### **Maxon Motor**

**EXPANDS X DRIVES LINE** 

Two years ago, Maxon Motor introduced a new generation of brushed DC motors - the Maxon X drives.

Now, four more motor sizes are being added to the existing portfolio. The 14, 16, 22 and 26 millimeter diameter models are now each available in a long version (L), which offers higher continuous torque and higher continuous output power.

At the same time, Maxon Motor is introducing four new GPX planetary gearheads, in the sizes 14, 19, 26 and 37 millimeters, compatible with existing products in



the program. These gearheads are designed with scaled gear stages. Each of the new three-stage gearheads can be driven with the next smaller motor. This results in the drive system being smaller, lighter and more economical.

The existing GPX 16 and GPX 32 models are available in various versions and can be equipped with ceramic axles to reduce wear. Customers looking for a particularly low-noise gearhead have the option of choosing plastic planetary gears.

Maxon also expanded its encoder portfolio. The new ENX 16 Easy absolute encoder is available as an SSI or BiSS-C version, according to the customer's requirements.

### For more information:

Maxon Motor Phone: (508) 677-0520 ext. 113 www.maxonmotorusa.com

**LM76** 

DEBUTS THREE NEW LINEAR ROLLER BLOCK AND RAIL SYSTEMS

Low cost, Saibo SB-LGB linear roller block and rail systems are now available from LM76 in three sizes to meet load requirements up to 1,200 newtons (270 pounds).

These narrow profile linear motion systems feature low smooth noise. travel, high speed up to 10 meters per second, high acceleration up to 50 meters per second, low weight, high linear accuracy, sealed radial low friction bearings and low cost. Due to their narrow profile they are easy to install

into new and existing applications.

Saibo SB-LGB linear roller block and rail systems have an adjustable preload system to control the required level of precision needed for most applications. The roller block has six drilled and tapped holes for mounting tooling, cameras, test equipment and more. They can be used in robotics, assembly, pick-and-place, sorting, pack-

aging, manufacturing, sampling, laser cutting, wafer handling and other precision applications. The rail systems are protected from debris, dust, chips and contaminates by plastic end caps with spring loaded oil filled felt pads. The felt wiper pads also deliver lubrication to the guide and rollers. The wipers are easily re-lubricated through convenient oil ports in the end cap.

### For more information:

LM76 Phone: (413) 525-4166 www.lm76.com

### Redex

OFFERS INCREASED VERSATILITY WITH NEW GEARS

Versatility is the key issue for manufacturers of multi-axis milling machines and vertical turning lathes. The same machine must be able to perform various milling and lathing operations so that machining operations can be carried out with the highest accuracy (without part disassembly) and the highest productivity.



Until now, these constraints meant that manufacturers had to use drives that were generally complex and did not necessarily meet every technical requirement. Redex offers two complementary integrated drives for tables used on milling machines and vertical lathes. They allow designers to choose the right drive for each application and

> based on their priorities of speed, power, accuracy and rigidity.

> Redex's high-speed versions of its DRP, KRP and KRPX ranges complement the features of its MSR range of drives. They simplify the design of the mechanical transmission systems of both large rotary tables used on vertical lathes (over 2,000

# From the Forest City Gear Family To You and Yours...Merry Christmas



meters) and smaller tables used on milling machines. They also improve machine accuracy and allow for smaller machine footprints.

When meshed with a drive gear, the two reducers on Redex TwinDrive and DualDrive solutions cancel 100 percent of backlash. These high-speed reducers have been hardened to allow continuous operating cycles and meet the specific requirements of rotary tables. As a result, Redex high-speed TwinDrive and DualDrive units can achieve rotational speeds of up to 28 rotations per minute.

Although the Redex MSR range offers higher rotational speeds, the high-speed versions of its DRP, KRP and KRPX drives offer greater accuracy, rigidity and momentum. They are the standard drives with the highest positioning accuracy.

The complementarity of both solutions allows manufacturers to design the right rotary-table drives for specific applications and thus their priorities of speed, power, accuracy and rigidity.

Redex solutions make it possible to execute additional functions on the C-axis without any additional mechanical devices or the use of position locking. This maximum accuracy is maintained during milling and/or positioning operations particularly by the electrical or mechanical preload system, which continuously manages the counter-torque between the pinions.

Solutions that use two reducers, and thus two motors, are more cost effective and easier to manage in most cases. Compared to heavy-duty rotary tables used in conventional configurations that require a 160-kW motor, the TwinDrive solution uses two 80-kW motors, which are more standard and often less expensive. Maintenance and spare-parts management is also simplified by the use of the smaller, standard motors. This simplifies rotarytable design because it eliminates the need for machine-tool manufacturers to design and build their own gearboxes with all the necessary components.

### For more information:

Redex SA Phone: +(33) 2 38 94 42 62 www.cfourtune@redex.fr

### **Suhner**

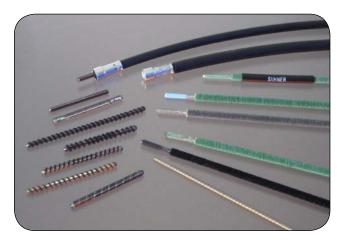
### SOLVES NOISE ABSORPTION FOR POWER SEAT

Less noise, less vibrations, less distractions, more comfort; all this is required in today's global automotive industry. The power seat manufacturers are demanding innovation on the level of the component manufacturer.

Using patented innovations in conjunction with state-of-the-art manufactur-

ing technologies, Suhner addresses these needs.

Through scientific experiments in Suhner's R&D laboratory as well as through a well-respected university in the United States, Suhner has found the ideal combination of materials together with the best manufacturing techniques.



Suhner's research found that the main noise source is the drive motor and its load, so the mission was to dampen these noise levels with the components that Suhner is manufacturing – the flexible drive shaft that is rotating inside a plastic casing. The combination of materials used together with how they are manufactured is the secret to the lowest noise levels for the entire power seat system.

### For more information:

Suhner Manufacturing, Inc. Phone: (706) 235-8046 www.suhner.com

### **Siemens**

UPGRADES SIMATIC 427D MICROBOX IPC WITH THIRD GENERATION INTEL PROCESSOR

Siemens Simatic 427D Microbox IPC has been upgraded with the third generation Intel Core i7 (1.7 GHz) processor for high system performance in demanding industrial applications. A turbo-boost feature delivers up to 2.4 GHz for maximum computing and control performance.

The IPC's DDR3 memory technology offers up to 8-GB RAM. The expandable mass memory is configurable with Fast Cards up to 16 GB, SSD (Solid State Drive) with 50 GB (high endurance) or 80 GB (standard) for robust requirements or a 2.5" hard disk with 250 GB. Memory options include a 250 GB hard disk, a DVD drive and a non-volatile memory of up to 512 KB for non-battery applications.

The fanless IPC operates in temperatures up to 55 degrees Celsius. Highly reliable where vibration and shock loads are present, it safeguards against voltage failure with NVRAM for WINAC RTX (soft PLC). It also offers a retentive signaling buffer for WinCC and image security with an enhanced write filter function.

The rugged housing has good chemical resistance against oil and grease with a smooth front to resist dirt buildup.

Downtime is also reduced and fault recognition enhanced with a self-diagnostic feature.

The unit offers up to two PCIe expansion slots. Four USB 3.0 interfaces located on the back of the IPC and one USB 2.0 interface in front quickly

## **ATC Diversified Electronics**

INTRODUCES LATEST SUMP PUMP MOTOR

ATC Diversified Electronics, a division of Marsh Bellofram Corporation, has introduced the Model SPM 120AAA single-channel shaft seal monitoring module for submersible pump motor applications.

Model SPM 120AAA provides early warning of possible motor shaft seal leakages and failures. When used as part of an effective predictive maintenance strategy, the module can help reduce the risks of premature equipment failure and downtime over 10 million mechanical cycles and fifty thousand electrical operations. Offered with choices of both fixed and adjustable sensitivities, the Model SPM 120AAA detects a pump motor shaft

seal leak by sensing the position of a resistive float switch or pair of conductive probes installed within the seal cavity. When the resistance drops below the sensi-





connect hardware components. Additionally, the 427D is easily integrated into the fieldbus level with built-in PROFIBUS DP/ MPI or PROFINET (IRT, 3 PORTS; CP1616compatible) and 2-Gigabit Ethernet (IE/ PN) ports.

#### For more information:

Siemens Corporation www.siemens.com.

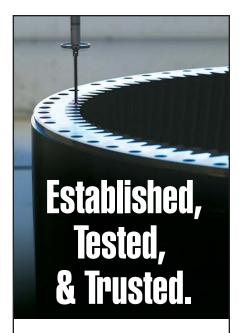
tivity rating and a possible leak is detected, the output relay energizes and the LED illuminates to red. When the submersible pump seal fault condition is cleared, the output relay automatically resets. Units operate from a 120 VAC 50/60 Hz supply voltage.

The Model SPM 120AAA is ideal for OEM submersible pumps, potable or wastewater sump pumps, industrial or municipal pump monitoring, control package manufacturing and general industrial leak detection. Units are UL Recognized and include a 10-year comprehensive product warranty.

### For more information:

ATC Diversified Electronics Phone: (304) 387-1200 www.marshbellofram.com







### **Using technology & innovation** to meet your needs – now and into the future.

Brevini Gear:

Offers innovative solutions to complex geartrain challenges with state-of-the-art technologies in engineering, manufacturing and validation.

Focuses only on large, high-precision gears and gear related components.

Commits to meeting your technical, quality and delivery requirements for R&D, quality assurance, serial production or remanufacturing at a competitive price.

### The Brevini Advantage

- AGMA Quality Level: 2015-1-A01 Grade 3
- Helical and spur gear capability: 12" (305 mm) to 68.10" (1730 mm)
- Helical and spur ring gear capability: 24" (600 mm) to 94.49" (2400 mm) OD
- · In-house deep case, carburizing
- · Design, assembly, and gear/gearbox validation

### **Brevini Gear**

2400 N. Priority Way Yorktown, IN 47396 765-759-2128 info@brevinigear.com





### **MotiCont**

INTRODUCES HIGH SPEED, ZERO COGGING DDLMS

MotiCont, a manufacturer of motion control products, has introduced a new line of direct-drive linear motors (DDLMs).

MotiCont's DDLMs eliminate backlash and provide an economical solution for users requiring high acceleration, high speed, and long life. They are available in three off-the-shelf models.

The compact DDLM-019-044-01 linear motor is only 0.75 inches in diameter and 1.75 inches long. It has a stroke of 0.46 inches and features 11 ounces of continuous force and a 34.8 ounce peak. The compact, longer stroke DDLM-019-070-01 linear motor is also only 0.75 inches in diameter but is 2.75 inches long. It has a stroke of 0.96 inches and features 10.1 ounces of continuous force and a 32.1 ounce peak. For higher force applications the DDLM-038-051-01 linear motor is 1.5 inches in diameter and 2 inches long. It has a stroke of 0.375 inches with a continuous force of 3.1 pounds and a 9.9 pound peak.

These compact motors can be integrated into new and existing applications using threaded features on the front and rear faces of the motor, as well as each end of the shaft. The feed-

back devices, amplifiers and controllers are also available.

Non-commutated, moving magnet motors have zero cogging and the light mass of the moving part allows for high acceleration/deceleration for higher throughput, and direct coupling to the load increases accuracy. All DDLM linear motors are also available with internal springs to retract the shaft to a home position in the event of a sudden shutdown.

Typical DDLM direct drive motor applications include: Automated assembly, component insertion, fluid dispensing, pick-and-place, robotics, wafer handling, sorting, valve and flow control, labeling, tension control, and laser machining in the processing, manufacturing, medical, inspection, metrology and other industries.

### For more information:

MotiCont Phone: (818) 785-1800 www.moticont.com

### **GAM**

### RELEASES LINEAR MOUNT PRODUCTS BROCHURE

GAM, a manufacturer of precision gear reducers, servo couplings and linear mounting kits, announced the release of its new linear mount products brochure on Nov. 11.

GAM's linear mount products are a line of products designed to mount directly to actuators. This offering started with just a single item, the linear slide kit, after GAM noticed customers having difficulty mounting motors to actuators. Over the years, it has evolved into a complete range of gearboxes, couplings, and adapter kits. The product range expanded even further as GAM leveraged its manufacturing operations and engineering resources to integrate individual products into complete system solutions as a service to customers.

"We really wanted to highlight our flexibility and capabilities beyond what customers may have known about or have seen in previous catalogs," said Craig Van den Avont, president of GAM. "This brochure really captures the essence of the level of value added service that we provide to our customer base."

### For more information:

Phone: (847) 649-2530 Fax: (847) 649-2501 www.gamweb.com

# **Helix Linear Technologies**

UNVEILS MINIATURE LINEAR GUIDANCE PRODUCTS

This new family of linear guidance products from Helix offers precision, accuracy and flexibility, and consists of an embedded inverse hook design. It's designed to tightly secure block components, which in turn helps them to better handle impact forces as they work to distribute stress over a larger area of the system.

Linear guidance systems offer accurate positioning, are often high speed and energy saving and can maintain accuracy for long periods of time in their respective applications.

Additional benefits of the Helix Miniature Linear Guides include:

Unique design: The miniature guides consist of a ball re-circulating design along with an embedded inverse hook design, which helps to reduce noise while at the same time extend life, re-

duce maintenance and improve high speed running capability.

Reinforced plates: The HMR-EE series stainless steel reinforced plates help to make this product line able to handle the operation of high running speeds.

Lubrication: Included in the design is an embedded lubrication pad, which works to oil balls and the raceway.

Greater surface contact: This feature allows the miniature guides to work with high load and high moment capacity when compared to competing products.

Dust-proof: Designed so that dust contamination is restricted, thereby enabling prolonged life.

#### For more information:

Helix Linear Technologies Phone: (855) 435-4958 www.helixlinear.com

### J.W. Winco

#### ANNOUNCES EN 450 BALL-SHAPED DOOR CATCHES

J.W. Winco, Inc., a supplier of standard industrial machine components, announced it now offers EN 450 ballshaped door catches, in metric sizes.

These RoHS-compliant door catches were designed for use with both shutter doors and sliding doors. The ballshaped door catch consists of a catch body to be fixed to a frame and a ball to be fixed to a door. The catch body is technopolymer plastic and matte black, and the ball is glass fiber reinforced plastic.

Under specific tests, the catch showed constant performances for more than 20,000 cycles.



Also available are EN 450.1 plastic spacers for ball-shaped door catches, made of glass fiber reinforced plastic. In addition to the basic spacing distances of 5, 10 and 15 millimeters, combinations of spacers can provide distances of 20, 25 and 30 millimeters as well.

J.W. Winco offers an extensive selection of inch and metric size adjustable levers, cabinet U-handles, plastic and steel hinges and locking mechanisms, revolving and retractable handles, hand wheels, hand cranks, tube connection and conveyor components, inch and metric construction tubing, shock absorption mounts, leveling mounts, hand knobs, spring, ball and indexing plungers, jig, fixture and fastening components, retaining magnet assemblies, toggle clamps, metric casters and wheels, universal joints, oil sight glasses, and metric tools for the industrial and commercial equipment industries.

#### For more information:

J.W. Winco, Inc. Phone: 1 (800) 877-8351 www.jwwinco.com

# **DieQua offers** more gearboxes

plus application experience to help select the best one for your needs

### **Helical Gearmotors**



- 1-75 HP Capacity
- . Motorized or Adapters
- Right Angle or Inline
- Shaft Mount Designs
- Multi-Stage Ratios
- Modular Design

### **Worm Reducers**



- 7 sizes, 28-110mm CD
- Fret-free Connection
- NEMA or IEC Adapters
- Coupling Input
- Aluminum Housings
- 2-Side Worm Support

### **Planetary Gearheads**



- Precision or Economy
- Inline or Right Angle
- 40-155mm Frames
- Low Backlash
- 1 and 2 Stage Ratios
- Lubricated for Life

### **Servo Worm Gearheads**



- 3 Racklash Levels
- · Shafts or Hollow Bores Single or Dual Outputs
- 11 sizes, 25-200mm CD • Capacity: 10-7000 Nm
- 20,000 Hour Ratings

#### Spiral Bevel Gearboxes



- 9 Sizes
- 1-250 HP Capacity
- Low Backlash Option
- Ratios from 1:1 to 6:1 Output Shaft Options
- Machined Housings

### **Special Designs**



- Add-On Options
- Modified Dimensions
- High Speed Applications
- Special Environments
- Special Duty Needs • Custom Designs



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