E-Ship 1 wins wind propulsion innovation award

The E-Ship 1, a RoLo cargo vessel with four 2m rotor sails to assist its diesel engines, was named winner of the inaugural Wind Propulsion Innovation Awards 2016 in the category “wind propulsion in commercial shipping – innovation” yesterday at SMM in Hamburg. Launched in 2010 by German wind power specialist Enercon, the ship is used to transport wind turbine components.

“The Flettner technology has proven effective and robust in commercial use,” Enercon said following the ship’s class renewal. “Depending on weather conditions, fuel savings of up to 15% can be achieved. The other Enercon innovations – a streamlined superstructure and hull and a specially coordinated rudder/variable pitch propeller combination – have proven effective and resulted in further fuel savings. This, together with the use of practically sulphur-free marine gas oil and the use of SCR catalytic converters, mean that the E-Ship 1 sets...
a high benchmark in the multi-purpose freight segment.”
Enercon was the award winner in the category “wind propulsion technology user”.
In the category “wind propulsion research”, the winner was the University of the South Pacific in Fiji for its Sustainable Sea Transport Programme.
Launched by the England-based International Windship Association (IWSA) to recognise pioneering projects and technological innovation in the development of wind propulsion for technically and commercially viable solutions for different vessels across the maritime industry, the awards spotlight individuals and companies making a real difference in advancing wind propulsion as a low-carbon, sustainable solution for the world’s shipping fleet.
Before the winners had been selected, Gavin Allwright, IWSA secretary, said: “We are really pleased by both the number and high quality of the nominations we have received. This is testament to the growth of interest in wind propulsion solutions across the industry and the innovative, pioneering spirit of the project teams dedicated to bringing these low-carbon technologies to market.”

Dr Andreas Schmidt of Enercon accepts the prize

Dr Rodrigo Azcueta, founder of Cape Horn Engineering

Greentech: Caterpillar and Marine Service offer complete LNG solution

Hall plan

Selected schedule

Maritime 4.0: Bachmann makes a complete integrated automation solution possible

Windenergy Hamburg: From multi-megawatt turbines to subsea cables

Things to do after the fair: Hamburg’s new landmark – the Elbphilharmonie

VDMA Thematic Day on Recruitment and Education

The VDMA is providing a programme of presentations and focused consulting services for its member companies and guests. The presentations will be held at VDMA’s main stand in Hall A1.
Today’s Thematic Day will focus on recruitment and education in the machinery industry. An expert from VDMA’s head office will hold presentations according to the schedule below. He’ll also be available all day at the VDMA stand for individual discussions with interested members.

German Engineering Federation (VDMA) – Marine Equipment and Systems at SMM: Hall A1 / Stand 518

11:00: “Factors for Career Decisions of Young People – Main Results of Latest VDMA Study”, Stefan Grötzschel, VDMA Education

13:00: “VDMA Apprentice Campaign – Progress and Results”, Stefan Grötzschel, VDMA Education
What Keeps The World Afloat?
Precision engineering and legendary reliability.

1911
MAN built the first diesel propulsion engine installed on a seagoing ship, the “MS Selandia”

120+
locations make up our global service network

50%
of global trade is powered by MAN marine engines

From luxury yachts, freighters and tankers to the most advanced naval vessels, ship owners and governments the world over put their trust in MAN Diesel & Turbo marine engines and systems. We offer the world’s largest engine program, with outputs ranging from 450 kW to 87,220 kW per engine. Our portfolio extends from gensets and compact four-stroke units to giant two-stroke engines – including the largest diesel engine on earth. All built to deliver our legendary reliability and eco-designed to beat the fuel efficiency regulations of tomorrow.
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SMM - Typ 02 - SBU Marine What Keeps The World Afloat - 210x297.indd   1
2016-07-28   14:09:39

Engineering the Future – since 1758.
MAN Diesel & Turbo
Clockwise from top left: DVV Media Group’s SMM get-together at the Weinland Waterfront wine shop in Hamburg; 120 guests attended; exhibition of new products at SMM; a visitor takes a closer look at a ship model; industry experts check the press; the German Association for Marine Technology (GMT) held the traditional “Blue Hour” networking event at the InWaterTec “German Maritime Technologies” Stand 139 in Hall B6, where about 150 international guests took the opportunity to meet and discuss current trends in a pleasant atmosphere.

Photos: Arndt, HMC/Maack, HMC/Zapf, Sadowski
MTU Series 4000

Legendary. Since 1996.

Since 1996, more than 37,000 MTU Series 4000 engines set the standard for efficiency and reliability again and again. With technologies like common rail fuel injection, turbocharging, exhaust gas aftertreatment and advanced electronics, highest quality standards and legal requirements are met alike. Learn more about the legend and the latest MTU Series 4000 marine diesel engines at legendary.mtu-online.com

New level of redundancy for Compac

Thordon Bearings has unveiled what is says is potentially the marine industry’s safest, most robust shaft seal as part of a programme of enhancements under way to optimise its award-winning Compac seawater-lubricated propeller shaft bearing system.

Targeting high quality, low leakage, long life and minimum maintenance, Thordon’s new SeaThigor forward seal was unveiled at SMM this week. Its technical features, the company says, raise the bar in dynamic and static seal design, with an unmatched performance of the primary dynamic seal, and an ingenious secondary seal module that provides a safe-return-to-port capability in the event of a face failure of the primary seal.

Providing a new level of redundancy to single screw or mission-critical vessels operating seawater-lubricated propeller shafts, SeaThigor can function as both a dynamic and static seal to provide watertight integrity around a shaft, while allowing the propeller shaft to rotate in both directions across a range of shaft speeds.

Thordon Bearings at SMM:
Hall A4 / Stand 125

E-tagging of marine equipment: demonstration at SMM

The technical possibilities of electronic tagging (e-tagging) and interlinkage with databases were demonstrated on Wednesday at the SMM stands of the Survitec Group, d-i davit international and Drew Marine in Hall B5.

The demonstration was performed by Bremen-based BALance Technology Consulting jointly with the market surveillance department of the German Federal Maritime and Hydrographic Agency (BSH) to show the functions and potential of e-tagging to the maritime community. The demonstration is part of a current study for the European Commission’s DG MOVE (Directorate-General for Mobility and Transport) on e-applications in the context of the new EU Marine Equipment Directive (MED). Beyond the traditional optical “wheelmark” certification, the new directive contains provisions allowing the marking of products with electronically readable tags (RFID, QR codes) as well. The study provides technology evaluation and impact assessment, and prepares the ground for amending regulations to the directive. Joachim Brodda, managing partner of BALance Technology Consulting and technical secretary of the Group of Notified Bodies under the MED (MarED), said: “E-tagging of marine equipment will contribute to the digitisation of the marine industry and to the safety aspects of equipment by allowing market surveillance to get faster access to required information and data. Under the headline of Maritime 4.0, advanced IT, communication technology and the future-targeted requirements of the EU directive open up manifold routes for all stakeholders including manufacturers, classification societies, shipping companies, etc, to integrate their business processes in the supply chain by means of digital solutions.”

The new MED takes effect on September 18th 2016 and also includes measures aimed at improving market surveillance, setting clear and transparent rules for the accreditation of conformity-assessment bodies and boosting the quality of conformity assessments.

Survitec at SMM:
Hall B5 / Stand 324

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With our experts on your team, you have a solution for every challenge. Come and discuss your requirements on BOOTH 105, HALL B4.EG
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THE NEW GENERATION SINGLE OIL THAT POWERS EFFICIENCY

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• Lighten the workload for your teams, avoid lube oil switchovers and reduce the risk of human error.
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Energizing performance. Every day
Three questions for...

**DR RODRIGO AZCUETA**

Azcueta is a leading CFD provider specialising in racing yacht designs for America’s Cup and Volvo Ocean Race teams, among others. We caught up with him at SMM in Hamburg, the city where he studied naval architecture and marine engineering, earned a PhD and started a family.

**Azcueta is a leading CFD provider specialising in racing yacht designs for America’s Cup and Volvo Ocean Race teams, among others.**

3. How can the marine industry profit from your service?

In my view the marine industry can benefit from this technology transfer more than any other industry. Unlike planes or cars, ships move at the interface between air and water, which is why the force similarities between the model at scale and the real ship cannot be achieved in a towing tank. Testing in a towing tank is based on many assumptions, empirical formulations and experience. CFD can model the ship at full scale. The shortcomings of towing tanks are more evident in the case of sailing yachts, as they create a huge lateral force compared with the resistance. Our CFD tools and methodologies have been developed and rigorously tested in what can be considered the Formula 1 of sailing: the America’s Cup. Our CFD can greatly increase efficiency, achieve large fuel savings, greater passenger comfort and improve performance.

**How can the marine industry profit from your service?**

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**There are many CFD companies in the market. How can a client tell a good service provider from a not-so-good one?**

A good indication are the tools that are being used, the computing resources and the experience in past projects. At Cape Horn Engineering we’ve always worked with products from CD-adapco, which in my view are the best on the market to this day. I started using COMET, one of the predecessors of Star-CCM+, and through my work have contributed to developing the code further. For our current work we need detailed hydrofoil simulations, motions and free surface, aerodynamics on wings and sails, fluid structure interaction, cavitation, transition and much more. Star-CCM+ allows us to do all of this with great efficiency.

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**ANNOYED BY BLOCKED VSAT?**

shipznet provides world-wide ship-to-shore data communication with up to 20 MB/s near shore and in ports. With shipznet, customers extend their costly and slow satellite systems to enable remote software management, crew communication or even video conferencing.
BWTS by OceanSaver aims at USCG type approval

Established in 2003 and headquartered in Norway (with offices in Busan and Shanghai), OceanSaver (OS) is among the leading global providers of IMO type-approved, high-capacity and technologically advanced ballast water treatment systems (BWTSs).

It is also a front-runner in the United States Coast Guard (USCG) type-approval process. Its BWTS MKII delivers high-performance filtration, flexible system installation, and is a reliable and streamlined solution for retrofit and newbuilding projects, OS says, adding that all tests (land-based, shipboard and environmental) have been concluded and the type-approval application will be submitted to the USCG in early September. The system combines pre-filtration using a 40µm mechanical self-cleaning screen filter and side stream electrodialysis with patented membrane cell technology. The system monitors the immediate oxidant demand (IOD) of the water to be treated to adjust the dosage level. OS has “unparalleled” experience and competence in the design, engineering and execution of retrofit projects, the company says. In addition, it can assist in financing through Export Credit Norway for up to 85% of the total contract value with a free-of-charge fixed interest rate option. OS has delivered major retrofit and newbuilding contracts in its core shipping segments, medium- to large-sized tankers with P/R and submerged ballast pumps, bulkers and LNG/LPG carriers.

To learn more about the company and see the BWTS meant for USCG type approval, visit Stand S22 in Hall A1 at SMM.

Busy year for Palfinger Marine

Palfinger Marine, a leading provider of highly reliable, innovative and customised life-saving systems, deck equipment and handling solutions for the maritime industries, has two stands at SMM.

At Stand 204 in Hall A1, it’s showing its cranes, winches and handling solutions, while its boats and davits can be found at Stand 326 in Hall B5. Norway’s Harding Safety AS, acquired earlier this year by the Austria-based Palfinger Group, is exhibiting at Stand 426 in Hall B5. It’s a leading supplier of life-saving equipment and life-cycle services for maritime installations and ships.

2016 has been an exciting year for Palfinger Marine. At the end of March, the sub-brands Palfinger Dreggen (offshore cranes), Palfinger Ned-Deck (davits) and NDM (winches and offshore equipment) became fully integrated into Palfinger Marine. In June, Palfinger closed the biggest acquisition in its history: Harding Safety AS. Starting from the second quarter of 2016, Harding has been a fully consolidated company of Palfinger. Together the companies offer clear benefits to Palfinger’s customers: an increased range of products and services for complete package offers, an extensive global sales and service network, and a strengthened position in all main marine and offshore segments.

The product portfolio includes cranes (marine, offshore, wind cranes), life-saving equipment (lifeboats and davits, special boats) and winches and handling equipment (winches, lifting and handling equipment, bulk and bunker handling equipment and fenders). Due to the increased product and service range, the enlarged Palfinger Marine says it will be in the “pole position” to offer complete packages consisting of cranes, lifting and handling equipment, life-saving solutions and global services. The joint set-up has operations in more than 30 countries worldwide, supported by an extensive partner network – this means global coverage. Another benefit is Palfinger’s strengthened position in the most relevant customer segments: offshore, marine, cruise, navy and coastguard, and wind.

Palfinger Marine at SMM:
Hall A1 / Stand 204
Hall B5 / Stand 326

From left: Hyun Soo Jeon, OceanSaver’s general manager for South Korea, and sales manager Benjamin Petterson

OceanSaver at SMM:
Hall A1 / Stand S22
Caterpillar and Marine Service offer complete LNG solution

Caterpillar and gas-engineering and storage specialist Marine Service GmbH say they have developed a winning formula for the design and production of LNG-fuelled propulsion systems through MaK™ branded products.

Cruise lines are pioneering a transformational move away from heavy fuel oils and distillates to liquefied natural gas (LNG) as the principal fuel for their ships, but they are by no means alone, the two companies note.

At the cruise sector’s largest annual gathering in Florida earlier this year, one cruise line CEO predicted that 80% of cruise ships would be running on LNG by 2025. While the claim brought a lively debate, all of the cruise sector’s biggest names (and a number of smaller ones) are weighing up gas-fuelled propulsion systems for next-generation vessels.

For engine manufacturers and propulsion system specialists, this is an eye-watering prospect with the cruise order book at a new peak of 59 vessels worth more than USD 44 billion. A number of cruise operators have not finalised their choice of propulsion systems. While the high visibility of these ships and their high value will continue to grab attention, many in the wider commercial maritime industry see LNG as the smart new option, complying with all existing and upcoming regulations on emissions of SOx, NOx, particulate matter and CO₂. The solution has already been successfully adopted by a number of progressive owners, notably in northern Europe and the US and, with the LNG bunkering infrastructure expanding in key locations around the world, a growing number of ship operators are taking a fresh look at its feasibility as a marine fuel.

“The cruise sector is leading the way, but we see a significant market in the commercial and offshore sectors, both for engine modifications and new installations,” said Ulf Hanne mann, Cruise & Ferry segment manager at leading engine builder Caterpillar Marine.

Ferry firms, container lines, short-sea operators, offshore vessel owners and the providers of inshore and harbour service vessels including tugs and workboats face equivalent choices in their future response to mandatory limits on emissions from ships.

For this reason, Caterpillar has prioritised establishing a leading position among power system providers by developing tailor-made LNG propulsion systems for a wide range of vessel types. Via its MaK brand, the company is working with Hamburg-headquartered LNG and cryogenic specialist Marine Service GmbH to offer systems for retrofit and newbuilding. The cooperation means that every link in the engineering chain from bunker flange to propeller – and everything in between – is available from a single source.

Caterpillar says that its all-inclusive view, which extends from front-end engineering and design (FEED) studies to en-
engine architecture and the new technologies that raise operating efficiency, have enabled the development of solutions that address different imperatives. Its solutions include special features to minimise methane slip, incorporating variable valve timing, flexible camshaft technology and a Caterpillar-patented “waste gate”, for example. These innovations combine to avoid part-load choking, optimising the fuel/air mixture to provide fast up-load response times and effective low-load operation. Again, system safety is ensured through Caterpillar’s control and monitoring process, which continuously tracks engine performance in real time. In-cylinder pressure monitoring devices prevent engine knocking by adjusting fuel injection and valve timings within the accepted tolerance range, with alarms set off should out-of-range exceptions occur. The bespoke handling solutions provided by Marine Service cover the entire fuel gas supply system, including storage tanks, scalable vaporiser system, double-walled piping systems inerted with nitrogen at up to 10 bar, and components including pumps, valves, level sensors and insulation. Most importantly, Marine Service’s gas conditioning system expertise ensures that engine fuel is of the right quality to be supplied at the right temperature and pressure to vaporise into a gas that can be burned in the dual-fuel engines. Effective fuel control and management is paramount. Caterpillar has also moved to address the issue of operating gas-fuelled engines efficiently at low loads, and specifically loads below 20%. Various strategies are possible, including taking one bank of cylinders in a Vee configuration out of the combustion process, thereby allowing the other engine bank to operate at a higher load. At its facility in Rostock, Germany, Caterpillar demonstrated the capabilities of the MaK M 46 DF engine and started the engine by using LNG from the very beginning, thus avoiding diesel engine-specific emissions – another first for the company. “This innovative concept was realised by utilising the experience Caterpillar has in electronically controlled engines. These engines will use the latest generation of Caterpillar’s own Engine Control Units (ECUs), which in conjunction with in-house software development enable customer operation profile-specific optimisation”, noted Dr Frank Starke, global product manager for medium-speed engines. “This is a major advance, particularly for cruise lines starting their engines in city-centre port locations.”
ZF Marine Propulsion Systems supplies a complete line of commercial transmissions, thrusters, propellers and control systems, offering the maneuverability, dependability and operating speed the marine industry requires. An exciting extension to our product portfolio will be waiting for you at the occasion of SMM Hamburg 2016.

www.zf.com/ap
Global treaty to halt invasive aquatic species to enter into force in 2017

Accession by Finland has triggered the entry into force of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) on September 8th 2017, the International Maritime Organization (IMO) said yesterday.

IMO called it “a landmark step towards halting the spread of invasive aquatic species, which can cause havoc for local ecosystems, affect biodiversity and lead to substantial economic loss”. Under the convention’s terms, ships will be required to manage their ballast water to remove, render harmless, or avoid the uptake or discharge of aquatic organisms and pathogens within ballast water and sediments.

“The spread of invasive species has been recognised as one of the greatest threats to the ecological and the economic well-being of the planet. These species are causing enormous damage to biodiversity and the valuable natural riches of the earth upon which we depend. Invasive species also cause direct and indirect health effects and the damage to the environment is often irreversible,” he said.

He added: “The entry into force of the Ballast Water Management Convention will not only minimise the risk of invasions by alien species via ballast water, it will also provide a global level playing field for international shipping, providing clear and robust standards for the management of ballast water on ships.”

The accession by Finland brings the combined tonnage of contracting states to the treaty to 35.1441%, with 52 contracting parties. The convention, adopted by the IMO in 2004, stipulates that it will enter into force twelve months after ratification by a minimum of 30 states, representing 35% of world merchant shipping tonnage.
Bachmann makes a complete integrated automation solution possible

Maritime 4.0 and Industry 4.0 involve communication between man, machine and product, where internet technology is used as the communication medium. The 4.0 technologies are already active, but it will take several years before they are fully mature. The aim is to increase the quality of products, reduce costs and make better use of resources.

What are the objectives of the shipbuilding industry?
The use of 4.0 technologies in the shipbuilding industry is growing. The degree of automation in vessels is steadily rising. Today’s high operating costs are pushing the need for automation. With better automation, the TCO (total cost of ownership) of a ship can be minimised.

Another hot topic in the industry is autonomous maritime technology. Various research projects are currently working on technology, security and the legal implications, and showing us that the technology isn’t far away. Initial concepts and conclusions can be found on the Internet. Last but not least, the strong wish to protect our environment is pushing the technology. New electrical- and hybrid propulsion solutions are gaining in importance.

What can Bachmann electronic contribute in this regard?
Bachmann is focused on offering the technology to make a complete integrated automation solution possible. About 160 different hardware modules offer a flexible platform where almost every sensor and actuator can be connected. Industrial protocols based on CAN, such as CANopen and SAE J1939, are available. Ethernet-based standards such as Profinet, EtherCAT, Modbus, OPC, OPC UA and DDS are augmented by the redundant real-time transmission protocol bluecom. Users have full access to develop their own socket communications as well.

The M1 does it!
The M1 controller is open and flexible. With its range of interfaces, it is ideally suited as either a gateway solution or main controller platform with integrated 4.0 technology for the maritime industry. No other controller provides as many integration options as the M1. All data are converted into standardised UOMs (units of measure). Together, all the data become information, creating a base for analysing the data.

atvise portal
To make it possible to visualise and secure-store data independently of the source, the atvise portal solution was developed. Based on the proven, fully web-based atvise SCADA, the portal provides OPC and OPC UA interfaces to connect a variety of different manufacturers to the portal. The multi-client front-end offering allows multiple customers or user-specific areas to benefit simultaneously from the same data.

Investments
A big step towards Maritime 4.0 can be taken without large investments. The data are already there. The M1 controller can provide an out-of-the-box solution. When customers later want to add more sensors, the M1 is an ideal solution because almost all sensors can be connected directly to one of the many interfaces. Just how easy this really is can be seen at Stand B6 410. The atvise portal connectivity is presented there with sensors and actuators from different manufacturers (Kral, Hydac, IFM and Dr E. Horn) connected. Live, on their own mobile device, visitors can monitor the data changes. The only thing they need to do is to bring a mobile device with a web browser and web access. The IP address is supplied by Bachmann.

Big data and other big requirements
This is no major challenge for Bachmann, but already a long-standing technological
standard. The automation world is big, and just as big are the demands placed on the technologies, which may vary depending on the type and location of the application. Bachmann system solutions are at home anywhere in the world, and meeting international requirements in terms of innovation and security has always been part of the company’s standard programme.

**Maritime 4.0, IoT, big data**
Bachmann moves with the times and the latest technological developments. Maritime 4.0 is not a single function, but a foundational architecture that Bachmann has been pursuing for years. The monitoring of equipment and complete vessels is the result of a consistent pursuit of these trends and the company’s contribution to creating relevant products.

**Teleservice**
The larger the amount of data, the more important that teleservice becomes. Fully integrated functions enable a simple and secure service even over large distances or with slow connections (e.g., satellite). Standard functions such as encryption or authentication are standard features at Bachmann.

**Security**
The demands placed on security for people and machines are constantly increasing. Besides conventional access protection, it’s also a matter of knowing who changed what, which parameter and when. Bachmann has the solution integrated in the M1 system “ready to use”. Available as usable system components are:

- Scalable security, optimised for the application
- Access control and access logging
- SSL encryption
- Convenient user and password management
- Access protection at variable levels
- Memory protection
- Access logger in the operating system
- Out of the box

**CUSTOMERS.**
Together with our customers we develop perfectly integrated automation solutions

**Booth: B6.410**
Oil mist eliminators

At SMM 2016, the Swiss company UT 99 is once again putting its efficient oil mist eliminators on display.

Two years ago, UT 99 presented the world’s first oil mist eliminator for crankcase (combustion engine) and lube oil tank (gas and steam turbines) ventilation with classification approval from DNV GL. Due to consequent and continued developments, UT 99 managed to successfully receive RINA type approval for its oil mist eliminator for diesel, gas and dual-fuel engines, UPF-844-MZ, in March 2016. Additionally, UT 99’s latest generation of oil mist separators, UPF-SauKuL and UPF-CCV-450, are being presented at the stand. These are highly efficient passive oil mist separators for the ventilation of small crankcases (combustion engines of up to 500 kW and 3 MW, respectively) and housings of auxiliary equipment (tanks, gears, clutches).

UT 99 AG at SMM: Hall A4 / Stand 409

Griffin receives ABS type approval

Singapore-based Griffin has announced that its MAS and GFS series of fully stainless steel fuel filter/water separators has been approved by the American Bureau of Shipping (ABS).

According to Griffin, the fuel filter/water separators are likely the first filtration product that is fully stainless steel-constructed and in compliance with the new ABS type-approval policy worldwide.

Based on the ABS rule change effective on November 1st 2010, fuel filters used in steel-constructed marine vessels must meet new, higher temperature fire rating standards. Furthermore, new installations for ABS-classed steel-hulled vessels require all steel-type filters to be built based on the rules set forth by the International Association of Classification Societies (IACS). It is developing an IACS unified interpretation (UI) that will address SOLAS Regulation 11-2/4.2.2.5.1, which states that ‘oil fuel pipes and their valves and fittings shall be of steel or other approved material’. Griffin’s fully stainless steel MAS and GFS series fulfill the standards.

ABS type approval is available for a wide range of products for marine and offshore applications, industrial plant and processes, and the information technology sector. There are many benefits for producers and users, and the type-approval process is practical, client-oriented and flexible. For more than 150 years, ABS has been at the forefront of maritime safety.

Griffin at SMM: Hall B7 / Stand 2012

Contact Griffin: info@griffin-asa.com

www.griffin-asa.com
Evonik presents ballast water treatment systems

Germany’s Evonik has its Avitalis ballast water treatment system (BWTS) on display.

Earlier this year, the company submitted a letter of intent (LOI) to the United States Coast Guard (USCG) to officially announce its intention to apply for USCG type approval for the system. According to the LOI, Evonik has selected DNV GL as the independent laboratory (IL) to oversee and supervise the test programme. Meanwhile, shipboard testing for the IMO type approval has started on the feeder container vessel Helmut of the shipping company Jens & Waller. IMO type approval by the German authority BSH (Federal Maritime and Hydrographic Agency) is expected in the first half of 2017.

Evonik at SMM: Hall A3 / Stand 108
Hall B6 / Stand 504
Total Lubmarine launches single oil solution

Leading lubricants supplier Total Lubmarine has launched Talusia Optima, a new cylinder lube oil that it says is compatible with high-sulphur heavy fuel oils and ultra-low-sulphur distillate fuels.

The new lube is a “breakthrough development” that will simplify the management of vessels trading globally in and out of Emission Control Areas, and offers the potential to significantly reduce lube consumption and help extend engine life, according to Total Lubmarine. Talusia Optima is suitable for use with fuels ranging in sulphur content between 0 and 3.5%.

Talusia Optima has received a no-objection letter from major OEM Winterthur Gas & Diesel (WinGD) for the use of the product across its two-stroke engine ranges.

Launching the product at SMM in Hamburg, Total Lubmarine’s technical director, Jean-Philippe Roman, said: “Today is the culmination of years of work in the lab and tests at sea, and I’m delighted that Talusia Optima is now on the market and available to our customers. It will make life on board easier for ships’ crews and greatly minimise the risks encountered during fuel changeovers. Tests conducted during sea trials have all shown that Talusia Optima’s resistance to adhesive wear is better than that of conventional BN 100 cylinder lube oils, and the piston coating wear rate is improved by 30%. Indeed, the final inspection on board one mega boxship that had used Talusia Optima for 4,300 hours while deployed on Asia-Europe liner routes found that its engine had perfect piston and liner cleanliness.”

Serge Dal Farra, Total Lubmarine’s global marketing manager, said: “As the developers of Talusia Universal, we knew that demand for a single oil solution was strong. No ship operator or engineer wants added complexity, and we have brought to market a lube that is compatible with all fuel types to meet our customers’ pressing need for a simple solution.”

Visit ABS in Hall B3.EG.200:
• Software Demonstrations
• Technical Presentations
• Regulatory Compliance Guidance

Offshore – Maritime Weather Forecasts

Special advice and forecasts
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■ General weather situation, text and graphics
■ Tabulated forecasts for any position or route
■ Forecasts for all important weather elements in high resolution
■ Wind forecasts at different levels
■ On request individual advice by qualified meteorologists
■ Update twice a day
Armaturen-Wolff launches quick-closing valve

The Hamburg-based valve manufacturer Armaturen-Wolff has tackled the increasing technical requirements and growing awareness of the need for secure plant shut-off in emergency situations under critical operating conditions.

On the occasion of SMM 2016, the company says it’s releasing a new development to the market: a high-performance, quick-closing valve. Using innovative “double-stem” technology, the valve ensures safe emergency shut-down of large diameter system pipelines such as DN 200 under pressures of 40 bar and temperatures of up to 400 °C.

The concept applies to liquids, gases and steam alike, including aggressive media, thus surpassing conventional concepts of marine quick-closing valves by far, Armaturen-Wolff says. At the same time, it adds, the valve enables substantial cost savings in comparison with established solutions for similar operating conditions. The company has filed a patent application.

Armaturen-Wolff at SMM: Hall A1 / Stand 216

From left: Hendrik Wolff, Hamburg’s economics senator Frank Horch, Mathias Wolff and Rainer Wolff – the Wolfs co-manage the company

Photo: Wroblewski

Join us during SMM 2016 in the Wärtsilä Digital Lounge, Hall B6, stand 312

Wärtsilä connects the dots – now and tomorrow

We continuously optimise our portfolio to meet the changing needs of our customers. As a leader in LNG technology and fuel flexibility, we allow our customers to keep their options open while guaranteeing environmental compliance in all IMO areas for years to come. We can help you achieve optimal efficiency throughout the entire lifecycle. Experience our visions of the future and ensure your future success. Read more at www.wartsila.com
Up on the bridge or down in the engineering room, you don’t need your computers beside you to have complete control over your IT systems.

With G&D’s KVM technology, you can remove computers from control rooms into one safe location. As a result, you’ll create more space with less noise and less heat and enjoy a better working environment.

For complete flexibility, users can access the systems wherever they are on board – all they need are the necessary peripherals e.g. a mouse and a keyboard and one or more display screens.

In addition, KVM systems from G&D deliver more safety. Our systems not only provide mission-critical features that monitor our KVM equipment but they can also measure several parameters of the systems they’re connected to.

On ships, in special applications control, in vessel traffic service (VTS), on offshore platforms… for complete control with flexibility the answer is KVM – from G&D.

Soon after SMM 2016, from September 27th to 30th, the WindEnergy Hamburg expo will take place at the Hamburg fair site. Since the themes of the events overlap to a large extent, more than a few SMM exhibitors will keep their stands in place and seamlessly segue into the wind energy expo. Here’s a look at the industry and WindEnergy Hamburg 2016.

Offshore industry well represented

WindEnergy Hamburg will see more than 1,200 companies showcasing their innovative products and services, representing all sectors of the value chain. Presumably about a third of the exhibitors will be companies serving the offshore segment, including maritime enterprises eager to seize the opportunity to expand into new areas of business.

The three fair halls at WindEnergy Hamburg 2016 will reflect nearly the entire range of offshore wind technologies. WindEnergy Hamburg will not only feature global players, but also national entities such as the Belgian Offshore Cluster, which represents 14 companies.

Components for offshore wind farms

A wide variety of international component providers will be exhibiting their wares in Hamburg. Among them are bearing, (main) shaft, couplings and generator gearbox suppliers, and gearbox producers including Eickhoff, Moventas, Multigear and ZF. Winergy’s vice president for sales, Paul Bollwerk, remarked: “We’ve believed in offshore wind since delivering our first gearboxes for such turbines back in 1991. WindEnergy 2016 offers a great opportunity to present our new offshore drivetrain innovations.”

Damen Shipyards will be showcasing a range of standardised service and (multi-purpose) utility vessel offerings. Germany’s Abeking & Rasmussen shipyard will present its Swath crew-transfer vessels. Wind


WindEnergy Hamburg will be held at the Hamburg fair site from September 27th to 30th 2016. The leading international expo for onshore and offshore wind energy, it reflects the global market and entire value chain, and is a meeting point for decision-makers from around the world. Looking further ahead, HUSUM Wind will be held from September 12th to 15th 2017 in the German North Sea town of Husum, in the state of Schleswig-Holstein – a front-runner in the wind industry. The focus of HUSUM Wind is on the German-speaking market. It is a traditional meeting point for intensive exchanges within the industry and practice-oriented value added. For more information, visit the websites www.windenergyhamburg.com and www.husumwind.com.

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NEU Handbuch Korrosionsschutz

Dieses Handbuch stellt die Grundlagen des Korrosionsschutzes in der See Schiffsfahrt mit Beispielen aus der Praxis vor. Es veranschaulicht die verschiedenen Korrosionsarten und deren Ursachen und beschreibt die Methoden der Oberflächenvorbereitung und Beschichtung.

NEU Glossar Schiffstechnik

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LR signs MoU with Airobotics to support Remote Presence programme

Lloyd’s Register (LR), a global engineering, technical and business services organisation, has signed a memorandum of understanding (MoU) with Israel-based Airobotics, a fully automatic drone platform, to work together to deliver faster, safer, more insightful and innovative services through the use of autonomous drones for pre-programmed inspection missions.

This milestone, LR says, is a key component in its Remote Presence Technology Programme, aiming to deliver its services more effectively to clients – not only with experts on the ground, but through remote access technologies, allowing on-demand access, across large distances, to its expert workforce.

Airobotics has developed a fully automatic platform, continuously available on-site and enabling both pre-programmed missions and expert access on demand. The platform is completely self-sustained, able to replace its own batteries and payloads as required for different missions. Payloads include various capture devices such as HD video, HD stills imagery and infrared, with hyperspectral and sniffing capabilities being developed. This high-end system is capable of collecting aerial data and processing and analysing them in a fast, safe, and efficient way, LR says.

LR’s Remote Presence programme consists of five sub-themes:
2. Vast Presence – Covering large assets in a hyper-efficient manner, giving better resolution visibility and insight at scale.
3. Secure Presence – Utilising technology to reach hard-to-access locations. Removing unnecessary risks while increasing reach into an asset.
4. Auto Presence – Delivering a set of fully autonomous services, reducing the resource needed, while increasing frequency and accuracy.
5. Deep Presence – Utilising a combination of technologies to enable a fully immersive, always-on environment.

Global Navigation Solutions (GNS), a UK-based marine services company, and Northrop Grumman Corporation’s Sperry Marine business unit, a provider of innovative marine navigation and integrated bridge systems for commercial shipping and defence markets, have announced a strategic cooperation.

The cooperation, they say, combines decades of experience and next-generation navigation solutions to provide shipping companies with an easier exchange of information between the back-of-bridge planning and data download environment and the electronic chart display and information system (ECDIS) for enhanced safety, improved onboard efficiency and a better overall user experience. They are showcasing the new system and Sperry Marine’s “bridge of the future” at the Northrop Grumman Sperry Marine stand at SMM.

The solution, to provide “end-to-end stress-free” navigation, will combine Voyager’s ability to seamlessly download and manage navigational information on board, plan and optimise routes for factors including tides and weather, and support more cost-effective ways to buy electronic navigational charts (ENCs) and other navigational products, with the advanced graphic interface design and colour-coding functionality of what Sperry Marine says is its market-leading ECDIS.

Autonomous drone at work Photo: Lloyd’s Register

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Wind and waves, the toots of ship horns and buzzing of elevated trains, construction site clamour and squawking seagulls – these create the soundscape of Hamburg's harbour with its quays, piers and historic Speicherstadt warehouse complex.

Right on the bank of the Elbe River, at the most westerly point of the new HafenCity district, the city is building the Elbphilharmonie concert hall. Hamburg's new landmark – in every way a monument to music and the urban experience – will finally open its doors on January 11th and 12th 2017 after years of delays and cost overruns. It's well worth taking a look at the building from the outside now.

Approaching the Elbphilharmonie from the Elbe and the Landungsbrücken ("landing stages", a floating dock), you’re impressed by the building’s bold architecture. On the massive brick body of the old Kaispeicher-A warehouse, the glass structure rises to a height of 110m. With its wave-like rooftop, it looks like a gigantic crystal floating over its foundation. In the sparkling glass façade, comprising more than 1,000 window panels, you can see a reflection of the changing colours of the sky and harbour lights.

The heart of the Elbphilharmonie, designed by Swiss architects Herzog & de Meuron, is the Grand Hall – a world-class concert hall, 50m high, with a seating capacity for 2,100 guests. It will provide a spectacular stage for Hamburg’s vibrant music scene, and for stars from all over the world. The Elbphilharmonie also houses two smaller concert halls along with a hotel, restaurant, 45 residential flats and publicly accessible plaza with 360° panorama view that will open this November.

Music in the Elbphilharmonie

As a new venue, the Elbphilharmonie will stimulate the musical life of this one-time Hanseatic League port. The Laeiszhalle, until now Hamburg’s largest concert hall, has reached the limit of its capacities. Even with its three halls for performances, it is hard pressed to accommodate the abundance of concerts – in terms of physical space as well as available dates. Both the Laeiszhalle and Elbphilharmonie have been managed by Hamburg-Musik GmbH since 2007, led by Christoph Lieben-Seutter, its general and artistic director. It is his role to mould the unique artistic profile of the Elbphilharmonie and strike a harmonious balance between the traditional and the modern.

As the orchestra in residence, the North German Radio Symphony Orchestra will have an important role to play in the Elbphilharmonie. The musical programme will be further enhanced by private concert promoters who for decades have presented Hamburg audiences with attractive, high-quality concerts – with world-class orchestras, great pianists, virtuosos and star vocalists.

Whether indie band or a cappella ensemble, whether jazz legend or symphony orchestra – all have something to contribute to create a musical programme in Hamburg that is unrivalled worldwide. This lively musical culture will soon have a new home in the Elbphilharmonie, continuing and expanding the city’s great musical tradition while gaining new audiences for concerts.
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