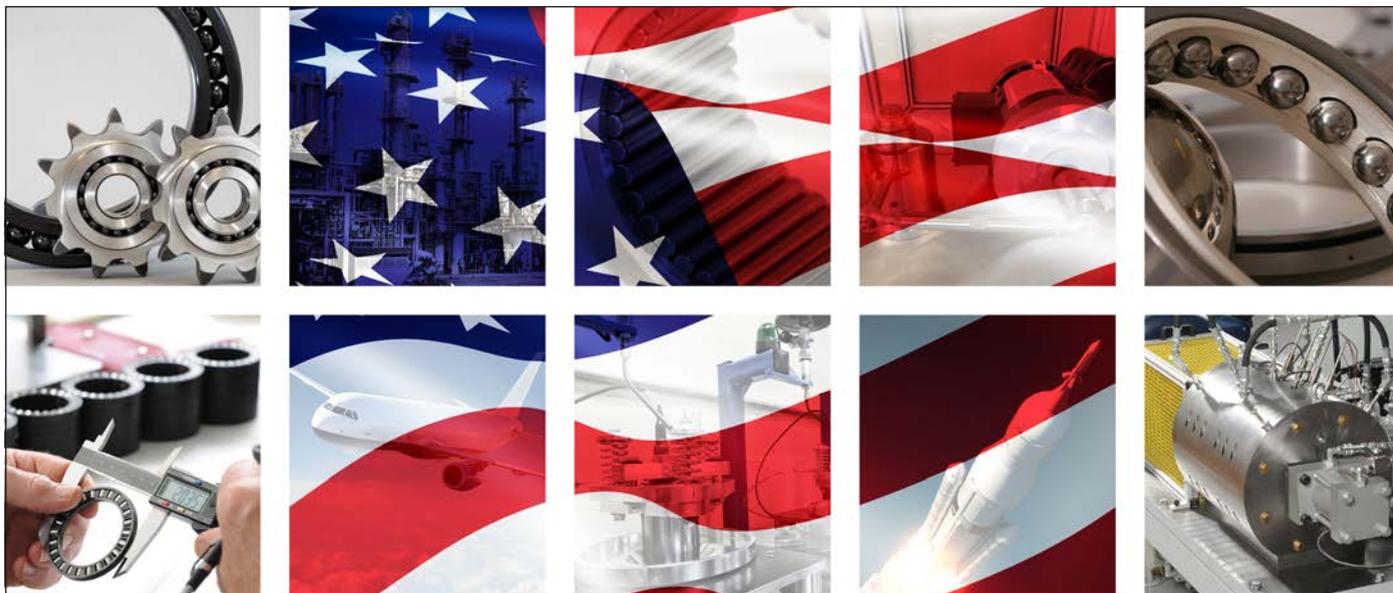
than 30 years, Renk has been offering complete solutions in the form of gearboxes, couplings, slide bearings and test bench technology for wind power. The intelligent planetary bearing system of the new EQ-Gear gearbox thus ensures almost uniform load distribution in all operating conditions. As a manufacturer of gearboxes and slide bearings, decades of experience in mastering extreme forces allow Renk to establish wear-resistant slide bearings as a sustainable alternative to conventional rolling bearings. There is no service life restriction thanks to the optimal design. At the same time, the



modular design allows for economical solutions for virtually any application.

**EQ-Gear: Variable use for all platform configurations**

The EQ-Gear is suitable both for low and medium-speed platform configurations in coaxial design as well as for the high-speed drive train with an axially-offset generator connection. Especially in the coaxial platform configuration, the lines required for pitch control can easily be guided through the gearbox between the input and output shaft. The unique wireless temperature monitoring is ensured by the remote monitoring of slide bearings. The optimal load distribution between the planetary stages is self-adjusting. Optionally, the entire system, including the electrical connection, can be tested and validated in the test bench. The gearboxes are certified according to IEC and GL guidelines.



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## EQ-Flex: For reliable torque transmission between the gearbox and generator

The torque limiter of the new EQ-Flex coupling ensures the torque limitation in the event of overload. This increases the system availability and the operators benefit from the freedom from maintenance and wear stability. The patented slip system ensures a variable and stable slip torque during operation. It is possible to adjust the slip

torque without disassembling the coupling in the drive train or to re-calibrate in the test bench. The layered structure on the specially shaped discs compensates axial, radial or angled offsets between drive and work machines without generating large restoring forces. The torque is measured continuously.

### For more information:

Renk AG  
Phone: +49 821 5700-279  
[www.renk-ag.com](http://www.renk-ag.com)

## Voith

### FLEXIBLE COUPLINGS UTILIZED FOR OEM TEST CELLS

Voith is proud to offer a tailored, highly flexible D2300 coupling for a major engine Original Equipment Manufacturer (OEM)'s test cells. The introduction of the coupling significantly streamlines the testing process for the OEM.

"We are excited about the success of the first installations for this OEM's midrange engine test cells," said Kyle Kluttz, vice president, new business sales — Americas, Voith. "This solution will streamline the testing process for a wide range of their engines and the result will be a more efficient, economical, and practical process."

The Voith D2300 coupling features high torsional flexibility, which makes it possible to reproduce test cycles more precisely in supercritical operations to achieve accurate results. Development test rigs, continuous-running test rigs, and end-of-line test rigs operate safely and reliably with this coupling at speeds up to 10,000 revolutions per minute (rpm). The coupling shifts a system's critical resonance frequencies below the operational speed range and dampens undesirable alternating torques. This protects all system components from damaging vibrations, increasing the lifetime and availability of the entire test rig.

Designed to be modular, the Voith coupling also easily integrates into a wide range of engine test rigs. The connections can be adapted to almost all types of engines and dynos, saving costs for adaptation expenses and allowing for the development of an improved design with a shorter lever arm. Less stress is placed on all of the connected units when moving through the resonance speed (engine start) and in other speed ranges, extending the service life of all of the test rig driveline components. Higher availability and lower life cycle costs for the system also contribute to cost savings and process efficiency.

Introduced in 2015, the Voith D2300 coupling prototype was first installed at the major engine OEM's facility in India. Its success led to a request to install the coupling at the OEM's facility in Brazil. Since then, the OEM continues to install the Voith solution across its global fleet of test cells to streamline the mid-range engine testing processes.

### For more information:

Voith  
Phone: (717) 792-7099  
[www.voith.com](http://www.voith.com)



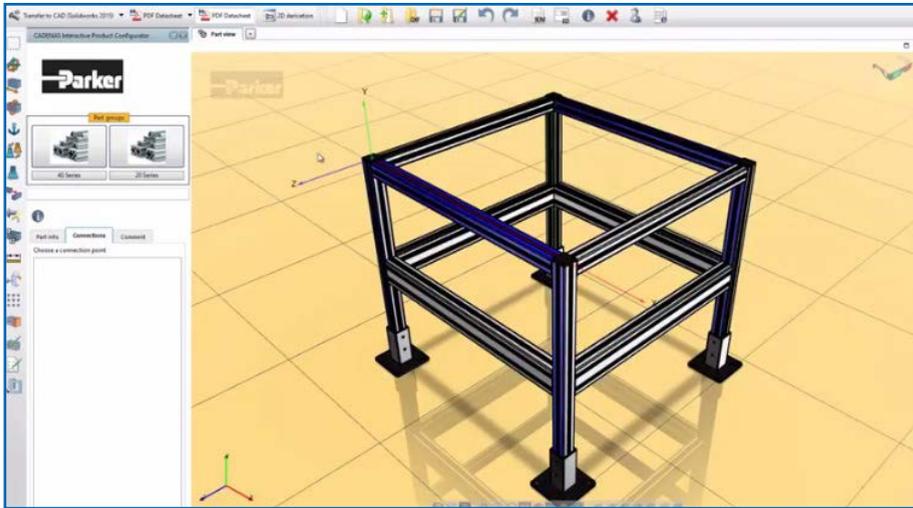
# Parker

## LAUNCHES FREE T-SLOT ALUMINUM DESIGN ARCHITECT TOOL

Electromechanical and Drives Division North America is pleased to announce the release of the Parker T-Slot Aluminum Design Architect, which enables users of any skill level to quickly and easily design products from Parker T-slot aluminum framing components.

The software takes the challenging task of designing products from T-slot aluminum and makes it as simple as building with snap-together blocks. Available as a free download on the Parker website, the software has been lauded by Parker design centers, professional

users, and DIYers for its simple, easy-to-use interface, on-the-fly BOM generation, and instant quote capabilities. Parker's T-slot aluminum framing is the material of choice for assembling an unlimited variety of bases, frames, linear slide systems, safety guarding, enclosures, worktables, material handling systems, and other structures. The modular T-slot aluminum profile system offers so much flexibility and cost savings in engineering, fabrication, and assembly that it has become the preferred material for a multitude of applications. Formerly, to design a product with T-slot aluminum, engineers would create the various profiles, connectors, fasteners and accessories within their CAD system. They would then create their design by manipulating each component. Upon completion, they would manually create a bill-of-materials and send to Parker for a quote. If the user did not have CAD



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access they would often send Parker a “napkin sketch,” for the Parker engineering team to interpret, design and quote. This would often require three to five iterations, taking significant time and effort for the customer and the Parker team. “It’s so easy, anyone can do it,” says Mario Mitchell, Parker’s T-Slot Aluminum Framing product manager. “The entire process has been streamlined and simplified with the end-user in mind. This simple, standalone system requires no CAD access or previous engineering experience; they download and start creating in minutes. Designs will be more accurate the first time and iterate much faster. One of my favorite features is how all of the fasteners and connectors are automatically generated for the design and everything is added to the BOM. When they are done designing, the user can email the BOM to us and we can get a price quote right back to them.” While no CAD access or experience is required to use the tool, there

are advanced features and outputs that will appeal to professional engineers and systems integrators, including .stp files and native CAD output to Dassault SolidWorks, Autodesk Inventor, and PTC CREO. “This tool isn’t just for the home user,” adds Jay Hopper, COO of CADENAS PARTSolutions. “There are some powerful features that will really appeal to pro users. For engineers who are integrating their Parker T-slot aluminum assembly into a larger design, they can instantly export projects from the T-slot aluminum design architect to their CAD application. If they’re looking to share the design with a purchasing department, they can instantly generate a 3D PDF cut sheet, with all of the details for their specific design. Anyone who has ever used T-slot aluminum profiles is going to love this tool.”

**For more information:**  
Parker Hannifin  
Phone: (800) 333-4932  
[www.parker.com/ips](http://www.parker.com/ips)

## Nord

MAXXDRIVE SUITABLE FOR HEAVY-DUTY APPLICATIONS



Robust, high load capacity and durable—industrial gear units by Nord Drivesystems are suitable for many heavy duty applications. The “extruder flange” option is now also available for rated torques between 15 kNm and 80 kNm.

MaxxDrive industrial gear units are characterized by high power density, quiet operation, and top reliability. Large rolling bearings ensure extremely high axial and radial load capacities and a long service life. The technological heavyweight drives also offer a modular, flexible design as well as varied mounting options. This makes the robust helical and bevel gear units in one-piece.

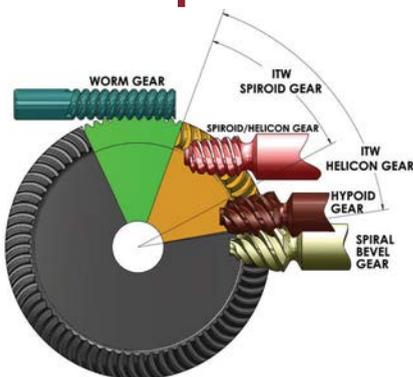
Unicase housings are suitable for a great number of heavy duty applications. On the basis of the industrial gear units, Nord plans complete drive systems for heavy duty operation with motors and drive electronics, for tasks including conveyor technology, pumps and agitators.

Nord now extended the successful series of industrial gear units: Two new sizes, 5 and 6, extend the previous range with rated torques of 15 kNm and 20 kNm. Offering a total of 11 sizes, the drive specialist now covers a torque range from 15 to 250 kNm. All options of the previous range are available for the new types as well.

In addition, Nord has supplemented sizes 5 to 11 (rated torques from 15 to 80 kNm) of its modular series

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with extruder flanges. Users benefit from generously dimensioned thrust bearings which easily absorb process forces and ensure a long service life. The “extruder flange” option can be customized to the customer’s shaft and optimally matched to the customer’s demands with several bearing variants. Offering many options for input and output shafts, mounting, seals, and monitoring (temperature, vibration, etc.), Nord’s extensive range of industrial gear units provide a high level of flexibility for designing demanding applications.

**For more information:**

Nord Gear Corp.  
Phone: (888) 314-6673  
[www.nord.com](http://www.nord.com)

# Thomson

OFFERS REDIMOUNT UPGRADE OPTION FOR MOTORS OR GEARS

Thomson Industries, Inc. has launched an upgraded RediMount option, a pre-engineered, modular adapter kit for seamlessly installing motors or gears in less than five minutes. The improved option is now the default for Thomson linear motion systems and precision linear actuators, and its capabilities are factored into optimal sizing recommendations generated through the company’s Linear MOTIONEERING product sizing and selection tool, accessible at the website below.

According to Niklas Sjostrom, product line manager EMEA & Asia at Thomson, “Lead time is minimized significantly as the motor or gear and systems can now be shipped with RediMount pre-installed. Whereas design engineers previously spent valuable time searching for the optimal motor flange kit and installing the individual components upon receipt,



now they can order our upgraded solution, significantly reducing lead time and having only the simple task of bolting on their motor upon receipt.”

RediMount accommodates a wide range of motor types and sizes or gears, which can be mounted to linear motion systems and actuators faster and with less effort than ever before. “RediMount also includes updated smart part numbers with a specific motor ID, which reflect the motor or gear manufacturer and type,” added Sjostrom. “For engineers with old product numbers, we developed a translator, which converts the old product number to a new one including motor ID.”

# Motors & Gear Drives

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Finally, apart from reduced lead and engineering time on the overall system, RediMount is also designed with a flexible coupling that matches or exceeds the high input torque of the linear unit.

**For more information:**

Thomson Industries, Inc.  
Phone: (540) 633-3549  
[www.linearmotioneering.com](http://www.linearmotioneering.com)

## Tsubaki

EXPANDS FAMILY OF CHAIN WEAR INDICATORS

The new BS Large Size Indicator is available in sizes RS20B to RS48B and the ANSI Large Size Indicator — covers sizes from RS100 to RS240. These complement the existing BS Set which is used with sizes RF06B to RS16B and the ANSI Set for sizes RS35 to RS80. The new large size indicators are avail-



able to purchase as individual items, rather than as part of a set.

The Tsubaki Chain Wear Indicator enables plant and machinery engineers to measure roller chain condition and determine critical wear in one simple operation. In use one end is shaped to fit snugly over a roller and the tip of the other end indicates the degree of wear by highlighting the total elongation over a number of links. As such, they are a valuable tool for helping keep machinery in top condition and for minimizing unexpected chain failures that could lead to costly production downtime.

All hard working roller chain will stretch over time, and equally it is inevitable that the sprockets with which it engages will wear. The stretch will cause a loss of tension, reducing the transmission efficiency. This wear is likely to cause loss of alignment accuracy for the overall drive system, leading to repercussions in positioning and locating duties, reduced efficiency and an increase in noise and vibration. If wear increases to a critical point the chain will begin riding and jumping on the sprockets which causes shock loads, which in turn will further accelerate wear.

These problems are avoided by regularly monitoring the chain for stretch and changing it before problems become manifest. Tsubaki's chain wear indicator gauges are made to high quality specifications and are resistant to corrosion. Their robust construction ensures accurate measuring every time over a long working life.

**For more information:**

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# Ruland Manufacturing

DISTRIBUTES SCHMIDT CONTROLFLEX COUPLINGS

Ruland Manufacturing is now an authorized distributor for Controlflex couplings manufactured by Schmidt-Kupplung in Wolfenbüttel, Germany. This partnership will give Schmidt-Kupplung an expanded North American presence and Ruland a more complete zero-backlash coupling product line.

Controlflex couplings have a compact balanced design, are electrically isolating, and have high misalignment capabilities, making them an ideal fit for encoders or light duty power transmission applications. Equipment designers in industries such as packaging, semiconductor, solar, medical, and automation benefit from the wide range of sizes and performance characteristics offered by these couplings.

Controlflex couplings are comprised of two anodized aluminum hubs joined by pins to a Delrin insert called the frog. Hubs are manufactured in standard widths for general purpose applications and thin widths for compact installations. The Delrin frog allows for a balance of rigidity to maintain position and flexibility for high misalignment capabilities. It is an efficient torque transmitting element with light bearing loads.

Controlflex couplings are manufactured in single and double frog styles, allowing for system design flexibility. Single frog couplings have high misalignment capabilities and fit in space restricted applications. Double frog styles offer higher torque and torsional stiffness capabilities. All styles have a balanced design for reduced vibration at speeds up to 25,000 rpm.

Controlflex couplings are available in clamp screw designs with or without keyways in inch, metric, and inch to metric bore sizes ranging from 1/8 inch (3 mm) to 1 1/2 inches (40 mm). Hardware meets or exceeds DIN 912 12.9 standards for maximum torque capabilities.

## For more information:

Ruland Manufacturing Co., Inc.  
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