

Made for Motion



KTR Company News

NEWS

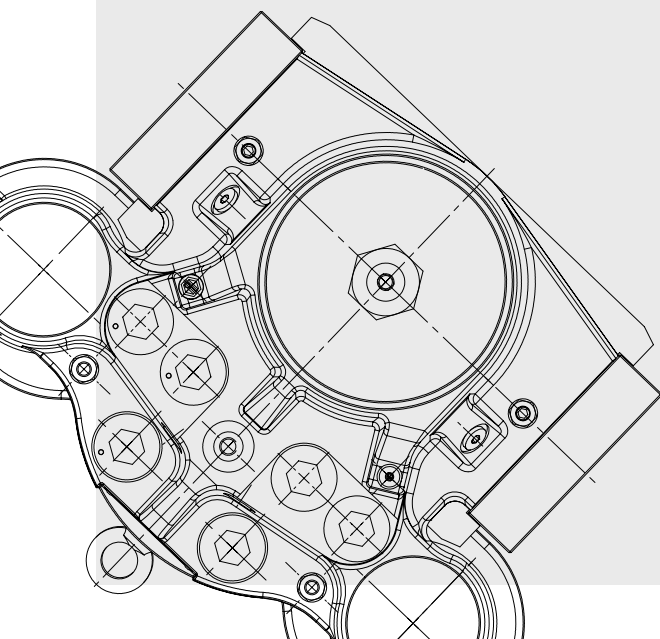
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Paired for better safety: KTR takes over EM Brake Systems

Introducing a breath of new life into the brakes business, the acquisition of East Westphalian manufacturer EM Brake Systems will, with immediate effect, expand KTR's product portfolio to include EM's premium electromechanical brake systems. Similar to our proven KTR-STOP® hydraulic brakes, the maintenance-free EMB brake systems have been successfully employed in wind turbines for many years. Both systems however can also be used in numerous other industrial applications. This move means that KTR is now the sole producer offering two brake systems with distinct characteristics from a single source – and by doing so, we efficiently speed up your planning.



Paired for better safety:

KTR takes over EM Brake Systems

KTR Kupplungstechnik GmbH from Rheine continue to expand their business of brakes, having taken over EM Brake Systems AG (EMB) located in Schloß Holte-Stukenbrock for 100 %. The East Westphalian company EMB is a manufacturer of electromechanical brakes for wind power stations and industrial applications.

„EM Brake Systems AG have developed a modern and innovative brake design which they have successfully established in the market over the past few years“, Prof. Dr. h. c. Josef Gerstner explains, CEO of KTR, adding: „In this regard the design shows trend-setting features which have already been used in wind technology with promising prospects“. KTR have projected and distributed hydraulic brakes throughout the world for several years. Purchasing EM Brake Systems AG the family-owned company located in Northern Münsterland has expanded its portfolio of high-performance brake components by the range of electromechanical brake systems. „In this way we strengthen our market position in wind power technology while at the same time increasing the relevance of our high-performance brakes for industrial applications“, Gerstner announces.



Das moderne Firmengebäude der EM Brake Systems AG

The location of EM Brake Systems AG in Schloß Holte-Stukenbrock is retained and will be developed to become a competence centre for brakes. All sorts of activities of the KTR group of companies with regard to brakes, brake systems and components will be concentrated here in the future.

Prospects for new couplings and brake activities

KTR's General Managing Director Dr. Josef Gerstner had the following to say about the future:

„KTR stands for coupling technology and EMB for brakes with electromechanical components. Both product groups are simple, yet complex and each are to have their own competence centres under the KTR umbrella. When it comes to the couplings, these are catered for at our new PTC (Power Transmission Centre) R&D Centre in Rheine. In the future, test benches for couplings will exclusively be used here. The ground-breaking ceremony for the new building will take place this spring.“



Prof. Dr. h. c. Josef Gerstner, CEO of KTR, and Dipl.-Ing. Alexander Remes, former Chairman of EM Brake Systems AG, signing the contract (from right to left)

The brake competence centre will be located at EMB in Schloss Holte-Stukenbrock. In addition to design and development, extra test benches specifically adapted to brake-system requirements are based there. An environmental chamber for extremely low temperatures has also been installed, enabling tests down to -70°C . By integrating EMB into the KTR Group, we are communicating a clear message: in the future we want to play as important a lead role in brake systems as we presently do with couplings. We will also use the chance to review our standing in industrial sectors where we are already well-positioned when it comes to couplings“ Dr. Gerstner says, adding: „We are increasingly making our way as a sub-system supplier.“



Electromechanical EMB-STOP L-A-F

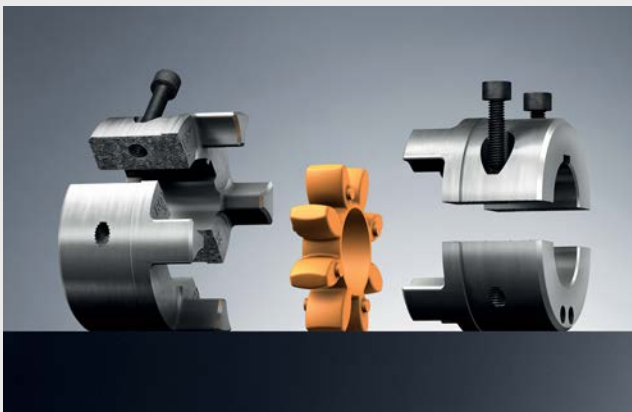
KTR Brake Systems 

Pumping as if there were no tomorrow-
The new ROTEX® S-H with SPLIT hubs

One invented the rotary lobe pump, the other the jaw coupling. And because this is a perfect synthesis, the renowned Vogelsang Maschinenbau GmbH in Essen (Oldenburg), Lower Saxony has continued to rely on KTR's torsionally flexible ROTEX® for years. And as is the case with ingenious inventors, they do not stand still. Instead, they constantly improve their products, adapting them to new challenges. The most recent alliance in this hand-in-glove relationship has stemmed from Vogelsang's switch from their proven rotary lobe pumps to ones using ROTEX® S-H with SPLIT hubs.

Ideal for resilient environments: Vogelsang rotary lobe pumps

Regardless whether a substance is highly viscous, abrasive or full of foreign matter, Vogelsang rotary lobe pumps not only shift everything that flows easily, they also move more resistant matter such as sewage, slurry, paints, liquid manure, organic suspensions or chemically aggressive substances such as waste oils, fuels and food waste. In cases where conventional pumping systems are quickly stretched to their limits, Vogelsang pumps come into their own, managing an hourly discharge capacity of more than 1,000 cubic metres with up to 16 bar (323 psi) differential pressure. When it comes to pumping hazardous matter reliably and efficiently, unproblematic components are a must.



ROTEX® S-H with SPLIT hubs for restricted installation spaces

Perfected for rapid replacement: ROTEX® S-H with SPLIT hubs

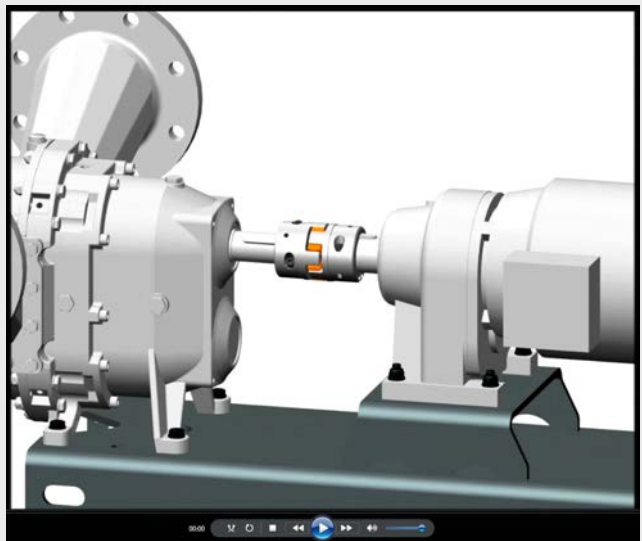
Not only does the ROTEX® S-H fulfil the high-performance requirements of rotary lobe pumps, but above all, it can be replaced rapidly. This is enabled through the divisible SPLIT hubs that are mechanically separated through 'cracking' and then screwed together again during assembly. On the one hand this assures an interlocking fit, while guaranteeing uncomplicated installation or removal on the other; hubs and spiders can easily be replaced without the need to dismantle the power packs.

As the SPLIT hubs are also ATEX compliant, they can be safely employed in diverse critical environments – for example when skimming off oil residues after ship or oil-rig damage.

The new ROTEX® S-H with SPLIT hubs sized 38 to 90 are used in all Vogelsang VX and IQ series rotary lobe pumps.



ROTEX® S-H with SPLIT hubs built into a rotary lobe pump



Video: ROTEX® S-H with SPLIT hubs in a Vogelsang pump

ROTEX® S-H with SPLIT hubs



Turbo compressors up the pressure
 In modern-day China turbo compressors are used in steel mills, oil and gas wells, in industrial technology, structural engineering and mining technology. However before high pressure can be successfully generated, all suppliers need to fine-tune their relevant technologies. In this process the coupling – the power transmission link – plays a key role. In the search of a suitable coupling manufacturer, it is not unusual for KTR to be chosen as was the case in the project described below.

The customer required an exceptionally powerful coupling with a defined load distribution to be used in a compressor. Furthermore the total weight was not to exceed 1,200 kg. The final choice was the maintenance-free 318 L-sized RIGIFLEX®-HP steel lamina coupling with a split torque shaft, characterised by its nominal torque of 180,000 Nm with a maximum torque of 404,000 Nm. And when it came to the total weight, the coupling was well under the defined maximum.



RIGIFLEX®-HP, size L

Precise calculation

To start with, KTR's engineers determined the drive train, based on the requirements listed in the turbo compressor's technical specification sheet. The ensuing data became the basis for the coupling design, the process of which necessitated calculating the torsional stiffness as well as the critical speed by using the finite element method. And of course throughout these developments, the maximum permissible weight had also to be kept in mind.

Finest workmanship and precision balancing

The necessary splitting of the torque shaft imposed extra high demands on construction and build quality. When machining the coupling, the focus was on high-end manufacturing accuracy and technical production quality. Weight optimisation was achieved by integrating diverse, exceptionally high-grade steels.



Assembly of the RIGIFLEX®-HP 318 L

Incorporating special bolted joints not only delivers optimal stability, it also contributes to weight reduction, facilitates assembly and improves balancing accuracy as well. So as to prevent vibrations during operation, both the spacer and the entire coupling were precision-balanced.



[RIGIFLEX®-HP](#)

[Pumps and compressors brochure](#)

On a precision course in India

India, with a shortest distance of some 7,000 km and more than 12,000 km by sea, is not close enough to use Germany as a base to move efficiently, swiftly and in a determined way. This is reason enough for us to manufacture our products locally in Asia's third largest economy.

As part of our growth initiative, we have continually expanded KTR India's machine plant. Today 'Made by KTR' is symbolic for globally-consistent quality at local costs. Currently KTR India has more than 20 types of machine tools including lathes, milling machines, band saws, hand presses and balancing machines. In addition to this, we have invested in modern CNC machines so as to ensure the best-possible precision throughout the entire process.

With the use of our ultramodern machinery at KTR India, we are in a position to make complex components with high-precision requirements for the local market.

This not only saves our customers and us long-distance delivery, it also cuts out high import duties. And to top this, we can offer German engineering at local costs.



Modern machinery at KTR India

[Global KTR locations](#)

Simplifying 2D

New: KTRwebview

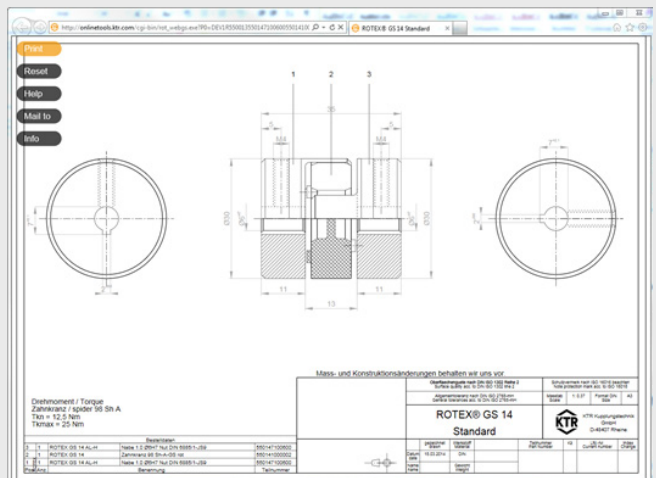
So as to further facilitate future design work for our customers, we have developed KTRwebview. This practical online graphic tool enables a precise depiction of 2D drawings while offering the user numerous additional functions such as emailing, printing, a help function, an info dialogue with our stock list and a whole lot more.

Compared to its predecessor, the most important advantages of KTRwebview are very apparent. While the user had to install a helper application for TDTwebgraph*, the new tool utilises the existing web browser. As a result the installation of additional software and the obligatory updates have become redundant. To make life easier, KTRwebview also runs on MacOS.

The new tool is highly appropriate for customers who are not allowed to install third-party software on their computers for security reasons.

Operating KTRwebview is as simple as using its predecessor:

- pan with left mouse button: zoom window
- using right and middle mouse button: show all
- left mouse button and control key: pan image detail



View of a 2-D drawing directly in the browser

*At the end of 2014, KTR will cease to support the TDTwebgraph viewer. We therefore recommend using KTRwebview with immediate effect.

[KTR-Online Tools](#)

See our new products at the Hanover Fair 2014

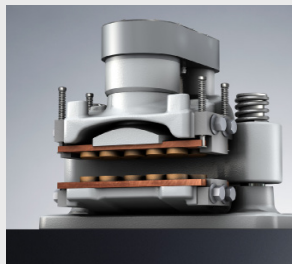
In a few days from now, the doors will open to the world's most important industrial fair. We decided to give you a foretaste of some of our new products that will be launched there.

Energy-efficient cooler with variable-speed control

Using energy proficiently is a pivotal technological challenge in hydraulics. As a leading hydraulic component manufacturer, KTR is right up with the times with our new development: the new eco cooler with a variable speed control and integrated self-cleaning mode for 24-volt drives. This control unit has been specially developed to constantly and automatically adjust the need for cooling in an energy-efficient way. This not only lowers the life-cycle costs of the entire installation, it also reduces the noise emission many times over. At the same time, the system's service life is significantly increased thanks to a needs-based use of the motor and ventilator. KTR's new cooler generation can also be employed both in stationary as well as maritime hydraulic systems and is ideally suited for retrofitting existing installations.

The electromechanical way of stopping: EMB-STOP

With the acquisition of EM Brake Systems, eight electromechanical high-performance brakes for wind turbines and other industrial applications are available with immediate effect. The EMB-STOP comes in the following variations: as an active floating caliper brake with either lever or transmission each in three possible sizes or as a passive floating caliper brake with transmission and finally as a rotor lock available in two sizes. The space-saving design enables braking forces of 50 to 400 kN at low weights and in compact dimensions.



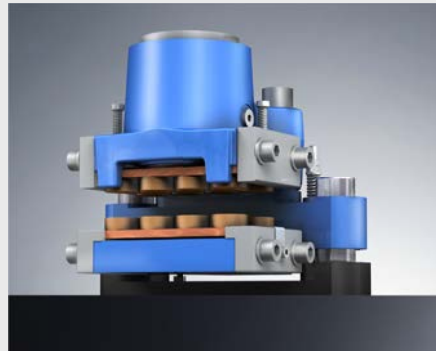
Check out the advantages of both the new EMB-STOP and eco cooler live at the Hanover Fair



7 - 11 April 2014
Hall 17, stand A42
(collective VDMA stand)

Larger and smaller KTR-STOP®

Our range of hydraulic high-performance brakes has also been extended. The proven KTR-STOP® series is now available in three new sizes – as XS, L and XXL, each for different purposes. XS is a service brake for low torques, L a stop brake for high torques and XXL, also a stop brake for use with mill applications. The calipers have a floating design, so they do not impose any axial load on the brake disc to any great extent and by doing so, preclude drive-train damage through potential misadjustments.



The new XS-sized KTR-STOP®

Experience KTR live



Drives and Control
England
08 - 10 April 2014



EuroExpo
Sweden
9 - 10 April 2014



SIMTOS
Korea
9 - 13 April 2014



IFAT Entsorga
Germany
5 - 9 May 2014

eco cooler 

EMB-STOP 

Fairs and Events 