NSK'S New Bearing Designs

DELIVER LONGER LIFE, HIGHER SPEEDS IN PAPERMAKING MACHINES

Rolling bearings used in the production of paper undergo a continuous production cycle and are required to handle high-temperature conditions, increasing loads and higher speeds; yet at the same time provide longer service life with the minimum of maintenance.

The increasing demands worldwide for paper mean that failures in the continuous production cycle can be costly, so bearing manufacturers are under pressure to provide products with increasing levels of reliability and operating life.

One of the major problems addressed by NSK is the trend to higher operating temperatures in the dryer sections of papermaking machines. These temperatures—up to 200°C on newer machines—cause high thermal stresses, which can lead to fracture of the inner rings of the spherical roller bearings used in the dryer sections. The same problem can also occur as a result of rapid dryer warm-up.

NSK analyzed the mechanism of inner ring fracture and established a strength evaluation method that enabled development of the TL (Tough and Long-Life) specification, a special surface treatment that produces both high raceway surface hardness and dimensional stability under temperatures up to 200°C, while simultaneously having the same level of compressive residual stress at the raceway surface as conventional carburized steel.

According to the company's press release, TL specification bearings have higher inner-ring fracture resistance than bainite steel (austempered, high-carbon, chrome bearing steel) or bearing steel (hardened, high-carbon, chrome bearing steel) units.

The raceway surface hardness of the TL material also exceeds that of bainite bearing steel and carburized steel.

NSK also developed the HPS series of spherical roller bearings for use in other small-diameter rolls in the papermaking process, including canvas rolls, paper rolls, felt rolls and riders. The HPS series is a new design of spherical roller bearing (SRB) that offers twice the running life of conventional SRB of the same size, together with a 20% increase in running speed, according to the release.

To address the cage wear issue, the company developed a special nitriding surface treatment, which is applied to the high-precision pressed steel cage of the HPS series bearings. Compared to conventional nitriding, NSK's treatment forms a finer and harder surface with a more uniform hardness.

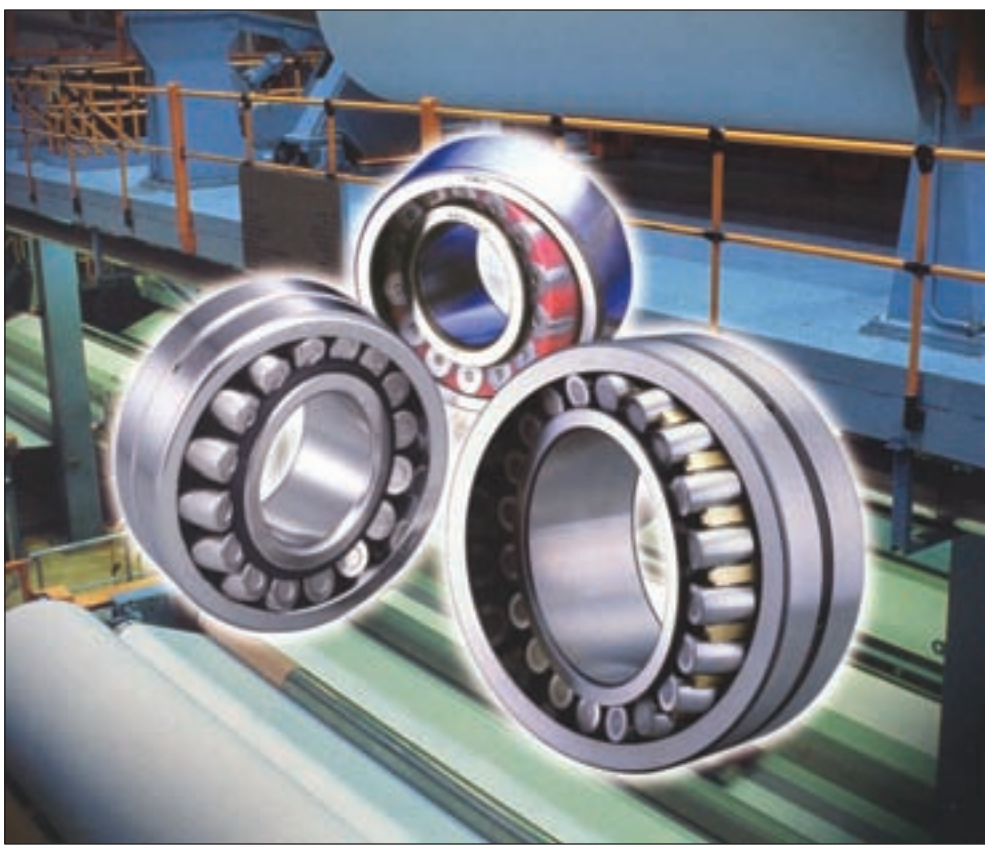
Finally, NSK's Molded Oil bearings (standard, deep-groove ball and SRB) enable machine users to replace existing methods of lubricating machine parts, especially on raw material conveyors, carrier rope sheaves and suction rolls.

"Molded Oil" is a plastic-containing lubricating oil, and the lubricating oil accounts for more than 50% of the content. Therefore, the mechanism of oil discharge from the matrix is temperature-dependent—the higher the heat generation, the higher the oil discharge rate.

Bearings equipped with Molded Oil are designed for environments exposed to moisture or paper dust. They do not suffer from oil leakage and there is no loss of lubricant due to the ingress of water. In addition, Molded Oil bearings can improve equipment performance in environments where lubrication is difficult to apply and in places where oil- and grease-absorbing dust are produced.

For more information:

Marketing Communications Dept.
NSK UK Ltd.
Northern Rd.
Newart Notts NG24 2JF
Phone: +(44) 1636-605-123
E-mail: *info-uk@nsk.com*
Internet: *www.eu.nsk.com*



Ruland Manufacturing's Couplings

RESISTANT TO WIND-UP

Ruland Manufacturing offers oldham couplings and zero-backlash jaw couplings with standard keyways as stock items. Keyways increase the torque capacity of the coupling by creating a positive drive while also ensuring precise positioning of the coupling hub. Oldham couplings and jaw couplings are each three-piece coupling assemblies comprised of two aluminum hubs with a mating center section for transmission of torque. The design offers simplified assembly and can mix and match hubs with different bores, even inch-to-metric combinations.

According to the company's press release, oldham and jaw couplings differ in performance.

Oldham coupling hubs have drive tenons that do not overlap when combined with the mating center disc. This design allows for easier sliding to accommodate misalignment with light bearing loads since the only resistance caused by misalignment is frictional. The couplings also operate as a mechanical fuse since the hubs will spin freely if the center disc fails and offers electrical isolation.

By contrast, zero-backlash jaw couplings have "jaws" that overlap when combined with their mating center spider. Jaws will stay engaged even if the spider fails. Spiders are made of an advanced polyurethane material and available in three different hardness levels to provide varied levels of shock absorption. Ruland jaw couplings have a curved jaw profile and press fit to provide zero-backlash. Standoffs, located on the spider "limbs," assist in angular misalignment capabilities, as well as electrical isolation.

Ruland oldham couplings and jaw couplings are offered in a choice of six outside diameters from 1/2" (13 mm) to 2 ¼" (57 mm) in both set-screw style and clamp style. A large variety of inch and metric bore sizes starting at 1/8" (3 mm) is available with keyways offered on 3/8" (8 mm) and larger bores.

For more information:
Ruland Manufacturing Co.
6 Hayes Memorial Dr.
Marlborough, MA 01752
Phone: (508) 485-1000
E-Mail: *marketing@ruland.com*

Danaher Motion

UPDATES CONTROL PLATFORM FOR AUTOMATED GUIDED VEHICLES

Danaher Motion introduces version 1.4 of its *NDC8* control platform for automated guided vehicles (AGVs). The *NDC8* control platform now supports up to 10 AC drives per AGV.

According to Danaher's press release, drives can be used for steering, driving or auxiliary control, and AC technology helps increase power while reducing running costs.

"*NDC8* version 1.4 hosts an industry-standard OPC client, allowing for a smooth connection to any I/O resource on the market," says Henrik Eriksson, strategic product line manager for Danaher Motion's AGV family of products. "The updated curve-editing tool gives the engineer the freedom to adapt each AGV layout, and new spline-based flexible curves allow for increased vehicle speed at corners, while saving floor space when negotiating tight corners. The improved tool set provides statistical data to optimize overall transport flow and increase system productivity."

Additionally, the route-planning tool set has been enhanced and helps users to limit and avoid AGV traffic congestion problems. Ladder Diagram language has been added to the *NDC8 PLC* programming environment, *OpenPCS*, for even more flexibility in customizing AGV solutions.

Magnetic spot or magnetic tape navigation can be combined effortlessly and seamlessly with existing laser navigation systems. Combining navigation techniques is particularly useful in environments where neither is optimal for all of the pre-programmed routes of a plant.

Danaher Motion's AGV solutions are used in the steel, automotive, electronics, ceramics, paper and printing, food and beverage, logistics and distribution, and entertainment industries.

For more information:
Danaher Motion
1500 Mittel Blvd.
Wood Dale, IL 60191
Phone: (540) 633-3400
E-mail: *ContactUs@DanaherMotion.com*
Internet: *www.DanaherMotion.com*

Portescap's Linear Actuators

CAPABLE OF PRECISE POSITIONING

Portescap, a Danaher Motion company, introduces 26DAM series digital linear actuators. These units provide linear force up to 120 oz. (33 N), linear step resolution of 0.001", 0.002" and 0.004" and 3.4 watts of power.

"The 26DAM is an ideal linear actuator solution in medical equipment applications such as pumps, pipettes and scanners, as well as instrumentation and valve applications," says Dave Beckstoffer, Portescap product manager.

These linear actuators are available in captive and non-captive versions, with uni-polar or bi-polar coil construction, and industry-standard frame sizes. Customized designs are available upon request.

For more information contact:
Danaher Motion
1500 Mittel Blvd.
Wood Dale, IL 60191
Phone: (540) 633-3400
E-mail: *portescap.sales@danahermotion.com*
Internet: *www.danahermotion.com*

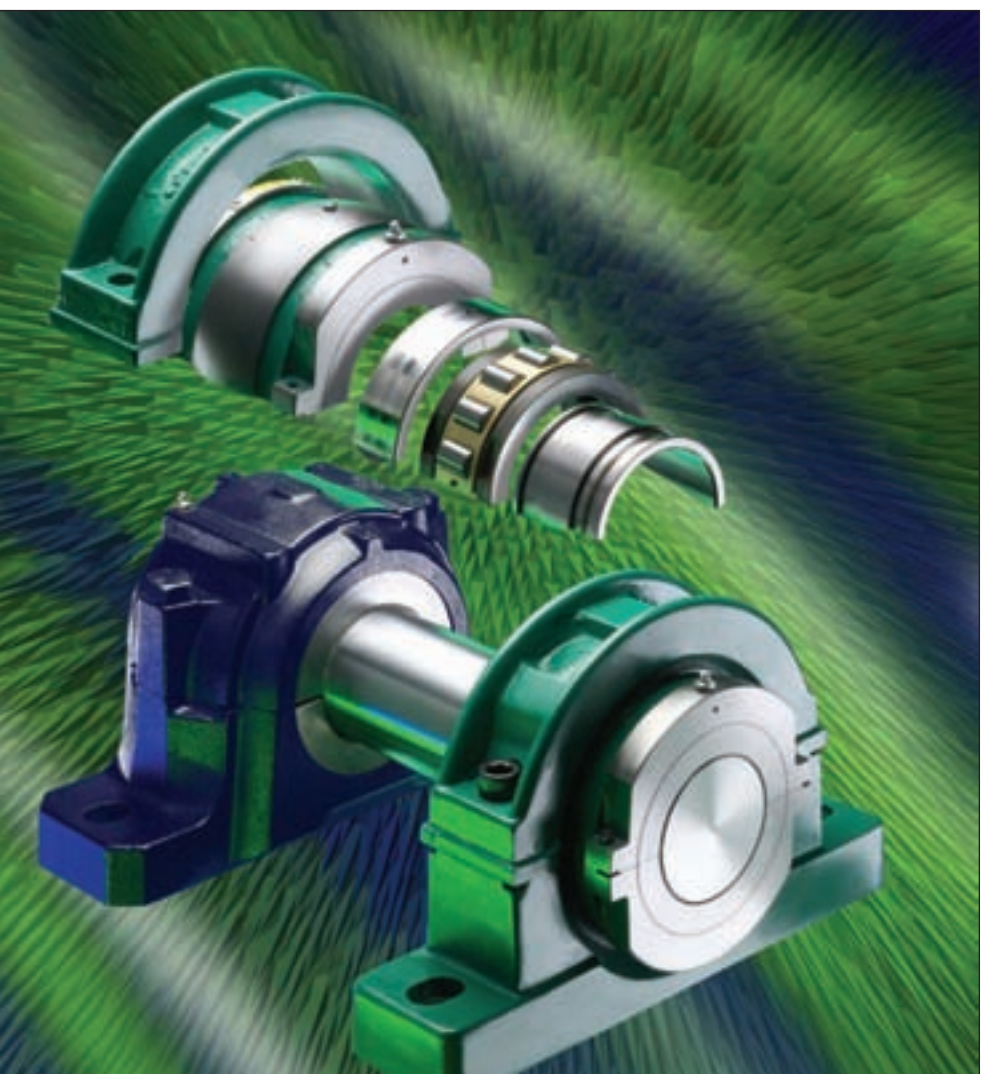
Revolvo's Dimensionally Interchangeable Split Plummer Blocks

DELIVER DOWNTIME REDUCTIONS FOR BEARING USERS

Revolvo's new SN and SD series SRB Split Roller Bearing units provide a retrofit solution, which offers full dimensional interchangeability with conventional SN & SD series plummer blocks and requires no dimensional or major structural changes to customers' machinery, according to the company's press release.

In developing the units, Revolvo addressed the issue of no ISO standard governing the boundary dimensions for split bearings. Until recently, this has meant that if a bearing user wanted to replace a solid bearing with a split bearing, problems developed because the shaft centers are higher on split roller bearing units. As a result, users would need to raise their shaft centers. However, this is a major undertaking, possibly requiring structural changes to machinery.

The new SRB, SN and SD series split roller bearings are dimensionally interchangeable with conventional industry standard SN and SD ranges of plummer blocks. According to the manufacturer, these new SRB bearings are up to 85% quicker than solid bearings to fit and remove from shafts. In addition, they have a new design of cage clip, which is retained via spiral pins to one-half of the cage during assembly and disassembly. With this retained design, the maintenance engineer benefits from a "free hand," which speeds up the bearing replacement process.



SRB bearing units are designed to be statically self-aligning. This means that there is no need to accurately realign the bearing housing to the shaft or any other in-line equipment during the installation. Secondly, SRB split roller bearings can accommodate thermal expansion of the shaft within the bearing envelope itself. Third, SRB split roller bearings perform reliably in environments up to 140°C. They are also suitable for use in aggressive environments due to the performance of the sealing systems available.

In fact, the SRB product has a spherical location between the cartridge housing and pedestal support, ensuring that, under conditions of shaft misalignment, the seals always remain concentric to the shaft. As a result, SRB split roller bearing units perform well in harsh operating conditions, even with shaft misalignment, whereas solid mounted bearings can suffer from non-concentric ineffective seals that will lead to premature bearing failure.

Finally, the SN and SD series split bearings can be inspected at regular intervals, as part of a planned maintenance campaign. Revolvo's design provides "pry" slots which enable disassembly of the cartridge housing and support pedestal, reducing the likelihood of components being broken, especially in applications where the bearing unit has been installed for some time, and/or where the environment is contaminated.

For more information:
Revolvo Ltd.
Queens Cross
Dudley, West Midlands DY1 1QW
U.K.
Phone: +(44) 1384-844000
Internet: *www.revolvo.com*

Sprint Electric's DC Drives

REGENERATE ENERGY

Sprint Electric's 340XRi, 680XRi and 1220XRi DC drives are designed to regenerate energy back into the main supply under braking without the need for complex intermediate storage, resistive dumping or additional power bridges.

Four-quadrant, regenerative DC drives offer an energy-efficient system with their ability to return the braking energy to the main supply, thereby lowering demand from the incoming AC supply. According to the company's press release, if drives are operated on equal driving/braking cycles, the cost of running the drive is only the electrical losses in the motor and drive. Comparatively, an AC drive generally uses a braking resistor to control down ramps dissipating the energy as heat to the atmosphere.

The ability to control the rate of braking is also lost when using braking resistors. A four-quadrant regenerative DC drive is fully controllable in both motoring and braking modes, and it conserves the maximum amount of energy, according to the release.

The DC drive package has an improved power conversion efficiency across a wider speed range. At the lower motor speeds, the DC drive package provides better power/torque conversion, typically from 10:1 to in excess of 100:1 speed ranges, eliminating the need to "oversize" the motor to achieve usable low-end torque.

A four-quadrant DC drive is more energy-efficient when dealing with torque at start and near-zero speeds. The DC drive develops full-rated torque at or near zero speed in exactly the same way as throughout the entire speed range. This is because the torque is generated by the linear interaction of

the two magnetic fields of the armature winding and the field winding. The commutator ensures that the axes of these magnetic fields remain constantly perpendicular to each other, thereby in the optimum torque position. Resulting torque is practically a linear function of the two DC armature and field currents.

The DC motor is usually of an open-frame, through-vent construction, which allows ease of cooling. Conversely, the AC motor is normally of totally enclosed, fan-cooled construction, which places a further burden on the cooling arrangements.

The four-quadrant DC drive can also independently set the required current levels in each winding to meet a certain load requirement without the need for complicated algorithms, since the interaction between the two is practically zero.

Sprint Electric's 340XRi, 680XRi and 1220XRi DC drives offer a solution to four-quadrant regenerative drive applications. Using little panel space and mounting on standard DIN rail, these drives are designed for use with motors up to 1.8kW, 2hp.

For more information:
Sprint Electric
Rudford Industrial Estate
Ford, Arundel, West Sussex
BN 18 OBD
UK
Phone: +44 1903-730-000
Internet: *www.sprint-electric.com*

R + W America's Torque Limiters

ALLOW OUTPUT PLATES TO SPIN FREELY

At torque overload, the balls in torque detent load limiters overcome the spring load and roll out of their detents, allowing the output plate to spin freely over an integral bearing.

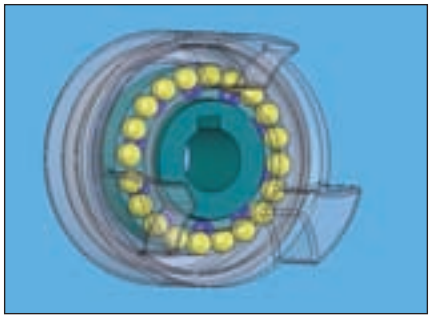
The output plate is normally either a piloted flange or a flexible coupling for connection to another shaft.

While suited to applications where release of the torque limiter takes place in emergency cases, they cannot be disengaged repeatedly as a part of a process, due to wear of the detent plate which takes place after roughly 1,000 revolutions in its overloaded condition.

Utilizing the same principle which has been used in air ratchets in the automotive and other industries for decades, the ESL nests the ball bearings between an additional set of ball bearings, rather than into detents in a hardened steel plate. The ball bearings in the ESL roll over each other, reducing impact, and evenly distributing remaining stress around the surfaces while they spin. This significantly increases the number of overload releases the torque limiter can withstand, making it unique in the industry, according to the release.

Currently, the ESL is available in the form of an elastomer insert coupling, which is a robust and backlash-free form of flexible coupling. They are, however, designed for specific OEM applications and there is a certain degree of flexibility in design when manufactured in volume. Currently torque overload values from 0.1-1,100 Nm (0.885-9735 in-lbs) and shaft bore diameters of 3-70 mm (1/8-2.75") are available.

For more information:
R + W America
1120 Tower Ln.
Bensenville, IL 60106
Phone: (630) 521-9911
Internet: *www.rw-america.com*



HPB Thermoid

ADDS V-BELT LINE

HBD/Thermoid Inc., a power transmission belt manufacturer, announced a new V-belt product line, Thermoid Select, to further complement its existing industrial V-Belt, timing belt and replacement belt product lines.

"Thermoid Select offers customers a competitively priced V-belt line that includes four different styles of the most popular belts, including classical, classical cogged, wedge, and wedge-cogged," says Fran Corda, marketing manager for the belt division of HBD/Thermoid. "Using our years of belt manufacturing and technical and design know-how, along with our production expertise, HBD/Thermoid, Inc. has teamed up with an overseas company to produce the Thermoid Select Belt Line."

HBD manufactures custom-designed and standard industrial products including AC/DC/BLDC electric motors, aerospace precision components, budding strips, cemented tungsten carbide parts, closed die forgings, coated rubber fabrics, conveyor belting, drives, ducting, gear reducers, hoses (automotive, aviation, hand-built, industrial, marine and petroleum), material handling products (metal separators/detectors and electromagnetic lifting equipment), power transmission belts, rubber bands, rubber roll coverings and ventilation equipment (fans/blowers).

For more information:
HBD Thermoid
1301 W. Sandusky Blvd.
Bellefontaine, OH 43311
Phone: (800) 433-8208
Internet: *www.hbdthermoid.com*

NKE Austria

MANUFACTURES 3,000 TYPES OF ROLLER BEARINGS IN NEW ASSEMBLY PLANT

NKE Austria introduced its new series of single-row cylindrical roller bearings.

According to NKE's press release, more than 3,000 types are made to order in NKE's new assembly plant in Steyr, Austria.

The modular production facility enables short lead times on all products. The applications of the new single-row cylindrical roller bearings include pumps and compressors, mechanical presses, electric motors, gearboxes, traction motors and axle bearings for railway vehicles, in steelworks and many other industrial applications.

The new roller bearings are available in 164 sizes, in design variants NU, NJ and NUP. The bearing cages are available in roller-guided and outer ring-guided versions, and are made from brass and polyamide, with pressed-steel versions available soon. In addition to radial clearance groups CN (CO) as standard, C3 and C4 groups are also available. Special versions including traction motor bearings (SQ1), wheel set bearings (SQ2) and electrically insulated bearings (SQ77) are available at short lead times.

Cylindrical roller bearings are made

from clean bearing steel. The surface finish of the raceways further helps reduce friction as well as lower the operating temperature. The optimized geometries of raceways and rolling elements increase the loading capacity, while a modified cage design improves the formation of lubricant film.

Misalignments can be compensated through modified contact geometry and crowned inner raceways. Tighter tolerances for the roller sorting ensure a uniform load distribution.

For more information:
NKE Austria
Ennser Strasse 41a
A- 4431 Steyr-Gleink, Austria
Phone: +(43) 7252-86667
Fax: (43) 7252-86667-59
E-mail: *j.mo@nke.at*
Internet: *www.nke.at*

Tsubaki's Linipower Jacks

LIFT AND ACTUATE

Tsubaki UK launched a new range of high-precision power jacks for lifting and actuation tasks. The Linipower range, with three model types and a wide range of options and accessories, is used in industries such as medical, industrial, transport, liquid crystal/PDP manufacture, telecommunications and entertainment.

The Linipower jacks offer lift capabilities in the range 1.96–980kN; strokes to two meters; and can be installed horizontally, vertically or inclined. They can be supplied as individual items or as motorized systems employing matched standard or specialized gearmotors, space-saving hypoid motors or servomotors. The jacks also offer the user options such as an LD function for low dust performance.

The standard base model in the Linipower range is the JWM series, a

simple and compact machine screw jack that integrates a trapezoidal screw and high-precision worm gear, making it suitable for low-speed, low-frequency operations. The unique sliding motion of the trapezoidal screw provides smooth and consistent low-speed performance, while an integrated self-lock feature maintains load, obviating the cost and time of installing a brake unit in the majority of applications.

Offering the highest capacity (908kN) in the Linipower range, the JWB ball screw type jack works best for high-speed, high-frequency operations. The compact drive produces high power, while its ball screw technology delivers long and predictable life, and also high efficiency, which, when compared to the JWM, allows a higher speed drive.

For applications where speed rather than lift capacity is the major requirement, the Linipower range offers the JWH high-lead ball screw type jack. Depending upon the lead used, the screw shaft speed of the JWH jack can exceed that of a JWB by up to four times, at the same input shaft rpm; reaching maximum screw shaft speeds of up of 7.5m/min. According to the company's press release, despite its higher speed performance, the JWH is quieter than the JWB jack, as it requires less input rpm at its drive and reducer units to run at the same speed.

Completing the Linipower range is the LD (low dust) type jack, which is recommended for use in clean rooms such as those serving FDP (Liquid Crystal/PDP) manufacture, and bearing assembly. This model regulates dust generation resulting from wear, as well as dust produced from the screw.

For more information:
Tsubaki UK Ltd.
Osier Dr.
Sherwood Park, Annesley
Nottingham NG15 ODX
Phone: + (44) 1623-688-788
E-mail: *sales@tsubaki.co.uk*
Internet: *www.tsubaki.co.uk*

Moog's New Controller

OFFERS ADVANCED CAPABILITIES IN INDUSTRY-STANDARD PACKAGE

The M3000 from Moog Controls is designed to address the needs of high-performance digital control for hydraulic and electrical products.

Based on IEC standards and exhibiting a modular structure, the M3000 comprises Moog's Servo Controller (MSC) and *Moog Axis Control Software* (*MACS*). It also can be combined with numerous extension modules, increasing its capabilities, functionality and application base even further.

According to the company's press release, complete system solutions are possible due to tight integration with other Moog products and devices such as servo valves, servo-proportional valves, servo drives and RKP pumps.

Key features include advanced digital motion control for closed-loop control of hydraulic and electric products; a 32-bit RISC processor with 32-bit floating-

point math for powerful, fast and accurate control; and multiple software-configurable interfaces to allow for SSI, encoder, CANopen, RS232, Ethernet, Profibus and analog/digital outputs.

The MSC is a freely programmable, high-performance servo controller, with built-in PLC functionality, capable of handling complex multi-axis functions and enabling cycle times as fast as 500 microseconds. The software element, *MACS*, is an IEC61131-3-compliant programming language based on the CoDeSys universal standard. It provides full programming, debugging, simulation, parameterization, visualization and tracing capabilities.

Extensive function blocks enable easy implementation of closed-loop applications, and various analogue (QAIO) and digital (QDIO) modules are offered for the extension of the local I/O.

For more information contact:
Moog Inc. Corporate Headquarters
Jamison and Seneca Rd.
East Aurora, NY 14052
Phone : (716) 652 -2000
Fax : (716) 687- 4457
E-Mail: *rgunn@moogcontrols.com*
Website: *www.moogcontrols.com/industrial*

Belden's Universal Joint

EXCEEDS MILITARY STANDARDS

Belden's complete line of universal joints and shaft assemblies includes a full range of military-certified universal joints used in auto racing/gear change linkage, military personnel carriers and aerospace applications.

Universal joints are designed and manufactured for a variety of applications, including high lift actuation and control mechanisms for

aircraft, where low deflection rates, high strength-to-weight ratios and long service life are essential.

The heavy-duty MS 271 military standard universal joints have undergone qualification and acceptance testing by a testing lab and the U.S. Department of Defense. The MS joints meet or exceed the requirements of military specification MIL-J-6193.

To qualify the universal joints, a variety of extensive and rigorous testing was completed. Reaction frames were designed and fabricated to perform torsional play, tightness, static torque, endurance and lubrication retention tests.

The Belden MS series of universal joints is the design that is mandated for all government/military and aerospace applications and is also utilized in performance and NASCAR racing. The military standard joint's high-strength pin-and-block design can be modified into various materials such as aircraft 17-5 and 15-5, and marine grade 316 and 316L stainless steel.

For more information:
Belden Inc.
2500 Braga Dr.
Broadview, IL 60155
Phone: (708) 344-4600
E-Mail: *info@beldenuniversal.com*
Website: *www.beldenuniversal.com*

New Brevini High Power Series

COMBINES EPICYCLIC GEAR DESIGN WITH MODULARITY

Brevini's new High Power series combines the highly efficient epicyclic gear design of Brevini's recently introduced S series of planetary gearboxes with the modular advantages provided by PIV's complementary POSIRED 2 family of helical and bevel-helical gearboxes. The result is a flexible power transmission package for use in pulp and paper processing, conveyor drives, industrial and marine lifting equipment, grinders and mills, machines for working sheet steel and rod, large iron-making plants, sugar and food production plants, and quarries.

Brevini's High Power series is designed to provide a family of products that are easy to configure and offer high levels of torque. By combining features of both technologies, the new gearboxes overcome the problems commonly experienced when using traditional bevel-helical gearboxes with high reduction ratios, i.e., impractical size, increased power losses and high cost.

Jon Snaith, technical manager at Brevini Power Transmissions UK Ltd., says, "By positioning the planetary gears at the output end, where speed is slow and torque is high, and using the bevel-helical gears for the input stages, we are using both elements to their best advantage. The design eliminates the necessity for additional cooling in almost all cases, reducing cost and increasing reliability. The combination also results in a unit that is considerably more compact and cost-effective than a bevel-helical solution used on its own."

The new series was launched with five standard sizes including a range of transmission ratios from 100–670, nominal torque ratings are from 37–370 Nm, and nominal power ratings are from 160–950 kW.

According to Brevini's press release, the S series planetary gearbox employs four planetary gear wheels in its epicyclic gear train, instead of the normal three, providing enhanced load sharing and the ability to produce 40–60% more torque output than other gearbox designs of equivalent size and weight. In addition, the S series design increases the contact area of the planet gears on the central gear, increasing both the rigidity and accuracy of the gearboxes.

The POSIRED 2 is designed for constant speed reduction. The gearboxes are suitable for OEM and maintenance applications, providing a nucleus of compatible components which can be assembled into a myriad of gearing combinations. The large sump and bigger case of the POSIRED 2 are designed to ensure that additional forced cooling of the lubricating oil in the transmission system is not required.

For more information:
Brevini Power Transmission UK Ltd.
Planet House
Centre Park
Warrington, Cheshire WA1 1QC
Phone: (44) 01925-636-682
E-mail: *sales@breviniuk.com*
Internet: *www.breviniuk.com*

High-Performance Stepper Drives

AVAILABLE IN 220 VAC MODELS

Applied Motion Products' family of STAC6 high-performance stepper drives is now available in 220 VAC models.

According to the company's press release, the drives offer advanced features to provide absolute maximum performance benefits from a stepper motor, and they provide software-selectable resolutions from 200 to 51,200 steps/rev. at speeds up to 50 rps.

In addition, self-test and auto setup features measure and configure motor parameters automatically, while anti-resonance technology eliminates mid-range instability for higher motor speeds and fuller use of available torque.

Demand signal smoothing can reduce extraneous system resonance for smoother motor performance and reduced wear on mechanical components.

Torque ripple smoothing adjusts the current waveform to reduce low-speed torque ripple for smooth motion at low motor speeds.

Additionally, MicroStep emulation provides motion capabilities for systems that require low step resolutions, such as retrofit systems with controller resolution that is fixed at a low value and cannot easily be changed.

Two integral control options are available, including an intuitive graphical programming language as well as a comprehensive high-level language for precise control of all drive features. The drive can be configured from a drop-down menu, or the user can create custom motor configurations if desired.

In applications requiring an encoder, the STAC6 offers a stall detect that can trigger a fault output when a motor has not reached its programmed position, a position maintenance to hold the motor position firm even when external forces

are trying to move it out of position, and stall prevention where the drive will work to end the desired move with new parameters.

For more information:
Applied Motion Products Co.
404 Westridge Dr.
Watsonville, CA 95076
Phone: (800) 525-1609, (831) 761-6555
E-mail: *mconnor@applied-motion.com*
Internet: *www.applied-motion.com*

Sharq Motion's New Parallel Shaft Gearmotors

OFFER BACKWARDS COMPATIBILITY

The new Sharq 207 series parallel-shaft gearmotors, designed as direct drop-in replacements for many high-volume OEM applications, are the first in a family of eleven new gearmotor designs being introduced in 2007.

Powered by 1/20 horsepower AC motors, the four standard models in the Sharq 207 series offer torque ratings from 42 to 113 in-lbs, with 2 to 29 rpm output speeds at full load current of 1.3 amps. Rated at 115 volt, 60 hertz, the Sharq 207 series employs shaded pole electric motors, with clockwise rotation as standard.

According to the company's press release, the totally enclosed, fan-cooled (TEFC) design offers high output in a compact 4.94"diameter, 7.47" length package.

With a 0.625" diameter output shaft and 150 lb. overhung load rating, the gearmotors feature an integral foot plate mount, as well as a three-point face mount, for easy mounting in any position.

For more information:
Sharq Motion
Phone: 888-SHARQ07
E-mail: *info@sharqmotion.com*
Website: *www.sharqmotion.com*