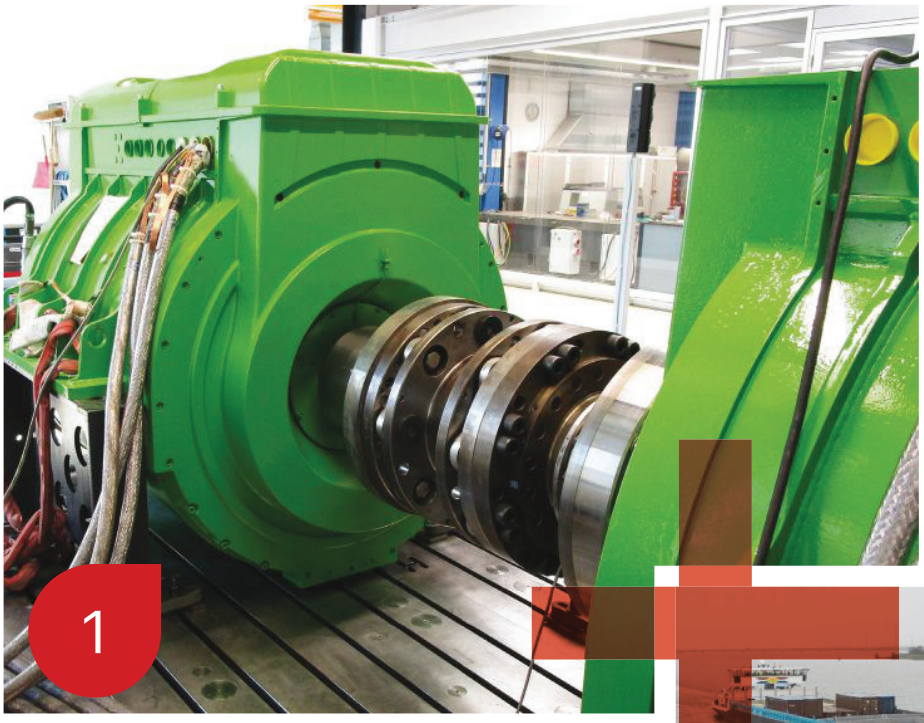

1. Oswald 1.3MW propulsion motors during heat-run tests in the company's lab
2. Propulsion motors (800kW and 400kW) installed aboard the vessel Indus
3. MS Letitia driven by two 1,600kW propulsion motors

Customized **electric motors**

High-performance motors are key to the maritime sector's energy transition

WORDS: **THOMAS BACHMANN**

The electrification of shipping is crucial for a sustainable future. Oswald, a medium-sized family business with over 115 years of experience, plays an important role in this with its customized electric motors and generators.

Oswald develops and manufactures customized electric motors for new-builds and modernization shipping projects. Its solutions offer several key advantages, especially when converting diesel engines to hybrid or fully electric propulsion. The adaptable systems enable application-optimized integration and are tested in cooperation with classification societies. Oswald's main propulsion systems with high-pole direct drives and PM synchronous motors are now in use in more than 100 vessels, many in the Netherlands and Germany but also in offshore and coastal areas. Due to their compactness and high efficiency, the electric motors are ideal for installation in applications with limited space.

Systems in action

Oswald electric motors are used in ferries, inland waterway vessels and workboats, to name just a few applications. This began in 2016 with the hybrid ferry Vision of the Fjords (Norway) and the fishing vessel MDV-1 Immanuel (Netherlands), and has continued up to the most recent deliveries for the container ship Letitia (the first emission-free inland waterway vessel on the Rhine) and the main propulsion motors for cargo ship Eems Bison, pusher Verbund, tugboats Seaforce 1-3, MTS Liberte and MTS Generation, cement carrier Tamarack, the MTS United LNG vessel project, and many more.

The increasing demand for electric drives requires a holistic approach, from power generation to distribution and integration of propulsion machinery, direct-driven propellers, thruster motors or PTI/PTO systems. Oswald works closely with partners that provide customized solutions for international shipbuilding and, as system integrators, are responsible from concept to implementation.

As an established specialist in electric machinery, Oswald develops and produces not only main drives for marine applications but also motors for demanding applications in press technology, test benches, plastics technology, winches, cranes, rope drives and heavy-duty applications. Furthermore, the Oswald team has developed a mobile laser marker called Lighttag and is deeply involved in the development of aircraft propulsion systems, together with international partners.

Oswald

To find out more, scan the QR code or visit: **www.oswald.de/en/product-overview/**