Klüber Lubrication

OFFERS FULLY-SYNTHETIC OIL FOR RAIL GEARBOXES

Klüber Lubrication, a worldwide manufacturer of specialty lubricants, offers Klübersynth GE 480 W 140, a fully synthetic high-performance gear oil based on polyalphaolefin (PAO) chemistry that offers high stability and protection even under shock loads.

With Klübersynth GE 480 W 140, Klüber Lubrication complements its range of efficient high-performance oils for railway gears. Klübersynth GE 475 W 90, with a kinematic viscosity of approximately 130 mm²/s at 40 degrees C, has proven to be successful in the market. For applications requiring an elevated viscosity, Klübersynth GE 480 W 140, has a kinematic viscosity of approx. 250 mm²/s at 40 degrees C. This new product concept corresponds to that of Klübersynth GE 475 W 90, which is approved by many OEMs, but with a higher viscosity.

Klübersynth GE 480 W 140 offers high resistance to scuffing and micropitting as well as good protection against wear on gear teeth and rolling bearings. The shear stability prevents



the lubricant film from collapsing, which is essential to protect both gear teeth and rolling bearings.

The low foaming tendency and anticorrosion properties of the product enable problem-free gear operation. Klübersynth GE 480 W 140 offers a much longer service life than conventional mineral oils, due to the excellent aging and oxidation resistance. As a result, service intervals are extended and maintenance costs are reduced.

High-performance gear oils from

Klüber Lubrication can be used in spur, bevel and hypoid gears, particularly if API GL4 or API GL5 is required. Klübersynth GE475W90 is approved by several gear manufacturers like IG Watteeuw, Voith Turbo, Siemens-Flende, Stadler Rail, Bombardier, CAF and the German railway operator Deutsche Bahn.

For more information:

Klüber Lubrication Phone: (603) 647-4104 www.klueber.com/us/en/

Joral

ANNOUNCES STAINLESS STEEL HOUSINGS FOR SENSORS AND ENCODERS



Joral LLC announces new stainless steel housings for all currently available sensors and encoders. Specifically designed to ensure total protection from extreme temperature fluctuation, corrosive environments, and pressure washdown. Joral stainless steel sensors are built to provide the greatest environmental protection available to provide maximum productivity.

In addition to the stainless steel housing, all of Joral's sensors are IP67 protected and rated MIL-STD 202 for shock and vibration. Stainless steel offerings include rotary encoders, linear encoders, and 3-axis inclinometers. Catered specifically to J1939 mobile hydraulics, Joral specializes in large tolerance non-contact position sensors and G-Force compensated incline sensors.

For more information:

Joral LLC Phone: (262) 378-5500 www.joralllc.com



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SDP/SI offers a wide variety of standard gears, both molded and high-quality machined, many featuring our exclusive Fairloc® Hub design.

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Igus

INTRODUCES BEARING THAT ASSISTS IN QUICK, EASY LINER REPLACEMENT

Igus has introduced a new bearing, drylin W Exchange, for its drylin W linear system in which the liner can be replaced directly on the rail without dismantling the system.

By using a practical assembly tool, users can push the old liner out of the housing, clip the new one on to the shaft and push it into the housing for a flush fit. The quick and easy swap of liners will save engineers time and money while maximizing machine up-time.

"When changing the liner on the linear glides guide rail, for example where extremely abrasive sand or glass dust is present, the entire linear slide has to be pushed off the rail," said Robert Dumayne, director at Igus. "For linear axes or multi-axis gantries with a toothed belt drive, this requires a high assembly effort and long machine downtime."

The new bearing housing for the



drylin W linear system ensures easy changing of the liner directly on the linear rail. The side cover of the bearing housing on the linear slide can be removed easily with a screwdriver. The liner is pushed out of the carriage and removed. The replacement liner, which is made of highly wear-resistant and abrasion-resistant iglidur J200 tribopolymer material, is clipped on to the rail and inserted precisely into the slide with the assembly tool. The change is completed by putting the side cap back on the bearing housing. The assembly tool is supplied free of charge, and it can be 3D printed.

The practical benefits of the drylin

W Exchange is that the rail cannot be damaged, and replacement takes place directly on the system. A pin in the middle of the side cover secures the liner on the carriage. It can also be replaced using a screwdriver. In this instance, igus provides special recesses on the new liner and in the carriage.

The new Exchange bearing housing can be retrofitted to all existing drylin W systems of size 10 with a shaft, including guides, linear axes and linear robots. Additional sizes are currently being planned.

For more information:

Igus Inc. Phone: (800) 521-2747 www.igus.com



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Portescap

ULTRA EC BRUSHLESS MOTORS OFFER HIGH TORQUE IN COMPACT PACKAGE

Portescap will be offering 2 more new length sizes under its ECT range of Ultra EC™ Brushless Slotless motors: the 35mm 22ECT35 and the 48mm 22ECT48. These new 22ECT motors along with higher torque capacity are light in weight and come in a compact package which helps in further miniaturization of the customer application.

These compact brushless motors offer almost 50 percent more continuous torque over similar comparative motors without compromising on the smooth operation and long life you expect from Portescap's brushless slotless motors. Our 22ECT motors are specially optimized for high continuous torque at low to medium speeds, maximizing power between 10K and 20K rpm.



The 22ECT motor is powered by a patented Ultra Coil Technology and patented multipolar rotor design, which provides torque of up to 41.6mNm. The 22ECT motor weighs almost 28% lesser than comparative motors and it is the lightest 4 pole motor which can be adapted in most applications in the medical & industrial markets especially in industrial hand tools where high torque lightweight motor is required to reduce the fatigue of the user. The new 22ECT is also an ideal choice for applications such as humanoid robots, lab automation equipment, electric grippers, land surveying devices.

Portescap succeeds in providing a high quality, long lasting & high performance brushless motor which is an ideal choice for geared applications because of its minimal speed drop and low motor heating under load. Their low inertia makes them an exceptional option for applications requiring fast stopping, starting and acceleration.

The new 22ECT motors are available with hall sensors and a total of 3 different coils to match your speed & voltage requirements. Upon request, Portescap can also provide options for customization including gearboxes,

encoders, coil variations and mechanical interface modifications.

Portescap is globally ISO 9001:2008 certified and our production site in India is also ISO 14001:2004 and OHSAS 18001:2007 certified.

For more information:

Portescap

Phone: (610) 235-5499 www.portescap.com



Rexnord

ANNOUNCES DRY-PT MATERIAL OPTION FOR SELECT CHAINS

Rexnord announced the latest addition to the company's line of conveying solutions products; the Dry-PT material option is now available in North America for select MatTop and TableTop chains. Dry-PT is optimized for applications where sustainability is critical, designed to maintain a constant low level of friction between the conveying chain and the bottle, run without lubrication and performs at a high level under stress. Produced in a unique lime green color to make early detection of contamination build-up easier, Dry-PT chain is suitable for PET bottle conveying applications. Available in Europe for more than two years, Dry-PT has been successfully placed in over 60 applications worldwide.



For more information:

Rexnord Corporation Phone: (866) 739-6673 www.rexnord.com

Gearing Solutions

YAW DRIVES OFFER EFFICIENT POWER-**TO-WEIGHT RATIOS**

Using unique roller gear technology, Gearing Solutions wind turbine Yaw Drives have an unparalleled power to weight ratio, achieving great efficiency. With aluminum housings, these proven yaw drives are up to 50 percent lighter with the smallest profile on the market, creating a premium weight to torque ratio. This power density makes installation and maintenance/repair much easier and faster, especially when working at height in a restricted space environment.

The lighter weight also allows the Gearing Solutions Yaw Drive to be more responsive, quickly redirecting alignment so that the turbine blades face the wind, producing the maximum amount of electrical energy at





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all times. These proven designs are ideal for turbines ranging in size from 10 kW to 50 kW, for agricultural, industrial and home wind turbine markets. Despite their lighter weight, Gearing Solutions Yaw Drives are durable, providing years of trouble-free service. Many have been in service for five years. This longevity eliminates the emergency tower climbing to replace broken gearboxes, and yields more economical power delivery.

For more information:

Gearing Solutions Phone: (440) 498-9538 www.gearingsolutions.com

Nord

PROVIDES PRODUCT DATA WITH EPLAN

Technical and electrical product data, as well as product macros for Nord electronic drive components, are now available in the web-based EPLAN data portal and can be used by all members of the portal for their proj-



ect work. EPLAN Electric P8 is one of the most important software solutions for CAD projects. EPLAN P8 provides almost unlimited possibilities for project planning, documentation and management of automation projects. EPLAN P8 product macros are available for motor starters and frequency inverters from the Nord series SK135E, SK180E, SK200E and SK500E, as well as for all Nord electronic drive technology accessories. Under the heading "Documentation/Software" on the Nord website, all currently available product macros for EPLAN P8 are also available as free downloads.

For more information:

Nord Drivesystems Phone: (608) 849-7300 www.nord.com

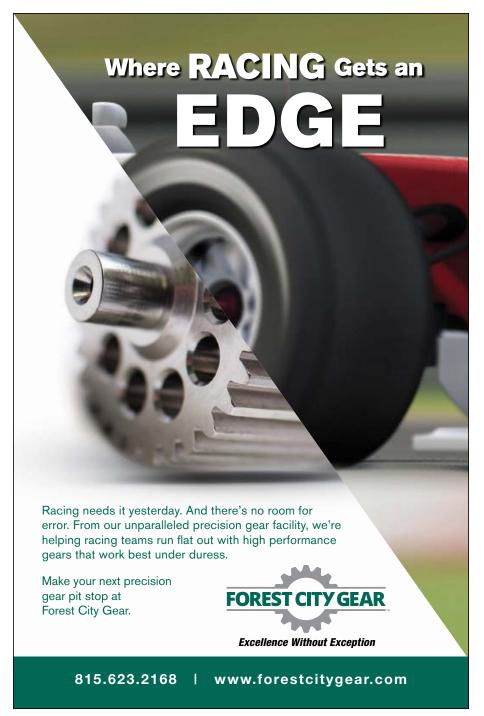
Rheintacho

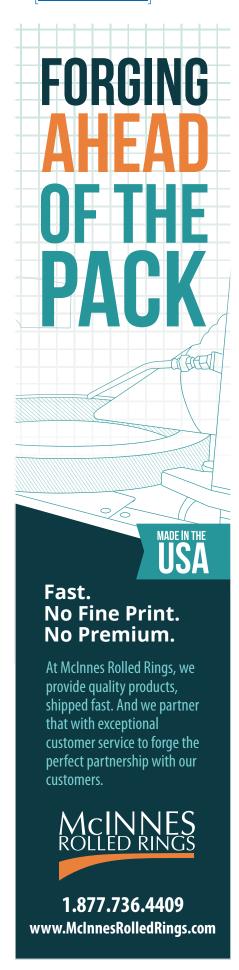
PROVIDES SENSOR OPTIONS FOR ELECTRIC DRIVES

The FQ, FP, FM and FK mobile electric drives from Rheintacho are equipped with a proven differentialhall technology for safe and reliable detection of rotational speed even in critical electrical and magnetic environmental conditions. The 2-channel design allows not only detection of rotational speed but also the direction of rotation.

In the price-sensitive market of electric drives, users can choose these sensors to match their needs regarding: the required signals, the necessary protection class for their specific applications, an interface via cable, a connector integrated into the sensor body and a wide variety of cable lengths and connector types.

The sensors can be used in a wide





range of temperatures (up to +140 °C) due to the housings made of highquality plastic as well as other constructive measures. The housing material used has exceptional mechanical properties. For example, compression strength and material durability reach values that already allow for substitution of metal housings depending on the respective application. Among other features, the electrical structure provides a very wide range of possible supply voltages and a high level of EMC stability. The Hall elements which are used cover a wide frequency range. The geometric design as flange sensor automatically ensures the proper installation position required for good



signal determination.

The FK series has proven over the last decade as a kind of world-standard for speed detection inside electric drives. The FM series features connectors integrated directly into the sensor housing to its sensor portfolio. The sensor is made of a proven high-tech-plastic. The FP series comes with completely new designed sensor electronics resulting in standstill detection and high-temperature resistance. The FQ series achieves the high protection class of IP69K.

For more information:

Rheintacho Phone: +49 (0) 761 4513 168 www.rheintacho.de

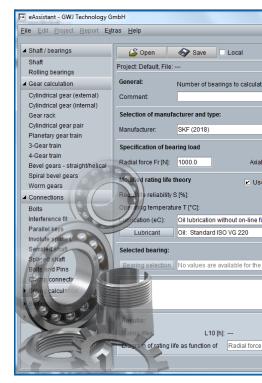
GWJ Technology

CELEBRATES 15 YEARS OF EASSISTANT

GWJ Technology GmbH from Braunschweig, Germany, is marking the 15th anniversary of its web-based calculation software *eAssistant* - the engineering assistant. The *eAssistant* software allows calculation, design and optimization of machine elements, including shafts, bearings, gears, different shaft-hub connections and bolted joints etc.

After several years of development, *eAssistant* was released in 2003 during Hannover Fair. Dial-up Internet was literally the only kind of Internet modem back then. The actual release was in May 2003 and included three calculation modules for shafts, rolling bearings and interference fits. The development process of the *eAssistant* continued thanks to the positive market response.

Further modules for parallel keys, serrated and splined shaft connections as well as involute splines were added in 2003 and 2004. At the Hannover Fair 2005, the first version of the cylindrical gear pair was introduced. Even back then, this module already included the real gear tooth form based on a mathematical simulation of the manufacturing process. Based on this, the first 3D CAD plugins for *Solidworks*, *Solid Edge* and *Autodesk Inventor* were implemented shortly afterwards. This was followed



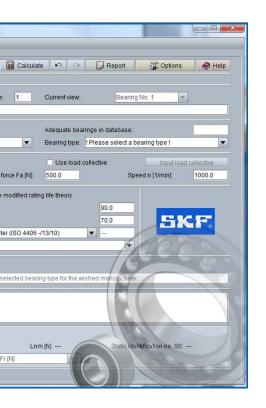
by the release of an English version and other gear modules.

Single cylindrical gears, cylindrical gear pairs, planetary gear trains, threeand four-gear train systems, gearracks, bevel gears as well as worm gears can now be determined. eAssistant provides different standards in order to calculate the load capacity. DIN 3990/ISO 6336 Method B or ANSI/AGMA 2101 are available. Calculation modules for bolted joints, timing belts, clamp connections and bolts and pins are also part of the eAssistant.

Bytheendof2012, GWJ reached another major milestone SystemManager, a true software application for complete systems of machine elements, was released. It runs as a classic desktop application, including FE libraries. The individual system elements are directly linked to the eAssistant calculation modules. The software engineering process of eAssistant and SystemManager is heavily influenced by user feedback to improve the software quality. The applications are constantly being developed.

For more information:

GWJ Technology Phone: +49 (0) 531-129 399-0 www.gwj.de



Miki Pulley

MOTOR APPLICATIONS

Miki Pulley's BXR-LE electric spring applied brakes are ideal for small and precise servo motor configurations. Their unique compact and lightweight design optimizes servo drive performance and efficiency.

With accompanying voltage controller, the brake's power consumption is stepped down to 7VDC after a split second of 24VDC for brake actuation.* When compared to most other electric brakes, the revolutionary BXR-LE design provides just one-third power consumption and heat generation in one-half the overall size thickness.



Specifications include a maximum 6,000 rpm, static friction torque range from 0.044 to 2.36 ft.lb. (0.06 Nm to 3.20 Nm) and an ambient operating temperature 14°F-104°F (-10°C to 40°C). Additional applications for the BXR-LE brakes include end effectors, ball screw actuators, XYZ positioning tables and 3D printers.

For more information:

Miki Pulley Phone: (800) 533-1731 www.mikipulley-us.com

