Press Release

Voith GmbH
Global Market Communication
St. Pöltener Straße 43
89522 Heidenheim
Phone +49 7321 37-2749
Fax +49 7321 37-132749
www.voith.com

SMM 2016: Voith Sets Standards for Reliable, Efficient and Safe Vessel Propulsion Systems

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- **Comprehensive services for lower life cycle costs**
- **VSP, VIT and VLJ as a basis for tailored propulsion solutions**
- **Daily expert forum on propulsion concepts at Voith booth**

Hamburg/Heidenheim: At this year's SMM in Hamburg from September 6 to 9, Voith presents propulsion concepts for a wide variety of applications. Voith exhibits propulsion units such as the Voith Schneider Propeller (VSP), the Voith Inline Thruster (VIT) and the Voith Linear Jet (VLJ) in hall A4, booth 203. With its propulsion concepts, the company has been setting standards for reliable, efficient and safe vessel propulsion systems and concepts for many years.

"Together with our partners, we ensure perfect harmony between the vessel design and propulsion system. This facilitates reliable and precise maneuvering, even in challenging situations. Individual maintenance planning and preventive maintenance are equally important to our customers as they prevent propulsion system failure and maximize uptimes", says Dr. Dominic Dorfner, Managing Director Voith Turbo Marine, explaining the focal points of this year's Voith presentation at SMM.

Dynamic maintenance cycles to reduce downtimes

The individual service solutions offered by Voith accompany the customer from counseling through engineering to holistic concepts. Unplanned downtimes can thus be reduced or even avoided, and life cycle costs are lowered. Regular evaluation of the propulsion system data supports the development of dynamic maintenance cycles and enables preventive maintenance. Individual retrofit solutions allow Voith to bring propulsion

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systems up to date and increase their energy efficiency and environmental compatibility.

A proven system for innovative vessel concepts: the VSP

Efficiency, reliability and safety of the Voith vessel propulsion systems are also documented by the VSP models on display. They are examples for the numerous areas of application of the VSP. The VSP concept comprises both propulsion and steering – at SMM, visitors of the Voith booth can also see the control stand. In addition, two vessel models equipped with VSPs will be on display at the Voith booth: the novel Carousel RAVE (Robert Allan Voith Escort) Tug owned by Dutch towage and salvage specialist Multraship BV and Kroonborg, a maintenance support vessel (MSV) owned by Dutch shipping company Royal Wagenborg. On the Carousel RAVE Tug, a novel towing system prevents capsizing of the tug. Propulsion and steering of the 32 meter vessel is via two 32RV5 EC/250 VSPs: one at the bow and one at the stern. This arrangement allows for a slim vessel design and facilitates maneuvering, particularly in narrow locks, ports or channels. In addition, this vessel concept facilitates high lateral thrust forces of up to 130 tons at a speed of eight knots. A hybrid variant of the VSP was recently awarded the "Electric & Hybrid Marine Award 2016". The two R5 EC/90-1 VSPs are used in MV Catriona owned by Caledonian Maritime Assets where they help to reduce fuel consumption by up to 30 percent and lower CO_2 emissions.

Precise dynamic positioning with the VIT

The Kroonborg is a MSV owned by Dutch shipping company Royal Wagenborg. In addition to two Voith Schneider Propellers (VSP 28R5 ECS/234-2) as main propulsion systems, the vessel is equipped with two Voith Inline Thrusters (VIT 2000-1000). The VITs are used as transverse thrusters. Their fast steering response ensures optimum dynamic positioning of the Walk to Work vessel at offshore platforms or in wind farms. Alternatively, VITs are also used as swing-out transverse thrusters – for example by the owners of mega-yachts who appreciate their silent operation and low maintenance requirements.

Highly efficient over a large speed range: the VLJ

In addition to the VSP and the VIT, Voith also presents a model of the VLJ at the trade fair booth. This propulsion system combines the advantages of propellers with those of water jets. Due to its robust design and its constant high efficiency in the speed range between 20 and 40 knots, it has lately scored high particularly with the owners of crew transport vessels (CTV).

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The low number of moving parts not only reduces wear but also limits the maintenance required. The high efficiency of the VLJ also results in low fuel consumption.

Daily expert forum with Dr. Dirk Jürgens

A novelty at the Voith booth are the daily forums, panel discussions and presentations of best practice examples. Dr. Dirk Jürgens, Head of Research and Development at Voith Turbo Marine, will discuss current requirements for vessel propulsion systems, efficient and environmentally-friendly concepts together with vessel operators and renowned shipbuilding experts and will offer a forum for solutions that have already been implemented. The discussion session will be held daily at the booth at 2:30 p.m. (Friday, September 9 at 11 a.m.).

Voith Turbo, a Group Division of Voith GmbH, is the 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 for energy, oil & gas, paper, raw materials, transport & automotive. Founded in 1867, Voith employs more than 20,000 people, generates €4.3 billion in sales, operates in over 60 countries around the world and is one of the largest family owned companies in Europe.*

*Excluding the discontinued Voith Industrial Services Group Division.

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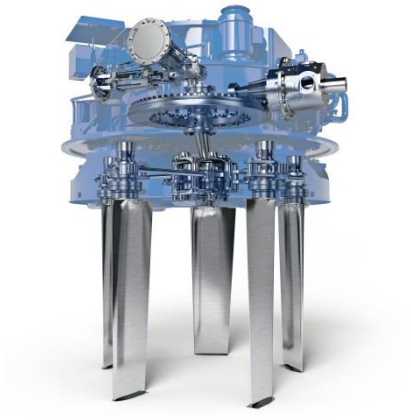

The VSP concept comprises both propulsion and steering.

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The VITs are used as transverse thrusters. Customers appreciate their silent operation and low maintenance requirements.

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The Voith Linear Jet (VLJ) combines the advantages of propellers with those of water jets.

Contact:
Matthias Herms
Global Market Communication Manager
Phone: +49 7321 37-2749
Matthias.Herms@Voith.com

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