

Press Release

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Coupling Specialist VULKAN Couplings Introduces new VULKARDAN F to the Market

Optimised design with light weight, shorter installation length and significant cost benefits

(Herne, August 2016) Vulkan Couplings the market leader in design and manufacture of highly flexible couplings is proud to introduce the all new Vulkardan F, a range of couplings which brings together Vulkan's extensive experience and innovation to the marine industry. The new coupling offers considerable benefits over those currently on the market. It has improved torsion characteristics, is shorter allowing reduced installation length and up to 40% lighter due to its compact design, all this with cost benefits as well.

Fabian Sommer, Vulkan's Product Manager announced. "For our customers this will offer not just flexibility in designing compact drive systems but also easier handling during installation". He added, "We also want to set new standards and make our contribution to space-saving in drive systems." The new coupling has been designed for maritime drive lines and stationary power generation units particularly with elastically mounted, high speed internal combustion engines and electric motors.

A new design approach and improved in-house vulcanisation process has led to far-reaching benefits in the technical properties of the couplings. Due to these innovations it has been possible to increase operating speeds by 10 percent, whereby the Vulkardan F is now able to provide solutions for a wider range of applications. In addition, by means of an optimized element shape, the "power loss", that is the heat produced during operation by alternating torque, can be quickly dissipated. Furthermore, this has a positive effect on the ageing characteristics. "We also foresee an increase in the engine performance of high speed motors in the future. Higher rotational speeds and alternating torques as well as high thermal loads will not be uncommon. Vulkardan F offers our customers future-proof opportunities for the optimum adjustment of their systems." says Fabian Sommer.

Vulkardan F is available in a range of torsional stiffness, which can be selected to optimize the torsion-vibration behaviour of drive line system such that minimum alternating torque load can be achieved. This selection process ensures that the connected machinery is isolated from the effects of adverse torsional vibration. Additionally, the coupling design offers the opportunity to easily add a tuning mass enabling fine tuning the system in-situ to optimize the noise performance and produce the highest possible levels of comfort.

The Vulkardan F is currently available in two sizes of 8.20 kNm to 16.25 kNm and has been developed for use in a wide range of applications from work boats such as tugs to mega yachts. This has been achieved by the use of highly flexible elements, radially, in combination with a high performance membrane, the Vulkardan F can accommodate high radial, axial and angular displacements with minimal reaction force. This enables a very "soft" Vulkan engine mounting, optimally adjusted, to suit the individual drive system resulting in lower noise and vibration on board and much more comfort for passengers and crew.

Fabian Sommer explains "After a challenging, in-house, development phase in which we closely monitored and optimised the individual coupling parts on our test rig, the coupling was ready for field trials. In May

this year the new Vulkardan F coupling was successfully field tested at DAMEN, one of the world's largest shipbuilding companies. Fabian Sommer further added "following the success of the field trials we are now happy and excited to offer our customers this much improved and future-proof product at an attractive price".

About the company: *VULKAN Kupplungs- und Getriebebau Bernhard Hackforth GmbH & Co. KG with Headquarters in Herne, Germany, is part of the VULKAN Group and a medium-sized family-owned company, which manufactures highly flexible couplings, braking systems, resilient mounts and shaft systems for ship propulsions, generator applications and industrial drive systems. For many decades VULKAN couplings have been used worldwide in cruise ships, working and container ships as well as in the oil and gas industry, the mining industry or conveyor systems. The company which looks back on 125 years since its founding is in the sole ownership of the Hackforth family and employs around 1,300 employees at 20 locations worldwide. These include five production sites in Germany, Brazil, the USA, China and India. VULKAN Lokring Rohrverbindungen GmbH & Co. KG is a specialist or solderless pipe connections in the cooling and air conditioning technology sector also part of the group of companies.*