RINGSPANN®

More constructional freedom to both sides

RINGSPANN's current industrial brakes range is almost seamless. It offers among other things a large selection of electrohydraulic drum and disc brakes that can be configured specifically for the customer. Just a few days ago the manufacturer incorporated another drum brake series for braking torques of up to 4,500 Nm into its portfolio. The highlight here is the thrustor mounted horizontally over the brake jaws. This is a particularly significant development for engineers of drive and safety systems of large lifting and conveyor systems, who will discover newfound freedom when designing the installation situation.

The brake calipers from RINGSPANN'S new series DT … FEA … H-ST are much slimmer in design than conventional industrial drum brakes. The key reason for this is a constructional variation that saves an enormous amount of space. While the thrustor for most drum brakes of a conventional frame model is mounted laterally for brake jaw releasing – which is why the entire brake construction is relatively wide – RINGSPANN engineers went down a different path with this new series: The entire electrohydraulic air system, including the integrated throttle valve and optional lever mechanism for manual operation, were turned 90 degrees and repositioned one level higher. It is therefore situated horizontally over the brake cylinder and brake jaws in the new drum brakes series. RINGSPANN thus provides particularly engineers of drive and safety systems of large lifting and conveyor systems for the coal and steel industry, container logistics, crane construction and marine technology with a compact brake alternative for all applications in which there is a lack of installation space to the right and left of the brake.

New in RINGSPANN's brake range: The drum brake series DT … FEA … H-ST for braking torques of up to 4,500 Nm. The highlight is the thrustor mounted horizontally over the brake jaws.

Franz Eisele
Head of Division
Brakes and Couplings
at RINGSPANN GmbH

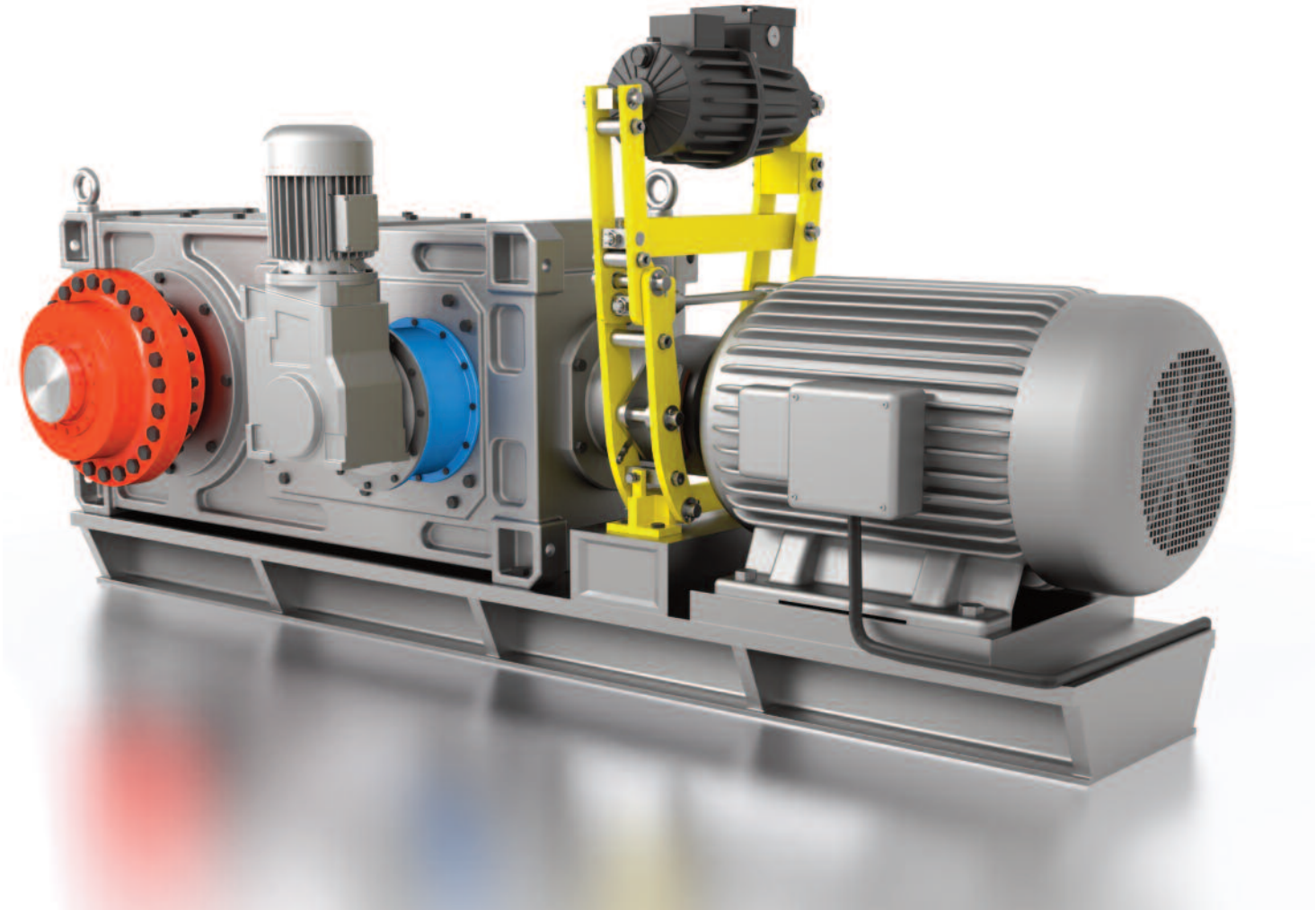
Eleven new drum brakes

What looks so simple in the end result required various engineering tricks in advance. Besides the frame, multiple thrustors in different performance classes needed to be reconfigured for the horizontal layout. "We were able to do this very quickly, however, since we develop and manufacture all electrohydraulic release systems for our industrial brakes in house", explains Franz Eisele, who heads RINGSPANN's brakes and couplings division.

Overall the new RINGSPANN series DT … FEA … H-ST offers the user five frame sizes and eleven versions of compact drum brakes with thrustors mounted horizontally. The selection covers braking torques ranging from 200 Nm to 4,500 Nm, and clamping forces of 2,550 N to 22,500 N. The clamping force describes the power generated by the brake, while the braking torque denotes the force that ultimately impacts the brake jaw (on the shaft or similar).

The first brakes are already in use

"The first customers are already using our new drum brakes and are extremely satisfied", Franz Eisele happily notes. Moreover, in view of what is now his division's almost seamless range of industrial brakes, he points to the fact "that RINGSPANN is more capable than ever of supplying the most extensive range of brake types in demand on the market". The company's brake range de facto ranks internationally among the most diverse offers in this drive technology market segment. Across all models, the drum brakes achieve braking torques of up to 7,200 Nm, while the disc brakes achieve braking torques of up to 19,900 Nm. Further, it includes the suitable control systems, a quick after-sales service and various options for customer-tailored brake configuration.

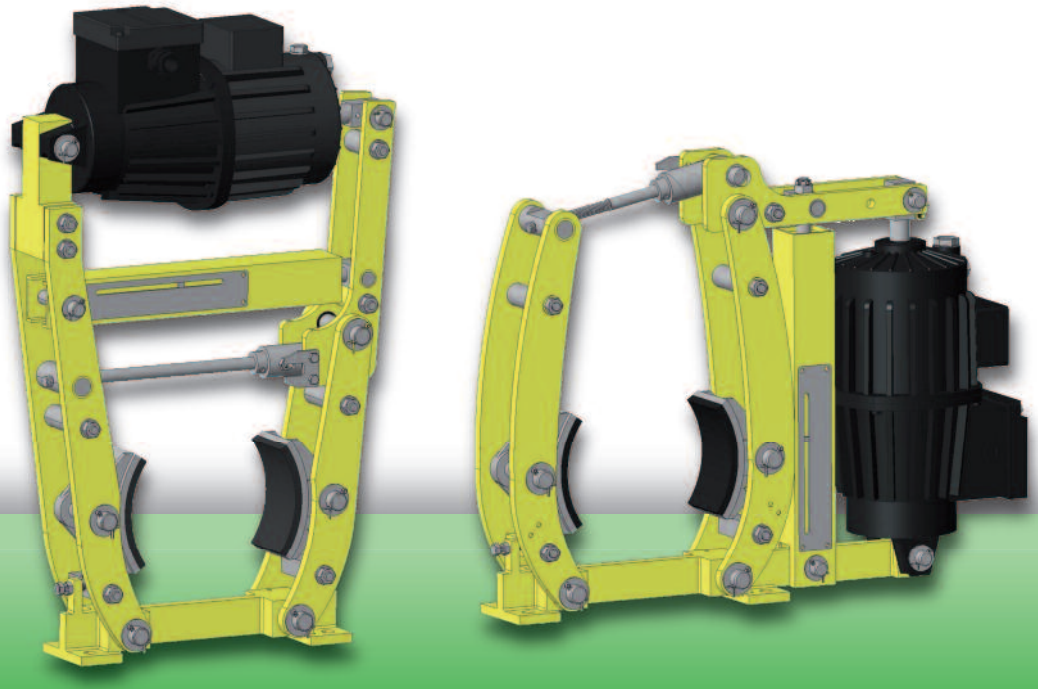


Many options for fine tuning

A key strategic role in RINGSPANN's international brake business is played by its Italian subsidiary by Milan. In the daily technology transfer with the engineering department at the Bad Homburg headquarters, it transforms almost every electrohydraulic drum or disc brake in the catalogue programme into a customer-specific ideal solution. To achieve this, there is not only a wide range of technical options available, but also RINGSPANN Italia's high degree of vertical integration. And for such cases in which the many options should not be enough to tailor the selected electrical or hydraulic brake with wider brake jaws or drums, an automatic friction lining wear control, an externally adjustable brake spring, a heat-resistant lifting device or sinter metal friction linings to the individual application – to name just a few aspects –, the machine fleet in Limbiate offers lots of scope for technical fine tuning.

Just-in-time partner for customers

The availability of all technically relevant components at the site in Italy further ensures a high degree of availability of the industrial brakes and enables the integration of the brake assembly into the just-in-time concepts of European firms. Furthermore, all wear and spare parts are on standby and delivered in record time. Last but not least, RINGSPANN offers the customer the greatest possible planning security and security of investment thanks to its in-house test bench technology. In addition to installation descriptions and instruction manuals, the customer receives all the necessary test reports and protocols for their technical documentation and quality assurance. <<



Infobox

Stopping, control, holding ...

RINGSPANN's brakes are deployed as stopping, control and holding systems in conveyor and crane systems, lifting and handling systems, mining and construction machines, as well as in marine technology, recycling technology and metallurgy. The current RINGSPANN portfolio provides customers with a technologically almost comprehensive range of brakes, which comprises all important functional and design types. In order to make it easier for designers and engineers to select the right brake, RINGSPANN also has a calculation tool that can be used free of charge at www.ringspann.de. It enables you to determine braking torques (clamping forces) and braking forces. It allows you for example to calculate the braking of rotating masses (e.g. shafts), carriages, cable winches and conveyor belts.

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