

## Press Release

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### **A new standard in propulsion efficiency and on-board comfort**

Following successful tests of the innovative new Voith Linear Jet (VLJ) propulsion system in the UK in late-2014, the company aims to target local markets, including; fast ferries, yachts, workboats for the offshore industry and coastal protection vessels.

The VLJ propulsion system is a new benchmark for the industry as it combines the best properties of both conventional water jets and propellers. This is an ideal low maintenance solution for propulsion systems operating with mixed operating speeds of up to 40 knots.

Voith engineers designed and developed the VLJ exclusively by utilising computational fluid dynamics (CFD). Voith was one of the first companies to adopt this technology and used it in the field of hydro power development to master highly complex interactions and effects.

Established in the marine industry in the early 1920s with its unique Voith Schneider Propeller (VSP), the Voith Linear Jet paves the way for the entry of Voith propulsion systems into the market of fast moving vessels.

South Africa boasts a number of designers and builders of high quality, cost effective fast crew and patrol boats for the regional African market. In these demanding applications high acceleration and sustained speeds of plus 30 knots together with the highest reliability levels are expected by customers. In addition, long missions mean that low noise and vibration levels as well as improved fuel economy are essential for both crew comfort and greater operability. All benefits of the VLJ over jet propulsion systems.

### **Proven in testing**

The VLJ is now officially the main driving force behind the modern DNV Classed 21m offshore service catamaran named the 'Crew Transport Vessel (CTV)', following successful testing in the southern UK in late-2014.

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The CTV is designed to transport service technicians to offshore wind farms around Europe, and has already achieved a trial speed of 30 knots, compared to 26.5 knots from its jet propulsion sister.

Even if the current installed ten cylinder 900 kW diesels were to be replaced for eight cylinder 720 kW diesels – the economical service speed of 25 knots required by CTV owner Turbine Transfers would still be met.

As a result, Turbine Transfers has given overwhelmingly positive feedback on the state-of-the-art VLJ propulsion system, which has enabled the vessel to achieve more thrust at high speeds.

Turbine Transfers Marine Superintendent Alistair Knowles says: "Bringing the vessel to a stop with a turbine significantly lowers noise and vibration levels as opposed to using conventional levels. It also improves our green credentials through substantial fuel and emission savings."

Voith Turbo, a Group Division of Voith GmbH, is a specialist for intelligent drive solutions and systems. Customers from highly diverse industries such as oil and gas, energy, mining and mechanical engineering, ship technology, rail and commercial vehicles rely on advanced technologies from Voith Turbo.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs more than 39 000 people, generates €5.3 billion in sales, operates in over 50 countries around the world and is today one of the largest family-owned companies in Europe.

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