



Daily News





Hot topic: the importance of the repair and retrofitting business

Source: Bosch/Schiff&Hafen

Repair yard capacity — a constraint on decarbonisation?

Full shipbuilding yards and little prospect of further fleet renewal has spurred an urgent need for retrofits of existing tonnage. However, a labour shortfall in ship repair threatens to deny the prospect, even to highly motivated shipowners willing to pay a premium. "If you want to retrofit a vessel from heavy fuel oil to methanol, there are only 17 yards that can do this," declared Santiago Suarez, Ship Performance manager, Lloyd's Register. Moreover, only 16 yards are currently capable of retrofitting sails, a fact scarcely mentioned during the week's wind power hype. "Propulsion is making a lot of noise – Flettner rotors, wing sails, kites – but this is quite limited," Suarez said. The revelation makes for a reality check following a week of excitement and hype over both wind-assist propulsion systems, and, in several high-profile cases, conversion of



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engines to methanol. "I hope we are among the yards to be identified as being able to do these conversions," jokes Dirk Harms, managing director of Bredo Drydocks. But many shipyards are based on mundane maintenance and repair, making the idea of fitting exotic new equipment like sails seem remote, he agreed. "Very few owners are able, at present, to go this way for the transition and for the conversions."

"If nuclear power comes up... this is something we have to consider. It will be a challenge to adapt the shipyards for this", he said. While containerships are not suitable to be retrofitted with sails in most cases, savings of 7-8% — comparable with what can be achieved with a wind installation — could be possible with the retrofit of a propeller more closely matched to engine output, Lars Greitsch, managing director and head of Research and Innovation at Mecklenburger Metallguss (MMG), explained.

"Twenty-four months' [payback time] is possible because the new propeller gives shipowners a chance to give back the old propeller – that reduces the investment costs a lot. So we do not talk about the material; we talk about production costs and engineering costs." "I think in October we reached around 50 propellers that we have now retrofitted together with MMG. And I think it's around 20 ships with new bulbous bow and several other features," add-

ed Martin Grieger, director Fleet Upgrade, Hapag-Lloyd.

Shipbuilding specialist Arran Dahl, is hoping to bring a greater efficiency to the shipbuilding industry with his technology, Slotstream, an application for digitalising yard visits through condition monitoring and predictive maintenance. Doing so would provide shipyards with a more intelligent planning framework to organise quayside slots, workforces, and prefabrication to reduce the length of repair and retrofit operations. The success of Slotstream would require shipowners to revisit their attitude to ship repair, Dahl told DVV Media - but maintained the idea would be extremely attractive once they understood the benefits. "The ideal way of doing it would be like a subscription model: the owner contracts the yard, they keep coming back. And yards all want this, it is ideal.

"But shipowners want to be able to take them to the closest yard. Or the cheapest. But in the end, it costs them more than going to a yard that knows exactly what's going to go wrong three months before it does. So the relationship has to change, but the software exists to do that."

"The number [of available shipyards] is small, but it's the beginning," said Suarez. "As with everything we're seeing with the energy transition, it's going to ramp up. At least there's a base where we can start to build from."

> IMPRINT

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Phone: +49 (0) 40 237 14-100 Email: info(at)dvvmedia.com **PUBLISHING DIRECTOR:** Manuel Bosch

EDITOR: Kathrin Lau (resp.)

CONTRIBUTING EDITORS:

Katharina Kütemeyer, Paul Bartlett, Charlie Bartlett, Andrea Mokosch LAYOUT: Christoph Jöns

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Tom Redd (right), Ocean Governance manager at foundation HUB Ocean, took to the stage to accept SMM's first "AI for the Oceans" award, as decided by a prestigious jury of experts from the German Association of Marine Technology, the World Economic Forum, The Economist Group and elsewhere. Redd described OceanSymphony, an AI-led initiative for tracking human impact on ecosystems: "We are looking for coral reefs, mangroves, mud flats... and then looking at how people's activities - shipping, gas activities, fishing - impact these.

"We wouldn't be in 2024 if it wasn't AI," he said. "For us, a really important aspect of using AI, especially generative AI, is trust. Having good data as a foundation for your models is essential. For us, the benefit of AI is what you do with that data."

Presented by Sebastian Unger, Germany's First Special Representative for the Oceans, the award distinguishes HUB Ocean from a highly competitive shortlist of over 70 Al-themed companies from 36 countries.



> DAILY VIFW

Don't miss the Daily View - our team of reporters will broadcast highlights from this year's SMM in an exciting daily video.

Watch it at www.shipandoffshore.net www.youtube.com/user/ShipOffshoreTV





Source: Mike Siebers











Sources: Bosch, Lau/Schiff&Hafen





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Panel: build resilience into new offshore construction

Representatives from class society ABS, the German Federal Government, and technology firms Current Scientific Corporation and terra.blue came together to discuss how to develop new offshore renewable energy assets to coexist sustainably with marine life.

In one of these projects, the German Federal Government is undertaking a scheme to recover huge amounts of Nazi ammunition, dumped by the allies in the Bornholm Basin, Little Belt area, and Gotland Deep, at the end of World War II. These included chemical weapons from WW1, and in subsea scans, signs of chemical warfare agents, such as sulphur mustard, leaking into the water.

"This summer we have started work on salvaging the 1.6 million tonnes of dumped ammunition from German waters," said Sebastian Unger, Ocean Commissioner of the German Federal Government director for Marine Environmental Protection at the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

"We need to put forward concrete measures that will help us to better protect green biodiversity and restore threatened habitats – reefs, salt marshes, algae, seagrass mead-



A lot of problems, but here is hope, concluded the panel

Source: Charlie Bartlett/Schiff&Hafen

ows. We have been able, with the global community, to agree on a global binding treaty to protect half of our earth's surface, the areas beyond national jurisdictions." Over the course of their lives, fixed-bottom turbines, like other offshore installations, accumulate plant growth and can become refuges for marine life, assisting biodiversity. However, as ABS offshore business development director, Patricia de Alemeida, told audiences, there are risks inherent to aging infrastructure at sea which must be addressed at the design stage.

"Currently, there are 126 decommissioning projects ongoing worldwide – in Europe, we have 58% of these," de Almeida said. Currently, Europe produces only 5% of the world's steel relies heavily on Chinese product – usually smelted from iron ore in coal-fired furnaces – rather than a ready supply of recycled steel. But there is hope that recycling of European offshore assets could help address the deficit. "We have seen that more companies, even steel mills, are interested in recycled materials," de Almeida said.

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Dieter Janecek, Coordinator for the Maritime Industry and Tourism of the Federal Ministry for Economic Affairs and Climate Protection (second from left), directed the first offshore dialogue at SMM yesterday. Flanked by the German Society for Metatechnology, GEMT, he was joined by Torgeir Sterri, Offshore Class director at DNV, Professor Dr Sören Ehlers, director of the DLR Institute of Energy Systems, and Dr Marco Klein, head of Ship Performance Systems at that Institute. New technologies offer opportunities, the panellists agreed, but there are risks. As Sterri pointed out, the world's energy consumption continues to rise. But, he said, there is a new generation of boys and girls that will be much more clever than we have been. Climate change is happening, the global economy will grow [but] we need to make our industry more attractive to the next generation, he said, while safety, quality, and cyber security should be top priorities.

Wilhelmsen launches global tank-cleaning setup

Wilhelmsen Ships Service has acquired two tank and cargo hold cleaning companies, Navadan and Stromme, and launched a new cleaning brand, Navadan™ by Wilhelmsen, offering the service across its global network of more than 2,200 ports and terminals.

The combined portfolio represents the best offerings from all three companies, the company said, including some of the most complex cleaning procedures. Effective cleaning of tankers and bulk carriers requires fast and efficient removal of cargo residues and the cleaning specialists can provide advice on challenging procedures such as preparing to load clean petroleum products on a VLCC, for example, that had previously carried dirty products. Kjell André Engen, president of Wilhelmsen Ships Service, said: "Our customers face tough challenges in maintaining compliant and efficient operations. Navadan by Wil-

helmsen illustrates our commitment to assist them in achieving the highest standards of compliance and safety, all while minimising downtime and operational cost. I know our dedicated technical experts, who are ready to tailor solutions to customers' needs, will make a significant impact on their day-today operations."

Wilhelmsen Ships Service GmbH at SMM: Hall B6 / Stand 331

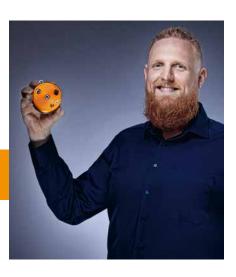




Goodbye? Not yet!

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Three questions for...

As the new Commercial Director at Gibdock, please can you outline the importance of this year's SMM event for you and the business?

SMM has always been really important for Gibdock and we have been exhibiting here with our German agent, Combitrade, for many years. For me, this year is particularly important because it gives me the opportunity to meet some of our core customers in person. Our regular clients are at



the centre of our future planning. Also, as we grow some of our core markets, it is great to be able to share our plans, get feedback, and discuss opportunities with people in an open and wide-ranging way.

Major expansion has taken place at the yard recently. Please can you reveal details?

Gibdock's turnover has doubled over the last two years and we have achieved this by building on our fantastic reputation for delivery and quality. We have grown our relationships with our long-term customers, and we have brought in some new team members to provide additional capacity. We are growing some of our smaller markets, including mid-sized cruise ships, offshore platforms and FPSOs and to support these new activities as well as existing customers, we are planning investment in our yard over the coming months and years. We have plans for deeper berths to increase the alongside capacity which runs in parallel with our docking projects, and we are also planning investment in our fabrication facilities such as additional craneage to increase our efficiency.

The shipping industry's decarbonisation drive and specifically the EU ETS and FuelEU Maritime are driving demand for emissions-related ship efficiency gains and the retrofit of energy saving devices. Please can you comment?

We have seen a flurry of activity from our regular customers as they take steps to cut emissions, and we have completed some exciting retrofits such as scrubbers and dual fuel conversions. However, we have seen these projects drop away as owners and manufacturers try to predict the direction of the markets and pick their future technologies. But with the ever-increasing cost of emissions, we are expecting these projects to pick up again this year, and we are encouraging our customers to engage us early to get our support and input. Interest in high-grade hull coatings remains high, and this year in addition to the various coatings which are now commonplace such as silicone-based systems, we have completed several graphene-based projects.

We are very excited to have been able to announce our new partnership with Armada Technologies this week. This will enable us to offer passive air lubrication systems as retrofits. Similar technology is very well proven, and has surged in popularity in the newbuilding markets. The partnership with Armada means that we will be able to offer our customers turnkey solutions which can be guaranteed to reduce their fuel consumption. We are predicting that these systems will be one of our largest growth areas for decarbonisation modifications over the next 24 months.

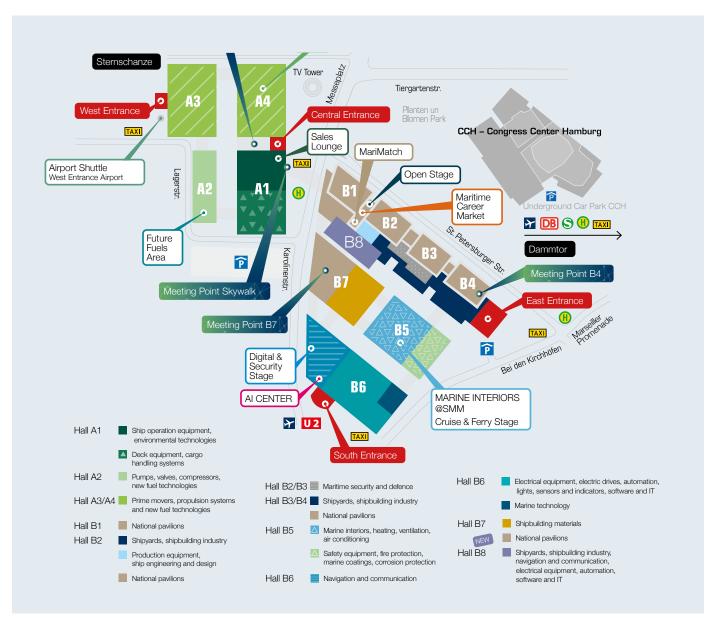
Gibdock Ltd. at SMM: Hall B3 / Stand 205 Every SMM, when the week is drawing to a close on Thursday afternoon and the remaining sunlight takes on a mostly blue shade - then it's time for a tradition that no one wants to miss: the legendary "Blaue Stunde", organised by the German Association for Marine Technologies and the Maritimes Cluster Norddeutschland. It's all about mingling and networking, enjoying two hours with a glass in your hand, with amusing chitchat and interesting people from the maritime industry, science, politics and media. Cheers!



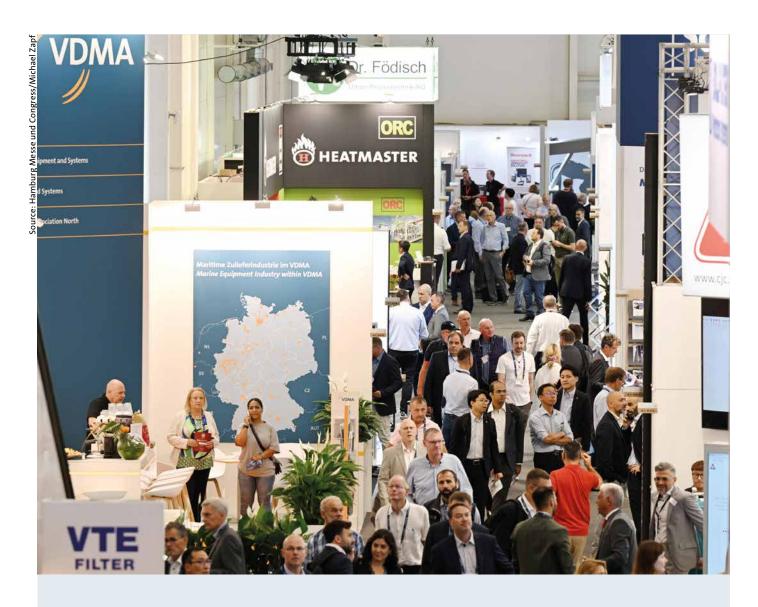


Recruitment is one of the big topics at this year's SMM, the Maritime Career Market (MCM) is therefore an important factor: In order to meet the growing demand for skilled labour and attract more talent to the industry, SMM doubled the duration of MCM to two days, Thursday and Friday. Leading companies and universities provide information on future-oriented training and study options. At no other trade fair for professional guidance is the maritime industry represented as completely as it is here.









FRIDAY, SEPTEMBER 6TH

10:30 MS&D Panel III:
Asymmetric Naval Responses –
The Illusion of Low-Intensity
Warfare at Sea

DMI

Digital & Security Stage / Hall B6

10:30 The Green and Digital Ship of the Future DFDS

Green Stage / Hall A4

11:40 Advancing sustainability in maritime: Enhanced shipyard processes, circular materials and lightweight design Center of Maritime Technologies gGmbH

11:55 Navigating the Future:
Marine Refrigerants in the
Global HFC Phase-Down
Wilhelmsen Ships Service
Cruise & Ferry Stage / Hall B5

12:00 MS&D Panel IV: Trends in Naval Shipbuilding DMI

Digital & Security Stage / Hall B6

13:00 Fascination Marine Technology GMT

Open Stage / Speaker Slot / Hall B2

13:35 Valve Materials Matter: Enhancing Ship Efficiency and Sustainability Georg Fischer Piping Systems Ltd. Green Stage / Hall A4

13:50 Retrofit decarbonisation solutions at MAN Energy Solutions - a step towards a greener future MAN Energy Solutions SE Green Stage / Hall A4

More information about the conference and panel programme:



Selection, no claim to completeness, all information without guarantee.

Focus on further emissions reduction



Experts giving insights at the stand of ClassNK

Source: Bosch/Schiff&Hafen

Classification society ClassNK is concentrating on shipping's need to reduce greenhouse gas (GHG) emissions at SMM. Its primary focus is on the tailored ClassNK Transition Support Services, designed to aid shipping clients in making

a seamless transition to zero-emission operations.

Representatives from ClassNK are offering visitors insights into its Transition Support Services, which focus on three types of

GHG emission reduction measures: the introduction of alternative fuels for ships, energy efficiency improvement technologies, and the use of onboard CCS. In addition, ClassNK has published "ClassNK Alternative Fuel Insight" to provide guidance relating to future fuel selection, summarising the characteristics and latest trends in alternative fuels in an easy-to-understand

Regardless of these measures, shipowners and managers must monitor GHG emissions today, using a suitable management tool. To address this, ClassNK provides ClassNK MRV Portal for regulatory compliance such as IMO-DCS/EU MRV/EU-ETS/FuelEU Maritime and CII rating as well as ClassNK ZETA for visualising and effectively managing GHG emissions.

ClassNK at SMM: Hall B2 / Stand 212

Nozzles, couplings and hoses make future fuels possible

Elaflex is presenting products for supplying ships with alternative fuels at SMM. Hose assemblies and couplings from Elaflex for hydrogen in the low-pressure range are featured.

New DCC dry disconnect couplings and semi-automatic pneumatic nozzles for

LH₂ from MannTek are also on display. Additionally, Elaflex is presenting Dual-Safe, a newly developed, double-walled hose assembly tool with sophisticated leak monitoring technology from SGB. Special rubber expansion joints and deck seals, tailored precisely to customer requirements in a wide variety of shapes, sizes, and

equipment variants from ditec, are highlighted. Composite hoses from Dantec for the safe transfer of ammonia and LNG are displayed, as well as hose reels for different bunkering media.

Elaflex Hiby GmbH & Co. KG at SMM: Hall A1 / Stand 327

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Vaisala takes it in the weather

At SMM, Vaisala, the Finnish provider of measurement instruments and intelligence for climate action, is showcasing its application set to provide reliable weather insights for safe, sustainable and efficient wind-assisted shipping and offshore wind energy operations.

Wind assistance will lead shipping into a more environmentally friendly future if the wind can be utilised as efficiently as possible. At the same time, safety issues in and around offshore wind energy substations are significantly higher than on shore. While weather forecasts are more accurate and trustworthy on land, unexpected severe weather events take a toll in harsh offshore environments.

Vaisala's maritime portfolio includes weather transmitters, wind anemometers and lidars, as well as humidity, barometric pressure, visibility and temperature sensors, global lightning detection data and



Master the weather, master the sea

Source: Lau/Schiff&Hafen

weather forecasting. They are combined with an Offshore Weather Awareness platform to deliver the hyperlocal weather intelligence, insights and nowcasting capabilities necessary to capture maximum wind propulsion and enhance safety at offshore operations.

Vaisala at SMM: Hall B6 / Stand 148

Versatile crane technology on display

At its stand at SMM, Fuchs Fördertechnik GmbH is showcasing its wide range of products for the maritime industry.

The company is focusing on serving merchant shipping, cruise liners, offshore operations, navy, and mega yachts. With over 60 years of experience and a track record of 6,600 manufactured crane systems,

Fuchs Fördertechnik offers versatile and flexible crane systems, including overhead cranes, monorail trolleys, telescopic crane systems, and special cranes. The Fuchs Group, which includes Fuchs Fördertechnik GmbH, Fuchs Produktionstechnik GmbH, and Fuchs Oberflächentechnik GmbH, is located just outside Hamburg and can handle the entire process from de-

sign and production to surface protection and delivery. Additionally, a globally active after-sales service team ensures proper care of the systems throughout their entire life cycle.

Fuchs Fördertechnik GmbH at SMM: Hall A1 / Stand 409



Rolls-Royce unveils new mtu propulsion and automation tools

Rolls-Royce is presenting new propulsion, automation, and service tools of the mtu product brand at SMM.

The applications support maritime customers in the energy transition while ensuring reliable and efficient fleet op-

eration. They include renewable diesel (HVO) combustion engines, exhaust gas after-treatment systems, hybrid systems, gas engines, automation, and bridge systems. Rolls-Royce will also present future methanol engines for CO₂-neutral operation with green methanol. The core of the

Rolls-Royce mtu marine portfolio remains the internal combustion engine, with technologies like exhaust gas after-treatment and sustainable fuels aiming for net-zero emissions.

Rolls-Royce offers mtu exhaust after-treatment systems for Series 2000 and 4000 diesel engines, approved for renewable diesel/HVO. Using HVO instead of fossil diesel can reduce CO₂ emissions by up to 90%, particulate emissions by up to 40%, and nitrogen oxide emissions by up to 8%. Customers like the Golden Gate Ferry in California have successfully used HVO for years. The portfolio also includes mtu gas engines for tugs, ferries, push boats, and special ships, meeting stringent emission standards and favoured for their quiet operation and lack of vibrations, odour, and black smoke.

Rolls-Royce supports hybrid propulsion systems with the mtu HybridPropulsion-Pack, combining a combustion engine, batteries, and electric propulsion for emission-free operation in ports. In June, Italian shipping company Liberty Lines has commissioned fast ferries with mtu hybrid systems.

systems.

Rolls-Royce Power Systems at SMM:
Hall A3 / Stand 307



Hybrid engine at the stand of Rolls-Royce

Source: Bosch/Schiff&Hafen

New version of ship efficiency guide

Efficient ship operation is a decisive lever for ensuring more environmental protection in shipping. For this reason, the Maritime Cluster Northern Germany (MCN), together with industry experts, has developed a guide for ship efficiency that is now available in an updated version.

The aim of the guide is to provide an overview of existing regulations in international shipping and to highlight technical options for improving ship efficiency that

are relevant for both newbuildings and existing ships.

New additions include topics such as ETS trading, which has been extended to include the shipping industry at the beginning of the year. The FuelEU Maritime regulation, which comes into force in January 2025, is also covered for the first time. A number of innovations have been included in the guide in response to the ever-evolving market for new technologies that make shipping more efficient. Carbon (dioxide) capture was added as a topic, as

has a chapter on changes in ship design over the past two decades. Furthermore, the fuel matrix has been revised to compare the impact of different fuels on engine availability, tank space requirements and bunker availability.

Since this month, the updated MCN Guide Ship Efficiency is now available free of charge.

Maritime Cluster Northern Germany (MCN) at SMM: Hall B6 / Stand 154

Expanded range of robust switchgear

The steute business division Controltec is introducing an expanded range of switchgear products with DNV approvals at its stand.

These switching devices have been specifically designed for applications that often involve exposure to damp and wet conditions, including salt water. Their key features include a wide temperature range (down to -60°C, depending on the series), mechanical robustness, and the ability to withstand shocks, impacts, and vibrations up to 4g. These qualities are frequently, but not exclusively, demanded by the maritime industry, for example in shipbuilding or on oil rigs. Previously, the steute range of DNV-approved switchgear consisted of magnetic sensors, safety sensors, and footswitches in "Extreme" variants. This range has now been extended to include three universally applicable position switch series: Ex 97, Ex 98, and Ex 99. All three series are compact and robust and can be customised to suit specific requirements by selecting different actuators. High protection class (IP 66/67) and certification for Ex zones 1 and 21 (gas Ex



Small gear, big impact

Source: Lau/Schiff&Hafen

and dust Ex) are standard features. Additional features of these position switches include compact and standard dimensions to EN 50047 (Ex 97) and EN 50041 (Ex 98 and 99), metal enclosures (Ex 98), and universal mounting options.

The three series are also available as non-Ex variants. At its stand, Steute is presenting all three switch series.

steute Technologies GmbH & Co KG at SMM: Hall B6 / Stand 137

Durable marine cables

Visitors to the stand of böhm Kabeltechnik GmbH have the opportunity to explore the Iserlohn-based company's highly specialised marine cables with VG 95218 60-66 approval.

With this approval, the marine cables fulfil the highest safety and quality standards, making them the ideal choice for shipbuilders, shipping companies and offshore plant operators who depend on reliability and safety. Regarding their resistance to oils, UV radiation and mechanical stresses, the cables are particularly durable, which significantly reduces maintenance costs, the frequency of replacements and increases cost-effectiveness. This robustness improves operational safety and at the same time offers optimum performance for the transmission of power and signals in demanding maritime environments. The marine

cables can be used universally and are suitable for a wide range of applications in the maritime sector, from communication systems to power supply. These marine cables have already proven themselves in renowned marine projects, which underlines their performance and reliability in real-life deployment scenarios.

böhm Kabeltechnik GmbH at SMM: Hall B6 / Stand 603





Diverse protection and control portfolio

Hamburg-based stuckeGroup is specialised in the development and manufacture of protection and control systems for both shipbuilding and industrial applications.

The multifunctional protection and control systems, which are on display in Hamburg, offer engine control and comprehensive protection functionality for generators, motors, transformers and feeder lines. They also provide differential and grid protection, power management, DP system logics, arc protection, reactive power undervoltage protection, grid decoupling, and power plant control for LV, MV, and HV systems, gas and diesel



Protection and control Source: Lau/Schiff&Hafen

engines, gensets, power units, and hybrid systems.

Amongst stucke's customers are system integrators, shipyards, shipowners and managers, designers, owners and operators of power plants, sites for the generation of renewables and emergency energy systems. stucke devices are type-certified and also comply with relevant cyber security rules. The company has offices in Germany, Serbia, India, China, Korea and representations around the globe. Product training, service, support, repair service and spare parts are available worldwide. One of the stucke protection and control devices is specially designed as a retrofit tool.

stucke Elektronik GmbH at SMM: Hall B6 / Stand 430

Hybrids and all-electric drive systems for smaller vessels

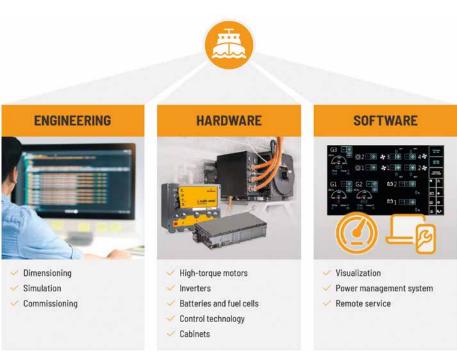
Baumüller Anlagen-Systemtechnik GmbH & Co KG is the system company of the Baumüller Group. It has already successfully converted numerous workboats, tugs, inland waterway vessels and yachts to hybrid and all-electric drive systems. With its wide range of products and services, from motors, converters, and control units to charging systems, diagnostic software, and links to battery management systems and fuel cells, Baumüller is well established in the smart shipping sector.

The marine portfolio is supplemented by a variety of new products such as the BAS-PCS power management system and the BAS-Link DC-Grid power distribution platform, which is presented at this year's SMM. Baumüller is also applying its engineering expertise to its range of charging infrastructure products with a customised system architecture. All marine applications are offered not only as original equipment, but also as retrofits. Comprehensive services for maximum runtimes and smooth operation round off the marine portfolio.

For electric ships with battery-powered electric motors, hybrid drives for e-fuel

generators with electric motors and parallel hybrid ship drives with synchronous electric and main motors, Baumüller handles all the engineering for propulsion and power generation: generators, drives for propellers and bow thrusters, the power distribution system, and onboard power generation.

Baumüller Anlagen-Systemtechnik GmbH & Co KG at SMM: Hall A4 / Stand 411



Baumüller offers a wide range of products and services

Source: Baumüller

Shipshave hull care yields 5-10% fuel savings

Shipshave's semi-autonomous In-Transit Cleaning of Hull (ITCH) technology, now deployed on more than a hundred ships, has demonstrated fuel and emission savings of at least 5-10%, the company has claimed.

The Stavanger-based firm, participating in SMM for the first time, has calculated that proactive in-transit hull care can result in a net fuel saving of 10% and a 50% reduction in EU Emissions Trading System costs. Its clients include Klaveness Combination Carriers and Stolt Tankers.

The company has recently revealed the possible impact on fuel bills. It has estimated that a ship consuming 24 tonnes of fuel a day at \$500 per tonne over a period of

280 days could save about \$100,000 in fuel costs over the period.

The ITCH system is deployed by the crew from a portable winch mounted on the forecastle. Soft brushes sweep up and down the hull under water, removing soft weed and other biofouling.

"We have seen consistently impressive results from piloting the ITCH system that we believe offers a low-threshold investment to reduce the carbon footprint of vessel operations given the imperative of compliance with the EU ETS and FuelEU Maritime," said Richard Aleksander Tjosvoll, chief sales officer.

The system generates other savings too. Port turnarounds can be faster, with no need for port authority clearances, and offhire deviations to carry out hull cleaning can be avoided. Shipshave estimates that 80-90% of the parallel/vertical area of a handysize bulk carrier can be 'cleaned' in a five-hour operation, typically costing less than USD 250 per clean.

The ITCH has recently been upgraded. New features include a software upgrade, and integration of the camera into the robotic tool so that cleaning results can be assessed more accurately and making data-driven cleaning possible. Meanwhile, lab test have shown that the ITCH has a negligible impact on the thickness and roughness of hull coatings, even after repeated use.

Shipshave AS at SMM: Hall B7 / Stand 406

Four dimensions of pipe and plan services

Knaack & Jahn presents its comprehensive and sustainable portfolio with a quality and full-service profile, called the 4-Dimension Specialists.

These four key dimensions in shipbuilding services and modern retrofitting are piping, steelwork, HVACR and fire protection. The German company is headquartered in Hamburg, with branch offices in Bremen and Kiel. Knaack & Jahn's product and service portfolio also includes thermal oil systems, exhaust systems, the replace-

ment of fresh water systems, hydraulic lines and systems, as well as the installation of piping on entire decks and in fire zones. Also part of the company's service is the installation of ballast water systems, in newbuilds and retrofits.

In addition to the flushing of hydraulic systems, another new feature of the service profile is that Knaack & Jahn now provides its own flushing units, including a calibrated particle analyser. Both as part of installation and later when carrying out maintenance work, thoroughly flushing out hydraulic flu-

id helps prevent potentially serious damage or failures caused by contaminants.

With regard to fire-extinguishing technology, the product range includes sprinkler systems such as standard, water mist, drencher, ship- and total-protection systems, Novec1230 and CO₂ systems.

The company's own KJ FireOff water mist system offers a wide variety of applications thanks to its innovative technology.

Knaack & Jahn at SMM: Hall B5 / Stand 524



Analytics for top performance and efficient compliance

Specialised in Advanced Performance Evaluation Analytics, based on high-frequency data, Metis is showcasing a bold rebrand and a completely revised platform at its stand at SMM.

The upgraded Metis platform features additional information layers, advanced filtering and intuitive navigation in a new 'look and feel'. It includes redesigned dashboards that enhance overviews of key performance indicators in domains including emissions, optimised operations and machinery condition. It also incorporates a new Metis 'Data Health indication', which evaluates data based on validity, completeness and timeliness.

The company has developed functionality that is specific to owner compliance needs (EEXI, CII, DCS/MRV, EU-ETS, Shapoli, etc.), with analytics that can integrate with



Redesigned dashboard

voyage planning and draw on weather prediction services to optimise fuel oil consumption, ETA and carbon intensity.

Metis is also active as a collaborative industry partner, with examples including its work with Kongsberg Digital and turbocharger maker Accelleron. It has been part of key R&D initiatives, including the EU-backed Engimmonia project to test clean shipboard energy tools, with a focus on ammonia as an alternative fuel, wasteheat recovery, renewables and energy management systems. The company is working with MTI Co Ltd Singapore Branch and the Agency for Science, Technology and Research (A*STAR) in Singapore to advance the use of AI for the predictive modelling of ship emissions.

Metis is also cooperating with The Cambridge Centre for Advanced Research and Education in Singapore (CARES) and Laskaridis Shipping Co. Ltd to evaluate the real impacts of future fuels on maritime decarbonisation.

Metis at SMM: Hall A1 / Stand 218

Taking the strain out of fixing a workboat

A new digital platform to identify suitable workboats for urgent offshore, maritime, or port projects within an 800-nautical mile radius has been launched by Nauticworx.com. The digital meets the expectations of charterers, fleet owners, and brokers looking to fix or deploy workboats as economically as possible.

The platform is aimed at maximising efficiency and profitability in a sector where timing is often critical. Participants can retain their anonymity if they wish, only accepting contacts, offers or requests with companies of their choosing. Nauticworx does not charge commissions, but levies subscription fees.

Key features include immediate access to a continuously updated database of regionally available vessels, flexibility and fixed costs with no hidden fees or brokerage charges, and increased sustainability by chartering vessels that are nearby, reducing fuel and emissions, and saving time.

Björn Smets, co-founder and Operations director, said: "Our platform is not just about connecting vessels and projects; it's about doing so in a way that enhances profitability, sustainability, and operational efficiency. We are about preventing project delays, cutting cost, reducing fuel consumption, filling up downtime gaps, and ensuring that availability of fit-for-purpose vessels."

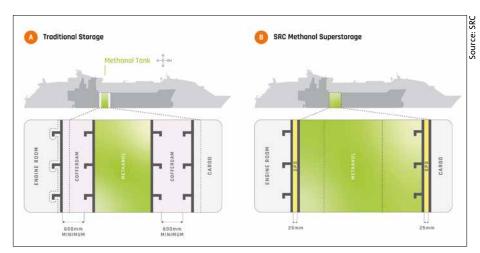
Nauticworx BV at SMM: Hall B6 / Stand 236



SRC presents progress in Methanol Superstorage

SRC Group is a multi-regional company with 23 years of experience in managing marine and offshore projects that require tailored products and short lead times.

At SMM SRC presents its progress in Methanol Superstorage - in what the company calls a "transformative system" for methanol storage on board ships. Instead of the cofferdams traditionally used as a precaution to separate tank walls, Methanol Superstorage deploys the patent-protected sandwich plate system, from SPS Technology - consisting of a continuous polymer core injected between two steel surfaces. The 25mm-thick walls provide protection against fire or leakage that is equivalent to a conventional tank, while boosting tank volumes by 85% to provide effective mitigation for methanol's significantly lower energy density than conventional fuel. The



SRCs Methanol Superstorage is a "transformative system" for methanol storage on board ships

system is also easy to retrofit. Methanol Superstorage has already received Approval in Principle from Lloyd's Register, which indicates that no conceptual issues have been identified relating to ship regulatory requirements.

SRC Group AS at SMM: Hall B7 / Stand 555

Shipboard Satcom systems for safety and service

Cobham Satcom highlights new maritime safety technology, its diverse VSAT antenna portfolio and the latest advancements in TVRO technology at SMM.

The Danish maritime radio and satellite communications company emphasises its long-standing commitment to maritime safety by presenting an innovative new GMDSS development for Inmarsat networks. The new system is designed to improve emergency communications while ensuring seamless access to the new functionality available through Inmarsat's new Safety Services. Cobham Satcom is also showcasing new SAILOR and Sea Tel TVRO antennas. Designed to enhance onboard TV viewing with reliable,

high-quality services globally, these new satellite TV antenna systems ensure consistent entertainment across various vessel types, from deep-sea trawlers to mega cruise ships.

Cobham Satcom at SMM: Hall B1 / Stand 501



Battery-powered sensors for diesel engines

IMES GmbH from Kaufbeuren is one of the leading specialists in cylinder pressure sensors and engine monitoring systems. At this year's SMM, the company is presenting its various electronic pressure indicators (EPM) (EPM-Peak, EPM-XP, EPM-XPplus and EPM-XPplus-vibro).

They are battery-powered, compact and lightweight handheld devices for two- and four-stroke diesel engines that are characterised by their ease of use, robustness and high accuracy. The new generation is a further development that offers one common hardware for all EPM types. This enables a simple upgrade from peak pressure indicator EPM-Peak to engine analyser EPM-XPplus-vibro. The user can purchase a license file for an upgrade to a higher version, and it is not necessary to send the device back to IMES. The collected data of all EPM types can be displayed



New generation: MES presents its EPM versions Source: IMES GmbH

and evaluated on the EPM visualisation software. Via USB port, the device will be connected to a PC and the visualisation software identifies the EPM type and activates the corresponding monitoring functions. Depending on the instrument peak pressure, pressure- and combustion behaviour, performance data as well as valve time will be evaluated and analysed.

The created measurement files can be sent to the superintendent in the shipowner's office, who can download the visualisation software from the IMES homepage free of charge.

If the PC is connected to the internet, it will be automatically checked if any firmware or visualisation software updates are available. Updates can be installed free of charge. Further new features are a larger and more comprehensive display and two additional function keys for easier menu handling.

IMES GmbH at SMM: Hall A2 / Stand 235

Adhesive and sealant for the construction, maintenance and repair of ships

Weicon GmbH & Co KG, established in 1947, has developed a permanently elastic adhesive and sealant for the construction, maintenance and repair of ships – the Flex 310 M FireSeal, which it showcases this year in Hamburg.

The SMP-based adhesive and sealant is flame-retardant and can withstand fire for up to 120 minutes. It is tested and classified for all joint structures according to EN 1366-4. The paint-compatible sealant with very low volume shrinkage meets the requirements of the International Maritime Organisation IMO FTPC Parts 2+5 as well as for rail vehicles in accordance with DIN EN 45545-2 R22/23 HL3. The very low emissions allow for safe indoor application. It is low-odour and contains no solvents, isocyanates or silicones. FireSeal adheres very well even to powder-coated, painted, galvanised, anodised, chromated and hot-

dip galvanised surfaces. It is suitable for use on metal, many plastics, concrete, and wood. It can be used for fire barriers and covers, for joints in non-structural components with fire resistance requirements,

connection joints, or for sealing cable ducts, pipe openings, and housings.

Weicon GmbH & Co KG at SMM: Hall B5 / Stand 133



The Weicon Flex 310 M FireSeal enables for safe indoor application due to its low emissions





Live experience at the stand thanks to the simulator

Source: Bosch/Schiff&Hafen The HamiltonJet simulator

Source: SI Schiffstechnik

Range of members's technologies

SI Schiffstechnik GmbH & Co KG is a representative of high-profile ship equipment manufacturers with the focus on state-of-the-art propulsion technologies and efficient vacuum and water treatment systems, including Brunvoll AS, HamilltonJet, Jets Vacuum AS, Poloplast GmbH & Co KG and Norwegian Greentech AS.

Brunvoll's portfolio includes tunnel thrusters, even in super silent-version, RIM-driven thrusters, propulsion systems, propellers, gearboxes and automation systems, including the latest dynamic positioning (DP) systems.

HamiltonJet offers advanced and innovative waterjet propulsion systems, including control and DP systems. Brand new is the LTX Series of high-efficiency waterjets designed for medium and low-speed operation between zero and 30 knots.

Jets Vacuum AS enriches the company's portfolio with the Vacuumarator® pump, a compact and reliable vacuum generator available for sanitary systems, robust and high-quality vacuum toilets, vacuum systems and wastewater treatment plants.

Poloplast GmbH & Co KG's products are a perfect match for the Jets Vacuum range,

including vacuum-based PP pipes and fittings approved for maritime use.

Ballast water management systems from 25 m³/h to 1,274 m³/h are being offered by Norwegian Greentech AS. Visitors to the stand of SI Schiffstechnik at this year's SMM will be able to use the HamiltonJet simulator. This simulator gives visitors a choice of steering capabilities to try out the impressive manoeuvrability of waterjets.

SI Schiffstechnik GmbH & Co KG at SMM: Hall B7 / Stand 128

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Prominent on the city's skyline: the Michel, Hamburg's most famous church, provides a stunning view from its platform at 132 metres

The favourite places of the editors

As an editorial team based in the most beautiful city in the world, we are naturally proud of our home town - and we have some very personal tips for you.

- 1. Die kleine Konditorei (kleine-konditorei.com): There are many stories about the origins of the Franzbrötchen. Whether the people of Hamburg tried their hand at croissants or fried baguettes, the result is still as much a part of Hamburg as the city's coat of arms. One thing is certain: the Franzbrötchen is a sweet yeast pastry filled with cinnamon and sugar, available in two varieties: twisted and pressed. The Franzbrötchen from this café, which now has four branches, has won several awards.
- 2. Erika's Eck (Sternstraße 98, 20357 Hamburg): The atmosphere in this cult pub is the same as it was 40 years ago. You

can meet people from all walks of life. Hot food is available from midnight, making Erika's Eck ideal for those who are hungry (again) at night. Schnitzel with a fried egg and potatoes or a sandwich for EUR 1? You'll be stuffed here (and it tastes good). A visit here is always an experience and a real insider tip from Hamburg locals for visitors.

- 3. Night Michel (nachtmichel.de): Hamburg's most famous church is the Michel. From the viewing platform of the 132-metre-high tower, you can enjoy a magnificent 360-degree view over Hamburg from above. A visit at night is a special experience and is possible on many days of the year after regular opening hours.
- 4. A typical night out in Hamburg: It starts in the Schanze or Ottensen, then

on to the Golem Club at the Fish Market, makes a detour to the Hamburger Berg (no, not a real mountain, but a party mile in the neighbourhood), goes to the Pudel (Goldener Pudel Club) at the harbour from 3.30am, and greets the new day at 5am on the wall of the Fish Market - with a cup of coffee and a fish roll in hand and tinnitus in the ear.

- **5. Poolstraße:** The old Jewish quarter on Großneumarkt still has some old houses with beautiful Wilhelminian-style facades. The streets and alleys are narrow, as are the entrances to the houses. Well worth a visit!
- 6. Deutsches Schauspielhaus (schauspielhaus.de): Known for its modern, often provocative productions that contrast with the baroque splendour of the interior, the traditional building opposite the main railway



The fishmarket: a buzzing experience outside – and especially inside the market hall

Source: Julia Schwendner/Mediaserver Hamburg

station has only recently been recognised by critics as an outstanding theatre again. Well-known directors such as Gustaf Gründgens, Peter Zadek or the current artistic director, Karin Beier, have shaped the theatre and made it famous far beyond Hamburg's borders. The performances of the "Junges Schauspielhaus" are also well worth seeing.

7. Flohschanze (Neuer Kamp 30, 20357 Hamburg): Nowhere else can you browse, rummage and haggle like at the Schanzenflohmarkt in the Karolinenviertel. From old guitars to ships' lamps and vintage records, you can find just about anything and discover real treasures among the junk. The

market is open every Saturday from 8am to 4pm.

8. Le Lion (Rathausstraße 3, 20095 Hamburg): Near the Rathausmarkt is Hamburg's most open secret, a parallel world like a David Lynch film set. Heavy, sound-absorbing carpeting, dim, indirect lighting, bizarrely patterned wallpaper – the 1920s-style bell bar promises discretion and sophisticated drinking culture. This is where the now world-famous Gin Basil Smash was invented.

9. Salt and Silver (Hafenstraße 136, 20359 Hamburg): Two restaurants in one – Le-

vantine inspired and Latin American. A little more expensive, but absolutely wonderful. The cuisine is a mix of everything the two founders have picked up on their travels around the world.

10. Entenwerder 1 (Entenwerder 1, 20539 Hamburg): One of the coolest places to watch the sunset has been created on a pontoon on the North Elbe. Retro folding chairs, old café furniture and parasols are spread out between two containers, with a giant golden pavilion to climb next to. Whether it's breakfast at the weekend, delicious cakes with coffee or a good craft beer for dinner, this is a favourite spot on the Elbe for many.



The traditional theatre Deutsches Schauspielhaus is located next to the central train station and is known for modern, often provocative staging

Source: Mediaserver Hamburg/Andreas Vallbracht



The bar Le Lion is said to be the place where the Gin Basil Smash was invented

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