





# Advancing into extreme performance ranges

RINGSPANN is driving forward the expansion of its industrial brake portfolio with a great deal of creativity and a laser focus on the requirements of its customers in the mechanical and plant engineering industry. One of the most recent measures in this context is the addition of three particularly large brake calipers for the realisation of high-performance disc brakes in emergency stop and extreme applications. Among others, this stands to benefit manufacturers of drive systems for heavy-duty and mining technology, as well as power plant construction and offshore technology.

RINGSPANN's current product range expansion in the field of industrial disc brakes particularly appeals to all designers, system manufacturers and vehicle manufacturers who tend to get very big wheels turning when it comes to developing their drive systems. And that is down to the fact that, with clamping forces ranging up to 560,000 N, the newly added HS/HW 145, HS/HW 165 and HS/HW 215 brake caliper series are entering the upper echelons of heavy engineering. This means that they enable, for example, the realisation of emergency stop systems for bulk material conveyor systems in the mining industry, for the driven cable winches of marine and offshore technology, or for use in heavy-duty construction machines, wind power plants, large-scale test benches and many other mammoth and extreme applications. In these areas, they are often used – in addition to many solo appearances– in batteries with several disc brakes.

Two become five

The new brake calipers from RINGSPANN are all representatives of the spring activated and hydraulically released design. They are available as fixed caliper and floating cali-

per models as well as in versions for parallel and right-angled mounting or installation – always viewed in relation to the position of the brake disc. "Based on the HS/HW 075 and HS/HW 120 series offered so far, we are now able to offer plant manufacturers a number of additional brake caliper variants for the design of industrial disc brakes in significantly higher performance classes", says Franz Eisele, who heads RINGSPANN's brakes and clutches division. The

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## Infobox

### All technically relevant designs

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, recycling technology and metallurgy. The current RING-SPANN 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.

company's current selection in the segment of spring activated and hydraulically released brake calipers now extends to five series in various dimensions and with clamping forces ranging from 1,500 to 560,000 N.

#### Lots of individual freedom

In addition to selecting the appropriate series, RINGSPANN offers customers numerous options to individually optimise the HS/HW high-performance brake calipers. For example, several types of friction linings are available for different requirements; among others, special sintered linings are available for applications with high circumferential speeds, where increased thermal load on the brakes is part of normal operation. In addition, the three new brake calipers are available in a marine and a cryogenic version, which considerably increases the range of application for these brakes. "In addition, plant engineers or system integrators will also receive a suitable console for all HS/HW brake calipers from us, which may considerably simplify

and accelerate parallel or right-angled installation or mounting on site", adds divisional manager Franz Eisele.

Since the company defines itself as a one-stop supplier, it also has the appropriate hydraulic power units, an electric friction block wear detection system and various sensor systems for querying operating modes in its portfolio. It also stocks raw parts for brake discs with diameters of up to 1,000 mm. This means RINGSPANN can supply the user with all the components needed to create a complete high-performance disc brake. What's more, the company's extensive selection of industrial brakes also makes it possible to combine the brakes of the HS/HW series in a package solution with spring activated/electrohydraulically released RINGSPANN brake calipers. In some applications this makes senses, since both spring activated brake types complement each other very well.

#### Planning and investment security

The availability of all technically relevant components at its European locations enables RINGSPANN to guarantee a high degree of availability of its industrial brakes. All wear and spare parts are available on call and the integration of brake assembly in just-in-time scenarios is also possible. On the basis of its in-house test rig technology, RINGSPANN can also offer its customers a high level of planning and investment security. In addition to installation descriptions and operating instructions, the scope of delivery also includes technical documentation and the test reports and protocols required for quality assurance.

