

Electrical motors: the engine of port mobility

Optimisation prospects for ports operators

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Port operators are dependent on fail-safe hoist technology in order to unload container ships quickly, and crane stoppages lead to cost-intensive lay days. Therefore, the continuous working order of hoist technology is an important factor for the economic success of ports.

Built to last

Franz Wölfer Elektromaschinenfabrik Osnabrück GmbH is a German company that develops and produces electrical motors for inverter operations, particularly for lifting applications. All motors are specially designed for the specification of the client. This guarantees an optimised ratio of inertia, power, weight and cost. These motors are in operation on all kinds of cranes, and in particular on: STS-, RTG-, RMG-cranes, straddle carriers, and AGV for the following drives: hoist, boom hoist, trolley and gantry.

Wölfer concentrates on the technical development of the motors. The results are highly dynamic drive motors with optimised acceleration time combined with reduced frequency converter current. The motors feature a robust design, but nevertheless often have smaller weight and frame sizes. Good control characteristics, also in the high range of speed (field weakening) for hoist applications, guarantee fast working routines. Due to low service requirements after the installation, the motors have lower life cycle costs.

Efficiency does matter

Wölfer offers motors mounted in the machinery house of STS-cranes in protection IP23 with internal cooling. This construction leads to much smaller motor types over standard motors, which have outer cooling in protection IP56. Because of the optimised efficiency, it is possible to use smaller frame sizes in protection IP56, for example for hoist motors on RTGs or RMGs. Through this smaller frame size, a very low moment of inertia of the whole drive train is achieved, which is very important for the dynamic of the drive. The percentage of the motor inertia compared to the total inertia of the drive is very high. In some cases it is possible to use smaller wires and inverters due to a lower current by the optimised ratio of efficiency and inertia.

The technology used in ports is a decisive advantage, particularly in view of the strong competition for market leadership.

ABOUT THE COMPANY AND ENQUIRIES

For over 60 years now Franz Wölfer Elektromaschinenfabrik has been developing and manufacturing smooth-running electric motors for use in hoisting equipment, in and on ships, as well as in general mechanical engineering. The company applies its extensive know-how to produce efficient motors for individually adapted drive mechanism solutions.

Web: www.woelfer-motoren.com

Wölfer moves the world



Franz Wölfer
Elektromaschinenfabrik
Osnabrück GmbH



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