

Rexnord

EXTENDS BENEFITS OF SMART CONDITION MONITORING SYSTEM

Proven maintenance savings alone enable manufacturers to recoup their investment in the Rexnord Series 1000 Smart Condition Monitoring System, powered by DiRXN, in less than a year. Additional productivity gains are driven by increased uptime and enhanced safety.

Customers can now choose from four levels of monitoring, from continuous monitoring of overall gear drive vibration and temperature, all the way up to comprehensive cloud-based notification of abnormalities. And in an industry first, the base model now comes standard on select new Falk V-Class and A-Plus Gear Drives.

These easy-to-deploy solutions make condition-based maintenance accessible on a sliding scale to match manufacturers' priorities and budgets. Customers get the right information at the right time to further extend their Rexnord products' already-premium operating life.

"This more cohesive, cost-effective approach eliminates unnecessary maintenance activities and significantly lowers total cost of ownership for mission-critical and standard gearbox assets," says Rick Morse, Rexnord vice president of innovation & digital solutions. "The new models accelerate the customer's journey from run-to-failure or schedule-based maintenance to condition-based maintenance."

The Smart Condition Monitoring System uses proprietary algorithms

to continuously compare sensor data against models of healthy gear drive operating conditions. Abnormal conditions trigger alerts to onsite visual indicators, the control system, and at the highest level, the Rexnord Connect Portal.

The system puts data in context, enabling customers to focus on outcomes; teams know what action to take when and why. Manufacturers gain the ability to replace time-consuming, hands-on equipment inspections with digital technology that enhances team safety, extends asset life, and lowers inventory and operating costs.

Morse says the scalable solution addresses current and future customer needs, with hardware and instrumentation incorporating common user interfaces and industry-standard communications protocols.

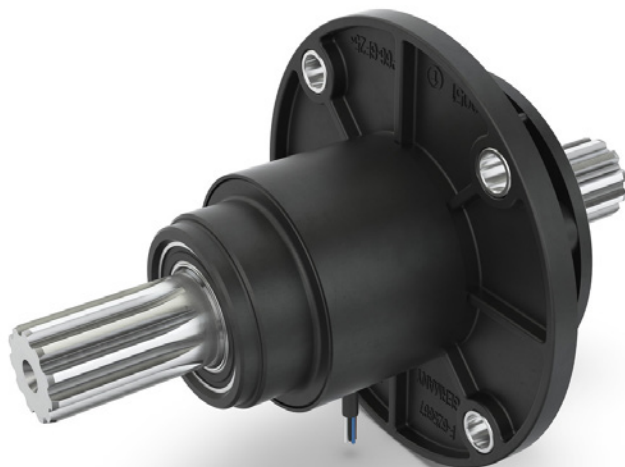
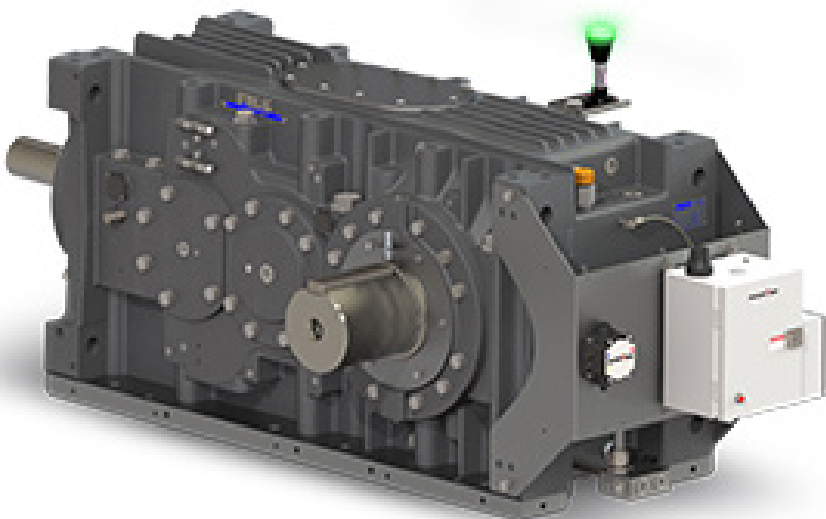
"We heard from manufacturers in mining, steel, cement, and pulp & paper that they're keen to deploy

condition-based maintenance solutions that can scale for different monitoring applications," he says. "The new series lets you zero in on the most immediate need, with field upgrades whenever you're ready to move from our base model to one of our more advanced solutions."

The Series 1000 Smart Condition Monitoring System offers rich features and functions to help manufacturers avoid unplanned downtime and eliminate unnecessary maintenance costs. Installation is fast and easy. Existing Falk Gear Drives can be upgraded with models 1010, 1020, 1050, and 1150 at a certified repair facility or your own facility, by certified Rexnord third-party technicians or by your qualified personnel with assistance from Rexnord or third-party technicians.

For more information:

Rexnord Corporation
Phone: (414) 843-3000
www.rexnord.com



Schaeffler's

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Schaeffler's Smart EcoSystem offers a standardized hard and software infrastructure from components equipped with sensors



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through to digital services and business models. It provides reliable data for controlling processes and machine monitoring with sensors and mechatronic products such as the TorqueSense Module. Schaeffler's unique domain expertise in the form of digital services allows the company to automatically generate relevant

information from the collected data and to receive specific recommended actions. These solutions can be used in a targeted manner to control processes, maximize availability, and optimize product quality.

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GWJ

OFFERS LATEST VERSION OF SYSTEMMANAGER

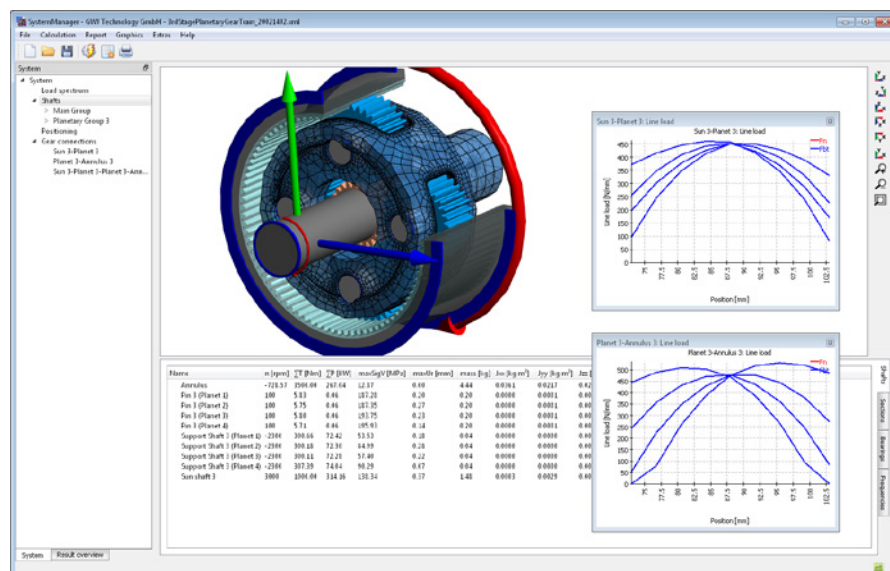
The new *SystemManager* version - an extension of the standard calculation software *eAssistant* and *TBK* - allows users to create shaft geometries using background graphics. A background drawing can be added by pasting it from the clipboard, for example from a PDF document, or as an image (png, jpg, tif, bmp). Then the shaft geometry can be drawn as a polygon. Scaling of the background graphic is also possible. Alternatively, the shaft geometry can consist of several shaft segments. The mouse (left mouse button + SHIFT key) can be used to adjust the lengths and diameters of the shaft segments to the required size. The CAD import as DXF or STEP now also allows a rotation of the drawing in case the shaft axis is not the x-axis.

A new function automates the coupling of the face coefficient $KH\beta$ and the load capacity calculation of cylindrical gears. This allows the user to see directly the effects of flank

modifications on the root and flank safeties of the gear in the system. This is also possible when using load spectra for the calculation. The line loads of all load cases are represented in a diagram. For 3D elastic parts with elastic bearings, now contact between bearing ring and part can be considered. The fitting is then considered in the contact model instead in the operating clearance of the bearing.

It is now possible to consider centrifugal expansion on 3D elastic parts. Additional new features for 3D elastic parts are new possibilities for mesh import and mesh export. Also new faces for connection with supports can now be defined directly within the software.

The updated version also features a variety of new interface functions such as the output of diagram values to different formats, freezing of diagrams or copying of curves from one diagram to another. The bearing databases from Schaeffler (INA/FAG) and SKF are



updated to latest data from the manufacturers. For data exchange of complete gear systems, the FVA's REXS format is supported in version 1.2.

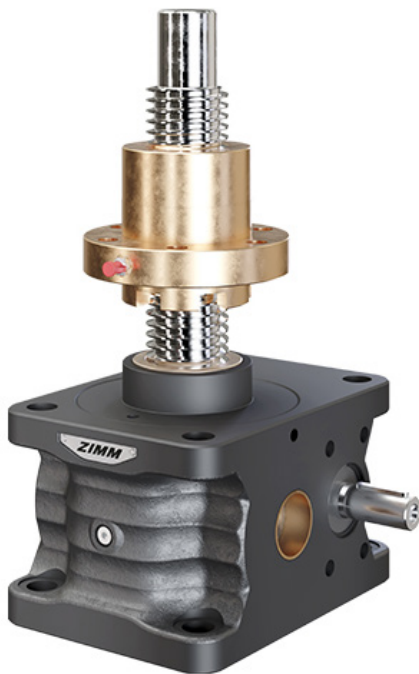
For more information:

GWJ Technology
Phone: +49 (0) 5311293990
www.gwj.de

DieQua

ANNOUNCES ZE SERIES SCREW JACK PLATFORM

DieQua Corporation has announced its new ZE Series from Zimm Screw Jack Systems with upgraded features. ZE, short for Zimm Evolution, represents the latest design features of their dynamic screw jack platform. The ZE offers increased gearbox lubrication capacity, reduced backlash, a smoother body design, and all sizes can be mounted in any position at full rated static load capacity. It is compatible with all existing Z-Series sizes and accessories.



Zimm Screw Jack Systems center around an electromechanical drive system, handling load capacities from just a few pounds to 100 tons and moving these loads, no matter what the size with precise positioning and accuracy.

For more information:

DieQua Corporation
Phone: (630) 622-2132
Diequa.com

Heidenhain

RING ENCODER RESISTS CONTAMINATION

Heidenhain introduces a new mid-range high accuracy ring encoder that is suitable for position measurement applications that require high tolerance to contamination but do not demand the accuracy level of an optical encoder. This unique Heidenhain ERM 2203 is optimized to meet those needs and is a welcome alternative to the market.

The new Heidenhain ERM 2203 ring encoders are most suitable for applications such as gear-wheel grinding machines and others that require similar high accuracy but must operate in an often-contaminated environment.

The sturdy ERM 2203 retains the 200 µm signal period as other current ERM products, though the graduation error has been reduced by



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approximately 30%. Also, the interpolation error has been cut in half and reversal error has been negated as compared to other ERM encoders. All these improvements enable this ERM 2203 to be mechanically and electronically compatible to other Heidenhain ERM and can be substituted in those applications that require a higher level of performance.

It is noted that when compared to other encoder technologies in machine tool applications, the ERM 2203

is a good alternative due to its high accuracy combined with its sturdiness. And compared to other encoder products utilizing magnetic scanning technology, the ERM 2203 offers a significantly higher line count along with a lower interpolation error and generous mounting tolerances in the axial direction.

For more information:

Heidenhain Corporation
Phone: (847) 519-3988
www.heidenhain.us

Neugart

OFFERS LATEST NCP SOFTWARE UPDATE

A direct route to a cost-efficient and energy-efficient gearbox/motor combination is available with the *Neugart Calculation Program (NCP)*. The user-friendly configuration tool is now available in the new software version *NCP 4.2*. Customers of the gearbox specialist can download the free version now.

Complex load trends in the drivetrain can be calculated in the *NCP*, and the optimum application-specific motor/gearbox combination determined on this basis. With the update, it is now also possible for propulsion drives in Automated Guided Vehicles (AGVs) and the new NGV gearbox range that is tailored to these vehicles. Existing projects from current or older *NCP* versions can now also be loaded for newly designed controlled systems and compared with them.

Neugart has simplified the operation of the tool with version 4.2 and improved user friendliness: conversions are no longer required when importing read-out motor data, for example. Users of popular CAD programs can now also use the familiar full stop as a separator as well as the comma. Calculations can also be carried out in the input fields. And the gearbox documentation has also been optimized, meaning that the user detects whether the selected gearbox is suitable based on utilization bars.

For more information:

Neugart GmbH
Phone: +49 7825 847-0
www.neugart.com



Regal Beloit

OFFERS WIRELESS VIBRATION AND TEMPERATURE MONITORING

Regal Beloit Corporation recently announced the introduction of new solutions for wireless vibration and temperature monitoring. The Perceptive Technologies wireless monitoring system provides 24/7 services to help detect abnormalities in equipment before they become problematic.



At a fraction of the cost of a wired system, this new Regal Perceptive Technologies wireless monitoring system eliminates the need to be near operating equipment and is adaptable to any industry. Monitoring can be performed on-site or from a cloud platform on equipment like fans, pumps, motors and blowers.

Regal's wireless monitoring system allows users to take advantage of the extensive industrial experience of the Perceptive Technologies team to monitor and analyze machinery remotely, helping to improve reliability and maximize production.

"Unlike other wireless systems that provide only basic diagnostic data, the Perceptive Technologies wireless monitoring system delivers complete raw and analyzed data to help manage assets and provide flexibility," said Daniel Phillips, director, reliability and maintenance—CMRP for Regal. "Users receive easy-to-understand, actionable information without the need for manual diagnosis."

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Klingelnberg

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Here's an overview of some measuring machines for bearings and large gears from Klingelnberg:

P 16 G – Solutions for complete measurements of roller bearings

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durability. The resulting requirements concerning material, geometry, form accuracy and surface roughness represent a particular challenge for manufacturing, as current quality standards require the use of a number of different precision measuring devices. Dimensions are therefore measured on a coordinate measuring machine, form and noise emission on a form tester, surface roughness on a surface tester and contours (e.g. edge radius) on a contour measuring station.

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Please contact Klingelnberg directly to discuss the company's services and software solutions.

For more information:

Klingelnberg America, Inc.
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