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Daily News

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The focus of the second Offshore Dialogue will be on offshore oil, gas and wind solutions

Photo: HMC / Fuhrmann

The Offshore Dialogue at SMM

The second Offshore Dialogue is hosted by Hamburg Messe with support from Germany's Federal Ministry of Economics and Technology (BMWi). The workshop is held in the framework of SMM.The focus will be on offshore oil, gas and wind.

Energy companies are increasingly looking to drill for oil and natural gas in deep water and even in ultra-deep offshore

fields, so it is quite fitting that the session chairman for the Offshore Oil and Gas Dialogue is Christoph Daum,



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managing director of Menck GmbH. Germany-based Menck is one of the world's leading providers of offshore pile-driving solutions and offers anchor points for offshore oil and gas as well as wind energy facilities. Tobias Rosenbaum, vice-president of Oil & Gas Germany at GL Noble Denton, will present a report on the challenges of offshore oil production. A division of the classification society Germanischer Lloyd, GL Noble Denton offers engineering and inspection services for the oil and gas as well as offshore technology sectors.

Dr Bas Buchner, chairman of MARIN (Maritime Research Institute Netherlands), will talk about the need for continued research and development of offshore technologies to meet the high demands of deep and ultra-deep oil and gas production.

Following Dr Buchner, Stefan Ladig, from the subsea division of Heinr. Bornemann GmbH, Germany, will introduce one of these technologies. His presentation will show the functionality and operation of Bornemann's subsea oil and gas skimmer (SOGS), a shipbased emergency system for the collection and containment of oil and gas spills.

Closing the Offshore Oil and Gas Dialogue will be a presentation on "Challenges and Requirements for Dynamic Positioning in Ice" by Nils Albert Jenssen, vice-president of Business Development at Kongsberg Maritime AS.

"The forecasts for the offshore wind industry were previously a good deal more optimistic than they are today," said Thorsten Herdan, managing director of VDMA's Power Systems division and vice-president of the German Offshore Wind Energy Foundation, who will lead the Offshore Wind Dialogue as session chairman.

The challenges for design and installation of offshore wind farms will also be covered by Hans Kahle, managing director of RWE Innogy Offshore Logistic GmbH, the company

responsible for logistics to alogue, will give participants implement RWE Innogy's offshore wind projects.

alogue, will give participants and speakers opportunities not only to exchange ideas,

Continuing operation of offshore wind farms after their installation is often neglected in discussions about set-up and connection. Michael Hannibal, CEO Offshore of Siemens Wind Power, will be addressing the subject of "Operation and Service".

Financing will be addressed by Dong Energy Renewables Germany GmbH. Dong Energy, based in Denmark, is one of Northern Europe's leading energy groups; it is installing the North Sea wind farms Borkum Riffgrund 1 and 2 and operates numerous offshore wind farms in the waters of Denmark and the UK.

The panel discussions, part of the Offshore Oil and Gas Dialogue and Offshore Wind Diand speakers opportunities not only to exchange ideas, but also to jointly develop solutions for current and future challenges in the industry. The focus will be on interaction and synergies between the maritime industry and the offshore oil and gas industry, and between the maritime industry and the offshore wind industry.

The Fascination of the Deep Sea, a special show on off-shore technologies and the latest development projects, will be held in the South Foyer. Leading research institutes and companies will present their latest exhibits, films and animations – an easy way of getting additional information on expeditions and the current range of scientific work.

Meet top managers in the offshore industry

At the second Business Offshore Conference, set for 2013 in Hamburg and organised by the DVV Media Group in cooperation with the German Association for Marine Technology (GMT), VDMA -Marine and Offshore Equipment Industries, and the Stiftung Offshore-Windenergie ("Offshore Wind Energy Foundation"), top executives of the world's foremost offshore and energy companies will give an overview of current and prospective global activities in the three major offshore segments of oil and gas, ocean mining and renewable energies.

Conference blocks:

- Front-End Projects & New Opportunities
- Risk Assessment & Safety Measures
- Installation, Service & Decommissioning

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Schoenrock Hydraulik has new strategic focus

Shipbuilding supplier Schoenrock Hydraulik Marine Systems is adjusting its focus in
the second half of 2012. The
company, headquartered just
outside Hamburg, is strengthening its position in the passenger ship and mega-yacht
market with a new watertight
electric sliding bulkhead door
called Shiptight (E). It is also
substantially expanding its
maintenance, alteration and
repair services.

"The launch of our electric sliding bulkhead door Shiptight (E) in 2011 was an immediate success. We now aim

► IMPRINT

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COPYRIGHT: DVV Media Group GmbH to market it more intensively in the high-end segment especially," said Volker Behrens, Schoenrock's director.

Since noise emissions during operation are minimal, this door type is particularly suited to ships offering a high level of comfort, such as cruise vessels, RoPax ferries and yachts. After receiving a first order for nine doors for a new megavacht some time ago, Schoenrock optimised the doors for the customer. It integrated the drive unit - previously consisting of a separate electric motor, spindle and guide rail - into the door frame, making the door a single, compact whole.

"This prevents installation errors as the entire door can be mounted and tested in the factory before going to the shipvard," Behrens noted. With a total weight of less the 500 kilograms depending on the size, Shiptight (E) is very light compared with competing models. It is available in various sizes and can withstand water column pressure of up to 15 m. The electric drive components on the gear wheel enable quiet, comfortable operation. Increased door frame stiffness and use of a Y-section seal make for optimal equali-



Dr Volker Behrens, managing director of Schoenrock Hydraulik

sation of mounting tolerance when welding in place – and hence lower start-up costs. The guide rail and rollers are made of stainless steel and are therefore rustproof. The sealing surface is rustproof as well.

surface is rustproof as well.
"Passenger ships, in particular, are being operated longer these days and safety consciousness on board has increased," Behrens said, pointing out that adherence to safety standards was gaining in importance. With this in mind, Schoenrock

is expanding its growing service business this year. Following installation, all maintenance, alterations and repairs of watertight bulkhead and shell doors supplied by Schoenrock will now be managed centrally from the company's headquarters near Hamburg. To this end, Schoenrock is working closely with its agents in all important shipbuilding regions. 5

Schoenrock Hydraulik at SMM: Hall B5 / Stand 123



Far Solitaire elected **Ship of the Year 2012**

Built by STX OSV Langsten for owners Farstad Shipping ASA, the unique offshore platform service vessel Far Solitaire was declared Ship of the Year 2012 by the Norwegian state secretary of trade and industry, Halvard Ingebrigtsen, at SMM in Hamburg on Wednesday.

Far Solitaire is a chemical tanker-compliant supply vessel, which is the main reason why the jury elected it Ship of the Year 2012. It is capable of undertaking all aspects of offshore platform services. The technologically advanced vessel was developed by Farstad Shipping ASA in close cooperation with Rolls-Royce Marine and is the first PSV of this type ever built (solitaire - one of a kind). Delivery will take place in October.

Over the years, the offshore oil industry has become more and more dependent on chemicals and noxious liquids in order to improve operational efficiency and maintain safety standards. At the same time, restrictions on offshore disposal of the same have become more stringent for environmental reasons. These liquids need to be transported to and from the offshore installations, and



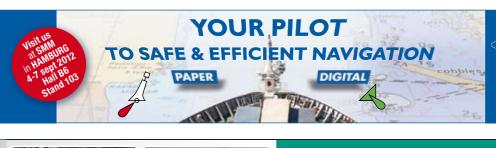
Far Solitaire was declared Ship of the Year 2012 by the Norwegian state secretary of trade and industry, Halvard Ingebrigtsen

capable platform supply vessels fit this purpose. However, a conventional offshore supply vessel defined by the rules applying to cargo vessels may carry a maximum of 800 cubic metres of these liquids on board at a time, which is often insufficient for the operator and does not utilise the vessel's overall capacity.

Other features highlighted by the jury are the ship's wavepiercing bow design, the development of a new cargo rail crane concept for PSVs and the introduction of a frequency converter for the swing-up thruster as power supply for shore power. During the project development, Rolls-Royce was charged by Farstad to pay close

attention to the impact on the environment that the construction and operation of this vessel would cause through its lifespan. The main parameters for the concept were laid out by Farstad.

The prestigious Ship of the Year award was established by the major Norwegian shipping magazine Skipsrevven. 3







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gmec 2012 – a complete success

gmec (global maritime environmental congress), held under the slogan "Setting the Green Course", closed on Thursday at the end of its scheduled two days (3 and 4 September). The event was a complete success, with a total of some 300 participants addressing the subjects of maritime climate change mitigation and environmental protection.

This was the second time gmec was held, and it was one of the focal points of SMM 2012, the world's leading maritime industry fair, which continues at the Hamburg fair site until Friday. "gmec was a complete success. We are very pleased with the concept and how it went. This year, gmec was held on the occasion of SMM. That was a unique combination, enabling visitors to get a closeup view of many of the technical solutions presented at the conference, and to continue discussing them at the exhibition," said Bernd Aufderheide, president and CEO of Hamburg Messe und Congress GmbH.

gmec promotes the exchange of ideas and knowledge of leading experts and executives from the scientific community and maritime industry. The chairmen of gmec were Spyros Polemis, chairman of the International Chamber of Shipping, and Corrado Antonini, honor- a similar view: "The gmec



The gmec round table, chaired by BBC presenter Nik Gowing, focused on green shipping

ary chairman of CESA (Community of European Shipyards Associations).

Polemis noted that "the gmec conference was initiated by industry representatives and is very important for the advancement of maritime environment protection. Key representatives of the maritime industry attended to discuss current topics. Integration of the gmec into SMM as a premium event was excellent." Antonini took

conference promotes the shipping industry's efforts to protect the marine environment, which has become an issue of high priority for both shipyards and shipowners. Greener shipping means to bring together research, innovation, education and training: the areas of intervention are many, but the future belongs to green ships."

The start of gmec on Monday was marked by a round-table discussion with leading ex-

perts, chaired by BBC presenter Nik Gowing and focusing on present and future aspects of green shipping. The second day of gmec on Tuesday was divided into four sessions. The presentations and discussions dealt with subjects such as ballast water management, pollutant emissions, international activities in maritime environmental protection, and regulations for protection of the marine environment. The ecologically and economically relevant aspects of the maritime industry were addressed along with concrete solutions. "Implementing sustainable technologies in global shipping will keep our oceans cleaner while making shipping less expensive and more efficient," said Chris Hayman, chairman of Seatrade Communications Limited and a member of the gmec steering committee responsible for the conference programme. "The industry has become more sensitive to issues concerning the protection of the marine environment over recent years. The positive response from gmec participants shows that our concept for this conference is right on."

The next gmec (global maritime environmental congress) will be held on the occasion of SMM 2014 from 9 to 12 September 2014. 🏂

www.gmec-smm.com



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Liebherr with new heavylift cranes

During SMM, Liebherr is range from 120 to 450 t. The showcasing a number of newly developed products in the heavy-lift crane sector. In addition, existing sales activities are being intensified, some in the form of new strategic collaborations with sales partners.

The Liebherr Group ranks among the world's biggest manufacturers of cranes and construction machinery. Its ship crane production has a tradition spanning decades; the first were built in 1958 in Biberach an der Riss, Germany. Since 1977, Liebherr ship cranes have been sold from Nenzing, Austria.

Liebherr offers a versatile and diverse range of maritime cranes providing solutions for any type of material-handling in ports as well as in offshore applications. Activities in these areas are united in the maritime crane product division under operational management by Liebherr-MCCtec GmbH with headquarters in Nenzing.

Extension of existing series of heavy-lift cranes

The lifting capacities of the existing Liebherr portfolio

new series of heavy lifters will include cranes with lifting capacities of up to 1,000t. A series of heavy-lift cranes with capacities between 300 and 2,000t already exists in the offshore crane sector. A completely new kind of subsea crane, the RL-K 7500, was recently developed for subsea operations. It has a knuckle boom for underwater work as well as an AHC (active heave compensation) system and can lift up to 270t above the water surface and lower loads to a depth of 3,000m. During AHC operation, 40 per cent of the required power is provided by active power from primary energy, and 60 per cent from passive power - Pactronic. Liebherr Pactronic is an innovative drive system on a hybrid basis and was initially developed for mobile harbour cranes and specially adapted to the AHC system for subsea cranes. In the mobile harbour crane division, Liebherr offers the LHM 600, the largest heavy-lift crane on the market. It can lift up to 208t and has already been used for several complex tandem lifts.



Electrohydraulic heavy-load ship crane CBB 450

Using Rostock site for maritime expansion

With a workforce of nearly 1,000, Liebherr-MCCtec Strategic cooperation Rostock GmbH manufactures mobile harbour cranes, ship cranes, floating cranes, offshore cranes and reach stackers. Thanks to its direct access to the Baltic Sea, Rostock is logistically well placed for worldwide sales, especially of large equipment. The additional establishment of sales and development capacities at the Rostock site is part of a strategic reorientation that is also serving to upgrade the Rostock plant. The production site in Rostock therefore plays an important role in further enhancing and strengthening the maritime

crane division's position in the international market.

with KKS

Sales and service are carried out by a total of 38 Liebherr companies. There are also numerous agents, trade representatives and dealers. In addition to the existing sales network, strategic cooperation with the company KKS (Kehdinger Kran-Service GmbH) has begun. The partnership includes not only operational sales activities, but also active cooperation in after-sales. 3

Liebherr-Werk Nenzing at SMM: Hall A1 / Stand 327

Smaller footprint with CleanBallast

Right on time for SMM 2012 RWO's sales and marketing ,the Bremen-based water treatment specialist RWO is presenting modifications of its key products. For instance, the footprint of its highly successful ballast water treatment system CleanBallast has been reduced to better meet customers' demands.

"Many of our customers pay very careful attention to the plant's space requirements without losing sight of the best ballast water treatment technology," said Peter Wolf,

director. "The modification of the CleanBallast system fulfils these conditions precisely, along with our extremely proven and reliable technology and a small plant footprint." The system is based on the

experienced and trusted principles of the CleanBallast technology, which consists of special DiskFilter deep filtration and sophisticated electrochemical EctoSys disinfection. On the basis of positive operational experience with CleanBallast, the design of the DiskFilter deep filtration was harmonised, which provides

The modified

the smaller footprint. The ballast water treatment system CleanBallast can easily be integrated into existing onboard processes and systems. The modular design means that it can be configured to suit the available space and

piping layout of ballast water systems. This is true for all pump capacities and ship types. CleanBallast is fully automated but with the possibility of both local and remote operation. 3

RWO at SMM: Hall A1 / Stand 218



CleanBallast obtains electronic components fulfil **GL** certification

RWO is the first German mantificate for its ballast water The document was handed compatibility (EMC), which is over on Tuesday at SMM. The not taken into account in the GL Approval Certificate con- IMO requirements, was also capacity of 150-3.750 m³/h, complies with GL regulations. Moreover, the electrical and guidelines.

the stricter GL requirements in comparison with the IMO ones regarding environmenufacturer to obtain a GL cer- tal assessment (vibrations, low temperatures and damp treatment unit, CleanBallast. heat). The electromagnetic firms that the system, with a tested. The system-related software was also subject to a review according to the GL



(f.l.t.r.) Hanspeter Raschle and Hagen Markus from GL Marine Products & Manufacturing, Steffen Schlöricke and Martyn Ayris from RWO





Container ship newbuilds to upsize, bank survey shows

UniCredit Bank's Hamburgbased Global Shipping team presented interim results of its new "Maritime Trend Barometer" exclusively to SMM Daily News during a tour of SMM on Wednesday..

"Shipping companies hope to get a grip on rising operational costs in the container shipping industry by using larger, more slowly travelling ships," said Joachim Flecks, director of Global Shipping at UniCredit Bank.

According to shipping companies surveyed by UniCredit for its latest "Maritime Trend Barometer", the likely consequence will be declining interest in small newbuilds, mainly in the 2,000- to 6,500-TEU range.

"Interestingly, those surveyed are certain that all container ship newbuilds will be designed only for substantially lower operational speeds than was the case just a few years ago," Flecks said. UniCredit will present final, detailed results of the survey in the coming weeks.



Joachim Flecks, director of Global Shipping at UniCredit Bank, spoke exclusively at SMM with the SMM Daily News about two new surveys by the bank. Photo: BONUM / Oldenburg

Snap poll at SMM

Meanwhile, Flecks announced he would soon release results of the snap poll "Shipbuilding Trends 2012" that he is now conducting at SMM among international shipyards and supply companies of all sizes.

"Against the background of the changes in shipping in the last two years, and with consequent implications for the shipbuilding industry, UniCredit has created another trend barometer," Flecks said. "Its aim is to elicit the current feelings of the shipbuilding industry and publish the resulting information. The evaluation is done anonymously, and the main emphasis is on current market trends and expectations.

Located in Hamburg, the UniCredit Global Shipping team is part of the Corporate & Investment Banking division. With offices in Athens, Oslo and Singapore, it is a centre of competence for the domestic and international maritime industry. Its portfolio volume of about 1,000 ships makes UniCredit Bank AG one of the leading ship-financing banks at the moment. 3



Class-approved rudder propellers by Jastram

Jastram, a Hamburg-based company in the marine engineering and equipment market, is exhibiting its newly developed rudder propellers at SMM.

RP230 and RP380 rudder propellers is based on 40 years of design and engineering experience. Their quality, dependability and robustness have been enhanced by the improvement of several technical details. The hydrodynamic shape was developed with the aid of CFD analysis. Service engineers collaborated on the design process, ensuring costeffective mounting and maintenance.

Approved for inland waterway and marine vessels

In cooperation with the classification societies, these systems, in varying configurations, have been approved for use in both inland waterway and marine vessels.

The initial speeds of 1,800 rpm and 2,100 rpm mean that the rudder propellers can be zle, an optional fin can be screwed on for protection against grounding. The cover plate prevents the propeller from ventilation at varying immersion depths.

The worm gear drive of the slewing gear has very compact dimensions, particularly in the hydraulic configuration, and is ideal for use on outer decks.

Jastram at SMM Hall A3 / Stand 218

used with all standard diesel engines. The optimum propeller diameters are 900mm for the RP230 and 1,100mm for the RP380. Customised propeller diameters are available as well. The new design of the Jastram For propellers without a noz-

Spur gears with two drive motors are used for marine vessels or for well mounting. These systems comply fully with all requirements of the classification societies. Jastram offers a range of different configurations for the propeller, the slewing gear and the installation of the drive, which can all be combined as needed. 🏖



Advantages of the propeller nozzle

- Increased thrust
- Less noise and vibra-
- Protects the propeller and objects in the water
- The nozzle is attached to the gear casing for easier servicing



The RP230 rudder propeller with nozzle



World premiere of new LNG fuel tank container

Hamburg-based Marine Service offers an easy, cost-effective tank solution for ships to be converted to LNG fuel use: the LNG fuel tank container, which has been introduced at SMM. Having the size of a mobile 40foot standard container (FEU), it is an economical solution to bunker LNG and supply the drive system with natural gas.

the more stringent exhaust emission requirements in ECAs starting in 2015, the LNG fuel tank container can be a real option for shipping companies to convert older types of ships to LNG fuel, which means that they can still be used in sheltered waters," said Jörg Redlin, direc-

"Particularly with regard to tor of the Marketing & LNG drive system. Bureau Veritas Division of Marine Service, approved the fuel gas system which has been active in the LNG market worldwide for nearly 50 years.

> and stored on deck like any normal container. In addition, it offers a direct connection to the supply of the

in July 2011.

During SMM, visitors can get a closer look at the LNG fuel The LNG fuel tank container tank container and talk with can be transported by lorry Marine Service experts at the company's outdoor stand. 3

> Marine Service at SMM: Hall A4.FG / Stand 004





eVent saves fuel costs for **HVAC systems**

At SMM, Denmark's Novenco Marine & Offshore is introducing eVent, a custom-made energy-optimising software for heating, ventilation and airconditioning (HVAC) systems on board ships and offshore installations.

The eVent software focuses on choosing the right systems according to design and operating conditions. An eVent review shows the savings in fuel costs and CO₂ emissions. For a typical offshore vessel, HVAC-related fuel costs and CO₂ emissions can be reduced by more than 50 per cent. Sales manager Roald Hauge says that Hall B1.EG / Stand 212

shipowners will be surprised by the results of an eVent review. "Because our focus is on highefficiency products and how to make a modern HVAC system, the payback time on additional investments becomes surprisingly short," he remarked. "Another result is that many of the components are becoming smaller. This will again reduce the size of piping and electrical installations, making the installation easier and reducing the cost for shipyards." eVent is suitable for all vessel types with an HVAC system. 🏂

Novenco at SMM:



The new energy-optimising software is suitable for all vessel types Photo: Novenco Marine & Offshore



CINTERSCHALT







THURSDAY, 6 SEPTEMBER

09:30 - 18:00 Event: Experts Day GROMEX

Hall A1 / Stand 518

09:30 - 17:30 Event: Marine Coatings Conference

> Conference B / Kopenhagen 3

10:00 - 14:00 Event: Turkish Maritime & Naval Summit

10:00 - 13:00 Event: How modern navigation technology can help reduce emissions and save fuel! Raytheon Anschütz GmbH

Hall B6 / Stand 304

10:15 - 12:00 Event: Offshore Oil & Gas Dialogue Hamburg Messe und

Entrance South Upper Floor

11:00 - 13:00 Seminar: Emissions to Air + Technology Solutions **EGCSA**

Congress

Hall B6 / Room B6.4

11:00 - 12:30 Workshop: ECDIS Digital Navigation Admiralty

Hall B6 / Room B6.1

11:00 - 12:00 Press Conference:

Latest developments in energy-saving devices and LNG hybrid-energy concepts for vessels Becker Marine Systems Conference A / Shanghai

13:00 **Product Introduction:**

Best-in-class cargo hold coating Hempadur Impact and Hempel's industry-leading cargo hold assortment Hempel A/S

Hall B5 / Stand 214

14:00 - 16:30 Event: Offshore Wind Dialogue **Entrance South Upper Floor**

14:00 - 16:00 Event: Integrated Propul-

sion Systems

CIMAC Circle 2012 Conference A / Chicago

FRIDAY, 7 SEPTEMBER

09:30 - 18:00 Event: Cap San Diego Day Hall A1 / Stand 518

09:30 - 18:00 Event: Experts Day

GROMEX Hall A1 / Stand 518

11:00 - 13:00 Product Introduction:

Lead generation with BlueStone Nexus BlueStone Ltd Hall A3 / Room A3.2

11:00 - 12:30 Workshop: ECDIS Digital Navigation Admiralty

Hall B6 / Room B6.1

Have a successful day at SMM. Further information can be found a www.smm-hamburg.com



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Visit us at the SMM: Hall B5, Booth 106 or online www.rm-group.com



EMMA helps shipowners to improve fuel efficiency

ABB, the Swiss power and automation technology group and exhibitor at this year's SMM, recently won an order from Germany's Rickmers Group to supply advisory systems for dynamic trim optimisation and fleet management solutions for five multi-purpose vessels.

ABB's delivery will help the ship management teams to operate the vessels in the most efficient way to save a maximum of fuel. The company will supply trim optimisation systems,

energy management systems and fleet management solutions. ABB's trim optimisation system dynamically measures the actual trim and advises the crew on the optimal floating position of the ship with easy-to-understand and userfriendly displays. All data generated on board are transferred to a cloud-based application for vessel benchmarking. This provides the management onshore with full visibility of the fleet's energy consumption, as all systems are linked by ABB's

The solutions are part of ABB's newly developed EMMA Advisory Suite of software and will help the Rickmers vessels save a considerable amount of fuel every year, thereby also reducing their environmental emis-

ABB expanded its portfolio of solutions for vessel information and control systems in 2011. They consist of a broad range of marine advisory and fleet management solutions; integrated automation, vessel management and control systems; and marine instrumentation and sensors, all of which help to optimise vessel operations and performance, improve energy efficiency, onboard equipment reliability and availability, and operational safety.

Installation of the system will be done vessel by vessel, and the first system is expected to be commissioned in the third quarter of 2012. The complete system for all five vessels is expected to be fully operational by the end of the year. 3

ABB Ltd at SMM: Hall B6 / Stand 320

Safer, Smarter, Greener – GL Group. +++ Visit us at SMM, Hall B4, Stand No. 105 +++

New Hamburger Lloyd flagship classed by ClassNK

In 2008, the shipping company Hamburger Lloyd (RHL) ordered four 4,600-TEU "widebeam" container ships from China's Shanghai Shipyard Co, Ltd. The first two state-of-theart newbuilds, the RHL Conscientia and RHL Concordia, were delivered this year and bring the number of units in RHL's fleet to 14.

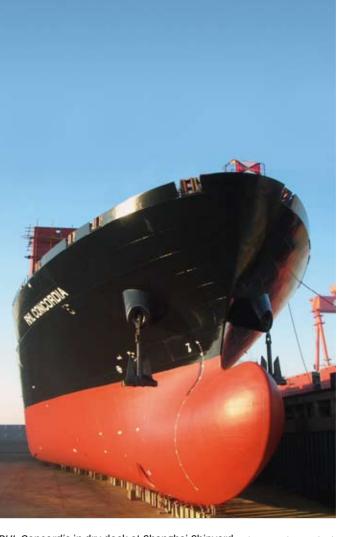
For the RHL Concordia, RHL has entered into new, forwardlooking cooperation with the world's largest classification society, Nippon Kaiji Kyokai (ClassNK).

"We were able to establish close cooperation with ClassNK during the construction phase, and after taking delivery we switched the classification society for both ships from Germanischer Lloyd (GL) to ClassNK," said Michael Brandhoff, RHL's technical director.

Better costs and performance transparency

The order boom in recent years has posed greater challenges to the established classification societies during the construction and operational phases.

"Through diversification, Hamburger Lloyd aims to achieve better transparency - in terms of costs and performance - in



RHL Concordia in dry dock at Shanghai Shipyard Photo: Hamburger Lloyd

the area of classification as well, and a direct comparison is the only way to do it," remarked Hauke Pane, RHL's managing director. "We have absolute faith in our new Japanese partners and are looking forward to close cooperation with ClassNK for many years."

The shipping company's new flagship, the RHL Concordia, is the 14th vessel in its fleet. The newbuild is 259.80m long, 37.30m wide and has a deadweight of 57,500t at a draught of 12.50m. It can carry 1,856 TEU in the holds and 2,764 TEU in as many as seven layers on deck. The container capacity is 3,620 TEU at 14t and there are 600 connections for reefer containers. A MAN 8K80MEC engine rated at 36,560 kW powers the newbuild to a cruising speed of 23.2 knots.

Hamburger Lloyd was founded in 2007. Its core business involves the technical and operational management as well as chartering of a modern fleet that operates globally for exclusively well-known charterers. RHL is currently focusing on the container ship segment. 🏂

Nippon Kaiii Kvokai at SMM: Hall B2.EG / Stand 208











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Corrosion Protection ICCP/AF Ballast Water Treatment Project Management

Transparency of ship operations

Exorbitant fuel costs, decreasing return on investment, stringent environmental regulations in ports and on routes as well as the energy efficiency standards of the International Maritime Organization (IMO) are among the many challenges that shipowners and operators have been dealing with for years now.

The greatest challenge of all, though, is in reconciling ecological and economic sustainability while operating a ship. The root of the problem is fuel consumption, the main source of operating costs and exhaust emissions. So Siemens now introduces EcoMain, the first integrated system solution for performance-optimised ship management. It brings transparency to ship operations while facilitating sustainable management. The new Siemens system platform gives shipowners and operators a new way to boost the economic efficiency of their ships and prove it in a simpler way.

The product range of Siemens Marine & Shipbuilding offers sustainable ship-operating solutions to all current and future challenges facing the maritime industry. An integral part of this portfolio is the innovative system platform EcoMain. It captures and processes all ship-operating data promptly and transparently for crew and



Siemens holds a system presentation of EcoMain at SMM

shipowner. This includes tem- - and consequently reduced of the entire fleet along with peratures, rotational speeds, draught and speed as well as outside influences such as weather data and water depth, among other things. Taking all relevant data into account, the integrated concept EcoMain guarantees maximum transparency of the entire ship operation. Furthermore, EcoMain provides the captain with concrete suggestions by analysing the interactions between the data in order to optimise trimming and navigation. Through this process, maximum operational efficiency can be attained. The suggestions translate into optimised fuel consumption

costs and emissions. Andreas Schwan, head of Marine & Shipbuilding at Siemens Drive Technologies Division, said, "The greatest potential for cost reductions is and remains in the area of maintenance intervals and energy consumption. By optimising these parameters, we can make individual sustainable ship operation a reality from both an ecological and economic perspective."

Thanks to a secure satellite link, the data captured and processed by EcoMain are available not only to the captain and crew but also to the shipowner. The link gives the shipowner details

the option to perform a central analysis of individual data such as maintenance plans.

The EcoMain platform not only helps shipowners in visualising the optimisation potential of their entire fleets; they can also use the software to prove that the optimised energy efficiency is in accordance with IMO standards. "EcoMain is the perfect solution for the maritime industry when it comes to creating transparency and tackling current and future challenges," Schwan said. 🏂

Siemens Marine & Shipbuilding at SMM: Hall B6 / Stand 316

Power balancing with THE DOCTOR

Switzerland-based International Technology GmbH has come to SMM in Hamburg with its new measurement technology for efficient, economical and clean engines.

With fuel prices rising and environmentally friendly measures taking priority, cruise operators are looking to make savings where they can.

Fuel savings of up to 3 per cent

International Technology has carried out power-balancing tests on the engines of several cruise ships, achieving controlled fuel savings of up to 3 per cent. Steadily rising fuel prices are forcing cruise operators to optimise their energy costs and keep them low. In the medium and long term, it is expected that fuel prices To ensure the effectiveness will soar to USD 1,000/t including expected carbon dioxide emission allowances.

Lack of appropriate monitoring devices

In addition to energy-saving initiatives on a ship, such as low-energy lighting and hull coating, significantly lower fuel consumption potential can be found in the diesel engine. Due to a lack of appropriate monitoring devices, this has not yet been realised,

New multi-cylinder online monitoring systems like THE DOCTOR DM 8-32 and DM 10-TP determine in real time and with high precision the exact performance differences between the cylinders in one cycle. Such differences are caused when the cylinders brake against each other, which means that the engine is not perfectly balanced and leads to a significant increase in fuel consumption. With THE DOCTOR DM 8-32 system, International Technology provides a mobile and robust multi-cylinder thermodynamic diagnostic device based on a thermodynamic analysis of cylinder pressure and its development.

Engine diagnosis system "in the cloud"

of fuel economy in the long term, the online monitoring system is offered as a complete package, with a new engine diagnostic system in a modern "cloud" application called EDSystem on the Internet. The system collects various engine parameters of every ship in the entire fleet. Engine status is displayed in a well-known traffic light chart, allowing easy navigation through the company structure down to the ship and engine level. The system con-



Walter Fuchs, managing director of International Technology GmbH, presenting "The Doctor" at SMM 2012 Photo: BONUM / Hönei

tinuously analyses fuel consumption and indicates when savings can be achieved.

With fuel costs reaching new highs and the push towards sustainability gathering momentum, the right approach towards multi-cylinder power balancing will result in lower costs and smarter shipping operations. 🏖

International Technology at SMM: Hall A1 / Stand 235





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Reliability for power transmission

Geislinger, a well-known Austrian supplier of torsional vibration dampers and elastic couplings for high-output diesel and gas engines, is presenting a new type of tailor-made coupling for marine and offhighway mining applications at this year's SMM.

In marine and off-highway mining applications in particular, the highest reliability is required. After having investigated how to further increase power density, Geislinger has designed a one-piece skeleton holding the springs (patent pending), giving the coupling a very slim outline. Available in four different stiffness se-

ries, the coupling has been developed to perfectly adapt to customers' requirements. Due to their design, the Geislinger SAE couplings offer excellent resistance to heat and oil, according to the company.

The standard SAE J620 connection interface is used towards the flywheel, but metric or non-standard bolt patterns can be ordered as well. The inner connection features a spline connection to handle the axial misalignments and allow blind assembly. To connect to various designs, tailor-made adapter pieces with spline on one side and flange, keyway or conical taper are available as an option. The Geislinger



Geislinger's new SAE coupling Photo: Geislinge

SE steel spring coupling can be combined with a Geislinger support bearing housing to obtain combinations with misalignment couplings or Cardan shafts. The company has chosen an oil-filled design to maximise engine compatibility. The coupling design is optimised for the maximum oil volume to ensure the highest oil quality within the exchange intervals. The revolutionary composite membrane allows for the thermal expansion of the oil and also provides the opportunity for a very quick and easy oil exchange. 3

Geislinger at SMM: Hall A3 / Stand 105

Dynex Data cable for deep-sea operations

Mooring Solutions, a German company that develops special solutions for towage, salvage and other maritime applications, is presenting Dynex Data at this year's SMM. A new lightweight data transfer cable for deep-sea operations, it is made by Mooring Solutions' Icelandic partner Hampidjan, the manufacturer of high-quality Dyneema mooring and towing ropes.

Dynex Data is a coaxial data transfer cable with a central copper conductor and screen enclosed in a Dynex Dux rope. Specially designed for

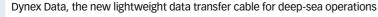
deep-sea research vessels using drum winches.

Dynex Data is unique and a patent is pending. To protect against electromagnetic waves, the central copper Mooring Solutions at SMM: conductor has a dense screen

the high loads on cable in of copper filaments. The data deep waters, it is suitable for cable can also be used as a high-strength, single-phase conductor and is produced The production process of as a single, continuous piece 9,000m long. 3

Hall A1 / Stand 108







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MTU's marine propulsion and service solutions

Dr Michael Haidinger, the new chief sales officer of Tognum AG, introduced himself at MTU's press conference on Wednesday at its SMM stand. Since July, Dr Haidinger has been responsible for the business units **Engines and Onsite Energy in** addition to the global distribution and service business. Previously, he was president of Rolls-Royce Germany and a member of Tognum's supervisory board. He has long experience in international customer relations and will now support Tognum's growth strategy.

MTU provides propulsion solutions for commercial vessels, yachts and naval vessels. Its high-speed marine diesel engines cover a power range from 260 to 9,100 kW (350 to 12,340 bhp). The product range is supplemented by combined propulsion systems with diesel engines and gas turbines that are available for even higher speeds and deliver up to 35 MW (46,900 bhp). MTU supplies not only engines, but also complete propulsion packages that include all subsystems such as gearboxes, propellers, onboard power supply systems and integrated ship automation systems. In the field of automation, the company is dis-



The MTU series 1163 on site at SMM

Photo: BONUM / Höne

playing a new control console for mega-yachts.

The main driver in the development of next-generation diesel engines is compliance with future exhaust gas emission limits while ensuring low fuel consumption. Accordingly, MTU aims to develop its Series 2000 yacht engines for compliance with US EPA Tier 3 Recreational and IMO Tier III emissions regulations. In addition, the Series 4000 "Ironmen" workboat

engine is currently being developed for compliance with EPA Tier 3 regulations, which will be met without the need for exhaust after-treatment. MTU Series 1163 – powering both civilian and defence vessels is being shown at SMM for the first time in its new, advanced IMO Tier II-compliant version. IMO Tier II is achieved using purely in-engine technology. With its two business units, Engines and Onsite Energy, the

Tognum Group is one of the world's leading suppliers of engines and propulsion systems for off-highway applications and of distributed power generation systems. These products are based on diesel engines with up to 9,100 kW power output, gas engines of up to 2,150 kW and gas turbines of up to 45,000 kW. 3

MTU at SMM: Hall A3 / Stand 305

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reefer containers), transport in a controlled atmosphere, fire extinguishing, safety and rescue are also dealt with, as are environmental protection, maintenance and regulations. A close connection with actual shipboard practice is maintained throughout

The publishers, Prof. Dr.-Ing. Hansheinrich Meier-Peter und Prof. Dr.-Ing. Frank Bernhardt, were able to attract various fields of shipping and marine engineering to author



Authors: Prof. Dr.-Ing. Hansheinrich Meier-Peter und Prof. Dr.-Ing. Frank Bernhardt Publisher: DVV Media Group/Seehafen Verlag

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NautoPilot 5000 with integrated heading and rudder plotter Photos: Raytheon Anschütz

Modern ECDIS and autopilot can save fuel

German navigation system manufacturer Ravtheon Anschütz held a live demonstration of the fuel-saving capabilities of its adaptive autopilot and ECDIS at SMM on Wednesday together with the German sea weather expert Dr Meeno Schrader of WetterWelt.

Raytheon Anschütz is exhibiting its new generation of integrated navigation and steering control systems at SMM. "Our new NP 5000 autopilot is attracting a lot of attention from customers. The requirements of emissions reduction and fuel savings are boosting demand for optimised rudder action and course control in automatic steering," noted Andreas Lentfer, director of Business Development at Raytheon Anschütz, in reviewing the first days of SMM. A graphical presentation of heading plot and corresponding rudder angles allows easy identification of frequency and amplitudes of rudder angles as key indicators of autopilot efficiency. However, having only manual adjustments is not the optimum, Lentfer said.

"Modern autopilots can also adapt to current weather and sea states automatically. As a unique feature, Anschütz autopilots offer 'precision' and 'economy' modes. If operated in economy mode, rudder movements are significantly reduced to save fuel, whereas operation in precision mode provides the highest accuracy for safe navigation," he explained.

The demonstration also showed the relevance of optimised route planning. "Formerly it was widespread thinking that ECDIS weather chart overlays were only to increase comfort and safety for passengers and loading. But with the increasing importance of emissions reduction and fuel savings, taking weather into account during route planning is drawing significant attention," Dr Schrader said. "As is known from sailing, wind and waves, as well as swells and currents, can have a heavy impact on performance."

As a typical example, a voyage from Hamburg to New York was demonstrated. Calculation of the shortest route pointed to crossing the English Channel and then the Atlantic, but crossing the North Sea and North Atlantic and then travelling along the US East Coast was more efficient when forecasted currents and waves were taken into consideration.

Lentfer said, "The IMO estimates the potential for fuel savings through efficient weather routing at 2 to 4 per cent, which can result in savings of EUR 500,000 and more per year for a large container ship."

Raytheon Anschütz is demonstrating the fuel-saving capabilities of its modern ECDIS and autopilot technology again today beginning at 10 am at its stand. 3

Ravtheon Anschütz at SMM: Hall B6 / Stand 304

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Wide-screen marine displays and panel computers

Conrac GmbH of Germany is presenting its latest marine panel PCs at SMM 2012 in Hamburg: a fully integrated marine panel PC featuring a screen diagonal of 13.3" (33.8 cm) and a panel PC with a screen diagonal of 7" (17.8 cm).

The new marine panel PCs have been developed particularly for ships' automation and control. Conrac will also present the latest series of its marine panel PCs that include the proven wide ECDIS marine displays. Designed and engineered for 24/7 operation, the panel PCs have been especially tailored to run all marine applications - from automation and control to ECDIS and navigation. The Hall / Stand: B6 / 207

integrated high-performance industrial PC is based on the latest low-power embedded technology. It not only secures the lowest power consumption but also guarantees optimal performance and reliability. As a special feature, Conrac has integrated a proprietary system-monitoring application called SysMon.

Conrac's marine displays and marine panel computers are supplied as console mount versions allowing different mountings and easy integration in customised housings or consoles. Available screen diagonals are 22" (56 cm) and 26" (66 cm). 🍑

Conrac at SMM:



Panel computers for automation and control

Photo: Conrac



The new x86-based ECDIS computer MC-5157-AC/DC, a highperformance, fanless marine computer.

Moxa with new computing solutions

Taiwan-based Moxa Inc, maker of device networking solutions for industrial automation, is presenting its new x86-based ECDIS computer MC-5157-AC/DC, a high-performance, fanless marine computer.

According to the company, the Intel Core i5 520E CPU features a 3 MB L2 cache that can easily satisfy the heavy computing loads demanded by shipboard automation systems. The fanless design further hardens this extremely rugged and reliable computer, designed from the outset for the harsh extremes of maritime environments. In addition to its computing power and rugged design, two PCI slots make hardware extensions simple, while the eight built-in NMEA ports allow users to easily connect gyros, speed logs, wind sensors and other specialised maritime hardware without the headache of configuring additional NMEA converters, thereby saving money, time, and maintenance effort. Users will be able to easily install Windows XP Embedded, XP Professional or Windows 7, or a Linux-based FOSS system to provide a flexible and friendly environment for system development and application implementation. The rugged computers comply with DNV, IEC 60945, IACS-E10, IEC 61162-1 and IEC 61162-2 and have an MTBF of seven years. 🏂

Moxa at SMM:

invitation elcome to our Breakfast 53.56177 / N 53° 33° 7 9:30 -10:30 9.97498 / E 9° 58′ 5″ DVV Media's Hall A1/Stand 523 Schiff&Hafen Ship&Offshore THB

Keeping the course with Simrad compass solutions

Navico, a marine electronics company headquartered in Norway, announced at SMM 2012 the arrival of two new Simrad-brand, IMO-compliant GPS and DGPS compasses, the Simrad HS80 GPS compass and the Simrad MX575C DGPS compass. Each is designed to provide reliable heading, rate of turn (ROT) and precise position information to the acclaimed Simrad autopilot range and the Simrad MX Series of navigation and AIS transponder systems.

A unique feature of these new Simrad D/GPS compasses is that each compass has dual IMO-compliance certification for both navigation and heading functions. These dual approvals eliminate the requirement and purchase of a separate navigation antenna, which results in substantial cost savings for the professional customer. Offering pitch, roll and heave (in NMEA 0183 format) as a standard output with 1 - 20 Hz position and heading updates, both products benefit from stand-alone automatic operation without the need for a black box, which therefore provides instant ease of use for the navigator. Exceptionally quick head-



Vegar Ek Pettersen (left), area sales manager of Navico Holding AS, and Satish Mittal, general manager of MX Marine Navico Inc

ing, start-up and reacquisition times are aided by three integrated sensors (gyro and two tilt sensors) that act to reduce the real-time kinematic (RTK)

search volume when computing GPS satellite positioning data. Heading accuracy of <0.5° RMS is achievable together with <1.0m DGPS po-

sitioning accuracy. This level of accuracy is achieved in the Simrad MX575C by utilising the industry standard RTCM correction data supplied from its internal beacon demodulator and from SBAS (WAAS, EGNOS, etc.). The Simrad HS80 simply uses SBAS for DGPS position accuracy.

Each compass offers flexibility on interface output protocols depending on the navigation system it is paired with. The Simrad HS80 is supplied with NMEA 2000 as the standard interface but can be used as an NMEA 0183 device with an optional cable. Alternatively, the standard interface available on the MX575C is NMEA 0183 but can also be used as an NMEA 2000 device with an optional adaptor.

Compact in design, allowing easy mounting to any flat surface or pole, the Simrad MX575C and Simrad HS80 also achieve 1 pps (pulse per second) output with a power/data cable in NMEA 0183 configuration. The MX575C achieves this as a standard output with a supplied cable. An optional cable allows the HS80 to reach the 1 PPS output. 3

Simrad Navico at SMM:





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