The electric drive towards greener cruising

Power-Packer is a world leader in motion control across a variety of industries. World Cruise Industry Review talks to key account manager Nanne Leenstra about what makes the company's range of electric drive units the ideal solution for the cruise industry's actuator needs.

How has Power-Packer's history in motion control informed its relationship with its customers - not just in the cruise industry, but across the board?

Nanne Leenstra: Power-Packer, part of the Actuant Corporation, has been a key name in the world of motion control for more than 40 years. We've certainly advanced far since the beginning, when we primarily manufactured cab-tilt systems for trucks, hydraulic units for medical equipment and convertible rooftop actuation for the automotive industry. We have cultivated an impressive understanding of the needs of companies working with these systems – across multiple global market segments - and this, in turn, continues to inform our work with our partners in the cruise industry.

Could you describe the range of drive units you currently supply to the cruise sector?

We've developed a complete range of electric drive units (EDUs), suitable for various applications: not only to open, close and lock doors (whether shell doors, tender doors, garage doors or sliding doors), but also to raise and lower masts, and operate flaps, hatches and mooring gangways. The units are available from 2.5kN to 165kN, with strokes up to 650mm. They can be used in harsh conditions and retain ATEX Zone 2 certification, available for systems starting at 35kN.

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Our EDUs give the cruise industry the unique opportunity of obtaining a product that features the best of both worlds: electro-hydraulic technology (high force in a small envelope) working hand in hand with electro-mechanical technology (using only electric power to connect). The units are selfcontained, with no need for a central hydraulic system or hydraulic tubing, and are compact and easy to install. In the near future, we plan to add sensor integration to the mix, at which point the EDU system will not simply be an actuator, but a powerful information tool to relay valuable real-time data about an application.

As we complete the design and assembly of all our products in house, we are also able to fulfil most of our customers' requirements through fully customised solutions. Our systems are designed based on customer specification. They carry Lloyds, DNV Norske Veritas, CCS China Class Society and Japanese Class NK marine certifications, while sporting IP class 67 or 69k waterresistant coatings.

Power-Packer supplies drive systems for the global automotive, truck and medical industries among others. How has it applied this experience to its work within the cruise industry?

These industries have more in common than one might think: they all require high standards, extensive validation processes and reliable actuators that are easy to install. Our systems are environmentally friendly, and fulfil specific and highly technical demands. It was the application of lessons we learned from these other markets that resulted in our EDU being easily approved and certified as a mechanical locking device in addition to its main role in operating doors, masts and hatches.

Every few years, a cruise operator needs to undertake a major refurbishment of part or all of its fleet. What new demands and pressures have arisen in this process in recent years, and how has Power-Packer adapted accordingly?

There has certainly been a greater emphasis recently in the cruise industry on the enhancement of sustainability in vessel operations. The development of our EDUs has been a big step in that direction.

For instance, one of our main customers, TTS Marine in Gothenburg, was recently working towards optimising the drive system for its watertight side shell doors and platforms, and in order to do so, the company sought a compact, costefficient, easy-to-install, silent product that required little maintenance. By opting for our EDU solution, TTS Marine obtained all of these advantages as built-in features while eliminating the risk of hydraulic oil spillage, ultimately reducing its vessels' lifetime costs and contributing to a greener cruise industry.

Further information

Power-Packer www.power-packer.com

