

New field in the maritime industry: Liebherr presents component solutions for dredging

- Liebherr extends its product range with special solutions for dredging
- Liebherr's Components division introduces a new technical concept for gear ring rope winches at SMM

Hamburg (Germany), 6 September 2016 – At the international trade fair for shipbuilding, machinery and marine technology (SMM) in Hamburg, the Liebherr Components division will be present its new component solutions for dredging. In that Liebherr is opening up a further area in the maritime industry with new component solutions for dredging. Special attention is paid to the development of efficient and durable solutions for individual applications in harsh environments.

With the components for dredging Liebherr is opening up a new field in the maritime industry: In doing so, Liebherr offers complete solutions consisting of winch gear, holding brakes, electric and hydraulic motors. Planetary plug-in gearboxes are installed, for example, in winches on cutter suction dredgers or hopper suction dredgers for moving the suction arms. The suction arm is lifted by the winches at the suction head, the middle and at the joint. Cutter suction dredgers have a cutter head at the front, with which it loosens the sediments, that are then sucked up. The winches here are to move the ladder, where the cutter head is mounted, as well as to produce a sideway movement of the cutter head by the sidewise arranged anchors and the spud pole recessed into the bottom.

Liebherr winch gearboxes are characterized by their compact design. Moreover, multiple tooth meshes within the planetary gear stages enable highest performance, whereas the drum bearings inside the gearbox are designed specifically for use in winches with high service life requirements and maintenance-friendly operation.

Strong engineering and customer service expertise

In 2014, Liebherr offered its planetary plug-in gearboxes for dredgers for the first time. The customer Royal IHC, a leading company in the dredging sector, equipped his applications also with hydraulic motors from Liebherr. In doing so, Royal IHC laid special emphasis on the reliability and quality of Liebherr products. Thus, the gearboxes must meet very high safety requirements and run up to 40,000 hours over their lifetime. "We at IHC appreciate Liebherr's rapid response times to our requests and concerns, be it in the technical area or in the sales. Strong engineering and customer service expertise along with the high quality of products were crucial for us in selecting the component supplier," says René Tjepkema, Sales Engineer Winches at Royal IHC.

Efficient solutions based on Liebherr's standardized product lines characterize the cooperation of Liebherr with customers. Especially companies, that manufacture individual components, place orders separately or manufacture applications with individual requirements will benefit from this concept. Therefore, Liebherr is currently working with Royal IHC on the technical design for gear ring rope winches in order to incorporate the component manufacturing requirements of the customer. Gear ring rope winches as subsystems consist of a large ring gear at the rope drum, gearboxes and a rope pinion as well as hydraulic or electric motor. The components are characterized by high torque and operational reliability and are able to additionally fulfil the requirements on functional redundancy, depending on the design. At the same time IHC gear ring rope winches enable high rope speeds and rope winding capacity. Here drive torques of up to 6,000 kilonewton meters (kNm) as well as rope winding lengths of up to 3,000 meters are implemented.

About Liebherr-Components AG

Liebherr-Components specializes in the development and manufacture of high-performance components. Its portfolio covers the areas of mechanical, hydraulic and electric drive and control technology for various applications.

Components by Liebherr ensure reliable solutions both in port and in coastal waters, as well as under extreme operating and ambient conditions on the high seas. Through the

many years of experience in the maritime environment, Liebherr understands the specific needs of the industry as well as its different applications and offers a wide range of components for use in maritime equipment. These applications range from ship propulsion systems, as well as ship and offshore cranes, right up to heavy-duty cranes and special applications.

About Royal IHC

Royal IHC develops, manufactures and maintains innovative equipment and marine vessels for use in ports, coastal areas or on the high seas for customers in the offshore, dredging and mining sectors. Royal IHC operates from various locations around the world to ensure the necessary proximity to customers on every continent.

Captions

liebherr-gearbox-in-IHC-winch-for-dredging.jpg

Liebherr gearboxes are employed in various winches by Royal IHC, used in dredging applications

liebherr-planetary-plug-in-gearbox.jpg

For customers from the maritime industry, plug-in gearboxes by Liebherr have to fulfill especially high safety and lifetime requirements

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