

Sønderborg, 22 October 2024

Press release

World premiere at METSTRADE 2024

The first electric outboard developed from the ground up*

Sønderborg, Denmark – With the launch of their new outboard motor, „FALCON“, Danish drive system and battery developer EPTechnologies sheds the last remnants of the combustion era, setting a new industry benchmark. FALCON is the lightest, quietest and most efficient outboard in its class, representing a strong commitment to sustainable innovation.

Designed entirely as an electric propulsion system, FALCON breaks away from conventional models, which typically retrofit electric components onto platforms originally intended for combustion engines. This novel design enables a compact, lightweight build that minimises drag, improves efficiency, and maximises onboard space for additional batteries. It extends range, boosts performance, and significantly lowers environmental impact.

Unrivalled power-to-weight ratio and hydrofoil efficiency

At the heart of the 130 kW drive is its axial flux design. While motors with comparable power typically weigh 117 kg, FALCON comes in at just 27 kg. Its shaft length can also be adjusted. This flexibility, combined with a high level of efficiency, results in unprecedented versatility and functionality.

The new electric drive meets the demands of a wide range of performance needs and vessel types, from leisure yachts to small passenger ferry's and rescue boats. Hydrofoils also benefit from significant improvements: once planing, their energy consumption with FALCON drops by two-thirds. A more powerful 230 kW version is currently in development to extend the product line.

Advanced steering for superior manoeuvrability and stability

FALCON's steering system was also completely re-engineered. Now, only the propeller and the propeller hub rotate while the motor block remains stationary. This setup protects sensitive engine components and greatly improves weight distribution and stability, particularly in twin outboard configurations. The 360° rotating propeller hub also offers outstanding manoeuvrability in confined spaces, eliminating the need for additional bow thrusters.

Sustainability from motor to battery

Engineered for maximum efficiency and zero emissions, the FALCON electric outboard motor delivers high-performance while promoting a more sustainable maritime industry.

To complement this, EPTechnologies produces its own range of ultra-light, highly efficient batteries, developed and produced in-house. These can be tailored to suit the specific needs of each vessel, ensuring ideal weight distribution and optimised configuration.

* in power class & flexibility