New Ships

by Ship&Offshore

No 35 / 1 September 2022 www.new-ships.net

Demand for gas carriers continued this week with a European company placing a large order in South Korea. Chinese contracts included container ships, bulk carriers, a heavy lift freighter and a gas bunkering vessel. Moves to reduce pollution from shipping remained a theme generating orders worldwide. Another sail-powered freighter of a new concept was ordered in Europe while a sail-powered Pacific island supply vessel was contracted in Asia. Turkey also won orders for electrically powered ferries from Scandinavia.

PROSPECTS AND ORDERS

EUROPE

FRANCE

Piriou wins another sail-powered freighter order

French yard Chantiers Piriou said it has signed a contract with TransOceanic Wind Transport (TOWT) for construction of a second 81m-long sail-powered cargo vessel. French shipping company TOWT has been focussing on the transport of goods on existing or future large sailing vessels since being founded in 2011. The new ordered vessel will be a repeat of the first ship of this type ordered in early 2022 with the design of a new concept in environment-friendly cargo shipping. The delivery of the first ship in Piriou's yard in Concarneau in France is scheduled for the end of 2023, while the second is planned for spring 2024. With a cargo capacity of 1,100 tonnes, the ships are designed for 320 days at sea per year. Navigation is principally sail-powered. The ships

measure 11.9 of breadth, with a draught of 6m. They will carry a crew of 7 to 12 plus 12 passengers in six double cabins. They will sail with an average speed of 10.5 knots and maximum speed under sail of over 16 knots. The hull and superstructure will be steel and aluminium. Sail power will come from two masts. Freight can be carried in bulk on pallets, wine and spirits will be among target cargo. In the coming weeks, the construction of the first ship will start in Piriou's shipyard in Giurgiu in Romania and it will arrive in Concarneau in summer 2023 for the outfitting phase. The construction of the second will start in a few months. In addition to wind propulsion, both newbuildings are equipped with two turbocharged 4-stroke marine diesel engines and a bow thruster. On the bridge, there will be a single command station and its ergonomics will allow the officer of the watch to carry out all the commands and course adjustment operations, excluding manoeuvres, single-handed. The ships and all its equipment will comply with the regulations on cargo vessels performing international sailings.

CONTACT

Chantiers Piriou, ZI du Moros, BP 521 29185 Concarneau Cedex, France. Tel. ++33 2 98 97 09 48. Fax ++33 2 98 97 20 36. Email piriou@piriou.fr Web www.piriou.com

GERMANY

FSG signs deal to develop new ConRo vessel for Canada

German yard Flensburger Schiffbau-Gesellschaft (FSG) has signed a memorandum of understanding with Canadian shipping company Oceanex to design a climate-neutral and efficient container RoRo vessel. The agreement was signed during the visit to Canada of a German economic delegation headed by German Chancellor Mr Olaf Scholz. The project will be part of a future vessel replacement programme at Oceanex. Together, the partners intend to investigate the utilisation of alternative fuels such as ammonia, methanol, synthetic fuels and biofuels as well as hydrogen, and the technologies needed to support them in the operational area of Newfoundland-based Oceanex. The central approach of FSG is a comprehensive life-cycle analysis that links long-term economic and ecological perspectives early in the planning stage. "As a shipyard, we have ambitious goals to become a major pillar of the energy transition," said yard managing director Mr Philipp Maracke.

CONTACT

Flensburger Schiffbau-Gesellschaft, Batteriestrasse 52, D-24939 Flensburg, Germany. Tel. ++49 461 49 40 0. Fax ++49 461 4940 214. Email info@fsg-ship.de Web www.fsg-ship.de

German Naval Yards to present corvette design

German Naval Yards announced it will release its new corvette design at this year's SMM 2022 trade fair in Hamburg beginning next week. The type SEAGUARD 96 corvette is 96m long, 13.5m wide, with a displacement of about 2,000 tonnes, and accommodation for 60 personnel. The corvette was designed in close collaboration with the team from associate shipyard CMN in France. The design aims to provide a high-end corvette capable of conducting multi-task naval operations with a 3D radar as well as a full range of weapon systems and sensors customisable for anti-air and anti-surface warfare. The stern has a helicopter platform with hangar. The propulsion and power generation system, adapted to the ship and its missions, are centred on twin main diesel engines and CPP propellers together with four diesel generators providing a maximum speed of 28 knots and an endurance of over 4,000 nautical miles.

CONTACT

German Naval Yards Kiel GmbH, Werftstrasse 110, D-24143 Kiel, Germany. Tel. ++49 431 239 32 0. Email info@germannaval.com Web www.germannaval.com

ITALY

Deal to take over ferry newbuilding

Polish state-owned Polferries has signed a contract to take over a RoRo passenger ferry currently being built by Italian yard Visentini. Poland's Ministry of Infrastructure said the vessel will be chartered-in to fill the gap before other newbuildings are delivered to Polferries. The LNG-ready vessel will be delivered to Polferries in the second half of 2024 and will be chartered with a purchase option. It will measure 216m long, 28m wide with 3,000 lane metres of freight capacity and will be able to accommodate 1,000 passengers in 230 cabins. It will serve the Polferries' route between Swinoujscie and Ystad.

CONTACT

Cantiere Navale Visentini S.R.L., Via Romea 42 - 45014 Porto Viro (RO), Italy. Tel. ++39 0426 320 700. Email cnv@shine.it

Expansion into catamaran yacht sector with new concept

Italian superyacht builder Extra Yachts, a brand of ISA Yachts, has announced a new design for a motorised catamaran superyacht of 30m length. The VILLA X30 design marks the company's expansion into the catamaran yacht sector. Exteriors and interiors designs are by the Dutch firm Phathom. The design has major usage of panoramic glass, large social areas, and open concept stern facilitating easier sea access. It has a hybrid propulsion system aiming to significantly reduce carbon dioxide emissions. Energy consumption efficiency is augmented by glass impregnated solar cells that produce additional power for on-board utilities. Sustainable or natural materials such as re-purposed fibres, sustainably assessed paints and plasters, alternative leathers and reclaimed woods will be considered without compromising quality or finish, the yard said.

CONTACT

Extra Yachts, Via Enrico Mattei 14, 60125 Ancona, Italy. Tel. ++39 071 502 191. Email info@extrayachts.com Web www.extrayachts.com/contact/

ASIA

CHINA

Boxships reported for European owner

Brokers say Greek shipping company Cosmoship Management has ordered two container feeder vessels of 1,100 TEU from Chinese yard Wuchang Shipbuilding. The order includes options for two repeat vessels. The order is worth about US23.8 million per ship.

CONTACT

Wuchang Shipbuilding Industry Group Co Ltd, 138, Yangda Road, Shuangliu Street, Xinzhou District, Wuhan City, Hubei Province, 430416 China. Tel. ++86 27 68 887 400. Fax ++86 27 883 14 876. Email wuchuan@wuchuan.com.cn Web www.wuchuan.com.cn

Feeder boxships for 2024 delivery

Brokers say a German owner has ordered two more 1,400 TEU container feeder ships from Penglai Zhongbai Jinglu Ship Industry in China. They are planned to be delivered in 2024 and will be ready to use liquified natural gas as fuel.

CONTACT

Penglai Zhongbai Jinglu Ship Industry Co Ltd, Add No .1 Fengtaibei Road,Beigou,Penglai District,Yantai.Tel. ++86 535 34 55 776. Web www.jinglushipyard.com/en/list-24-1.html

Bulker repeat order from PZM Polsteam

Brokers say Polish Steamship (PZM Polsteam) has ordered four 37,000 dwt lake bulk carriers from China State Shipbuilding Co (CSSC). They will be built by CSSC yard Dalian Shipbuilding Industry Company and and will be fitted for operations on the Great Lakes. PZM Polsteam had earlier this year previously ordered four of these vessels from CSSC.

CONTACT

Dalian Shipbuilding Industry Company (DSIC), No. 1, Haifang Street, Xigang District, Dalian City, Liaoning Province, China. Tel. ++86 411 844 82 888. Email: dsic@dsic.cn Web www.dsic.cn

JNS is said to build handysized bulkers with options

Brokers say Chinese yard Jiangmen Nanyang Ship Engineering (JNS) has an order for two 40,000dwt bulk carriers from Japanese shipping company Doun Kisen. The order includes options for two repeat handysize vessels. They will be open-hatch.

CONTACT

Jiangmen Nanyang Ship Engineering, Gujing Town, Xinhui District, Jiangmen City, Guangdong Province, 529145 China. Tel. ++86 7 50 26 31 666. Email office@jns.net.cn Web www.jns.net.cn/en/

Guangzhou Shipyard lands order to construct heavy-lift vessel

China's Guangzhou Shipyard has an order for one 65,000dwt heavy-lift freighter with semi-submersible capability from Chinese customer Cosco Shipping Specialized Carriers. It is due to be delivered in 2024. The ship will be tenth semi-submersible heavy-lift vessel in the Cosco Shipping fleet. It will be of design type Super X.

CONTACT

Guangzhou Shipyard Co. Ltd, No. 40, Fangcun Avenue South, Liwan District, Guangzhou 510382, China. Tel. ++86 20 815 83 532. Fax ++86 20 815 875 65. Email gzs@cssc.net.cn Web http://gzs.cssc.net.cn/index/lxwm.php

Green ferry to be built by China Merchants

Chinese yard China Merchants Heavy Industry has won an order for a RoRo passenger/freight ferry from shipping company China-Japan International Ferry. The vessel will be 167m long and 25m wide, and will carry 192 passengers and 334 containers of freight. The environment-friendly ferry will have low carbon emissions and will meet the requirements of Energy Efficiency Design Index (EEDI) Phase 3. It will be built at China Merchant's Jingling yard.

CONTACT

China Merchants Heavy Industry, Mazhou Island Base, Mawan Avenue 1045, Qianhai, Nanshan District, ShenZhen, Guangdong, Province, China. Tel ++86 755 26 86 99 99. Fax ++86 755 266 84 860. Email yiulian@136.com Web www.cmindustry.com.hk/?lang=zh-cn

Inland customer places bunker vessel order with Hudong-Zhonghua

China's Hudong-Zhonghua Shipbuilding has an order for one LNG bunker and transport

vessel of 14,000cu.m capacity. It has been ordered by Chinese customer Anhui Changjiang LNG Company which is currently building an inland waterways LNG terminal in Wuhu. The 130m-long and 23.5m-wide vessel will be capable of both LNG bunkering and also general LNG transport in coastal and inland waterways services. It is scheduled to be delivered in August 2024. Hudong-Zhonghua has also been involved in the design of the vessel.

CONTACT

Hudong-Zhonghua Shipbuilding (Group) Co. Ltd., 2851 Pudong Avenue, Shanghai, 200129 China. Tel. ++86 21 58 71 32 22. Fax ++86 21 58 71 26 03 Email hzgroup@shcei.com.cn Web http://hz-shipgroup.cssc.net.cn/hz_en/index.php

More destroyer construction revealed in China

China is stepping up the expansion of its navy as the political tension with Taiwan continues, with another five to six guided-missile destroyers under construction. Defence analysts said the Dalian shipyard of China State Shipbuilding Corporation is building five more Type 052D destroyers. Analysts added they are a larger design variant compared to previous vessels with an extended helicopter decks on the stern. Analysts also said that at least one more destroyer is under construction at the CSSC-affiliated Jiangnan shipyard in Shanghai and that they would soon join the current fleet of 25 destroyers in the 052D and 052DL class. This follows the addition of 10 destroyers in 2019 and eight in 2021. The Chinese navy has not officially announced any of the construction plans. The military build-up under Chinese President Xi Jinping, who has not ruled out taking Taiwan by force, will only intensify pressure in the surrounding waters that include the Japanese-administered Senkaku Islands, which China also claims. The 052D destroyer is an updated version of the 052C, which was based on the U.S. Navy's Aegis destroyers. With advanced air defences, the 052D is equipped to protect aircraft carriers. If Xi launches an offensive to take Taiwan by force, the Chinese navy's three aircraft carriers will likely be deployed. The 052D would be among the destroyers expected to provide protection. The U.S. Navy has 11 carrier strike groups, with each featuring multiple destroyers and submarines. With its vertical-launch system capable of handling guided missiles, the 052D would also have the ability to carry out precision strikes in Taiwan. By 2031, the Chinese navy may have sufficient resources to boast five aircraft carriers and over 60 cruisers and destroyers, according to a report in July from the Center for Strategic and Budgetary Assessments, a defence institute in Washington.

CONTACT

China State Shipbuilding Corporation, No. 889, Zhonghua Road, Laoximen Street, Huangpu District, Shanghai 200011, China. Tel. ++86 21 3311 66 66. Email cssc@cssc.net.cn Web www.cssc.net.cn/ CSSC Jiangnan Shipbuilding (Group), No. 988 Changxing Jiangnan Avenue, Chongming District, Shanghai 201913, China. Tel. ++86 21 66 99 33 88. Web http://jnshipyard.cssc.net.cn/cms/document/show/7.html

SOUTH KOREA

Gas carrier contract signed for European customer

South Korea's Hyundai Mipo Dockyard said it has won an order for two liquefied petroleum gas (LPG) carriers. The order is worth about 184 billion won (US$136.6 million). The customer was not revealed, and given as only a European shipping company. They are scheduled to be delivered by March 31, 2025. No details of vessel size were revealed.

CONTACT

Hyundai Mipo Dockyard, 100, Bangeojinsunhwandoro, Dong-gu, Ulsan, South Korea. Tel. ++82 52 250 30 38. Web www.hmd.co.kr

Sail-powered Pacific island supply vessel contracted

An international climate protection project involving Germany's University of Applied Sciences Emden/Leer and the German society for international cooperation (GIZ) has ordered construction of one Pacific island supply vessel with sail propulsion for climate-neutral ship operations. The construction contract was signed with the ship design office Kostec Co. Ltd. and the shipyard Asia Shipbuilding in South Korea. The newbuilding of about 460gt/290dwt will be around 48m long and will be operated in the Marshall Islands. Due to the good local wind conditions, the ship will be equipped with a powerful sailing system that is easy to operate and capable of automation. The sail area of the three-master will be around 500sq.m. The power supply for the auxiliary operation is also to be provided by regenerative energy via photovoltaics, small wind turbines and a shaft generator. A small diesel engine will be used for manoeuvring and propulsion in unfavourable wind conditions. A conversion to coconut-based biodiesel should be possible in the future. In addition to the transport task, the ship should also be used for maritime training. Accommodation for six trainees is provided for this purpose, who are to be trained in particular for environment-friendly and climate-friendly ship operation. The construction contract is a milestone in the transitioning to low-carbon sea transport funding project of the International Climate Initiative and is intended to support the Government of the Marshall Islands in achieving its ambitious climate goals, said Professor Captain Michael Vahs from the University of Applied Sciences Emden/Leer, which coordinates the technological development as a project partner. SDC Ship Design & Consult from Hamburg was commissioned to create the tender design. The ship will be built under the Korean Register (KR) and Marshall Islands flag regulations. The project plan envisages the keel-laying in March 2023 and delivery including an intensive testing and training programme in autumn 2023. German shipping group Briese in Leer has been commissioned to provide further support in the construction and delivery process.

CONTACT

Asia Shipbuilding Co. Ltd, 239, Seongpo-ro, Sadeung-myeon, Geoje-si, Gyeongsangnam-do, South Korea. Tel. +82-55-638-0920. Fax +82-55-638-0922. Web www.komarine.com/en/companies/asia-shipbuilding/

TURKEY

Green ferries for Scandinavian traffic

Danish ferry company Molslinjen said it has placed an order for construction of two electric ferries with Cemre Shipyard in Turkey. The order was generated after Denmark's Ministry of Transport announced that Molslinjen had won two tenders to operate ferry sailings on the Alslinjen and Samsolinjen. The tenders had sought eco-friendly vessels to be operated on the services. Both shipyard orders, which are for identical vessels, are conditional on a final contract between Molslinjen and the Danish Ministry of Transport this autumn. Molslinjen has already operated both routes since autumn 2018. The two new electric ferries must be put into service as soon as possible. Alslinjen's ferry is to be put into operation by September 2024, while Samsolinjen's ferry is to have its first

trip in January 2025. Cemre Shipyard was chosen partly because of the yard's extensive experience in building electric double-ended ferries. "It has been a huge task for us to prepare this construction and be ready in a very troubled and uncertain world, but it will also be a very exciting process, where we will take a very big step towards a green conversion of Danish domestic ferry service", said Molslinjen's managing director, Mr Carsten Jensen. Molslinjen said it will not publish the financial value of the two contracts.

CONTACT

Cemre Shipyard (Cemre Marin Endustri), Hersek Mah. Tersaneler Cad. No: 4/1 Altınova, Yalova, Turkey. Tel. ++90 226 461 30 05. Email info@cemreshipyard.com Web www.cemreshipyard.com

NORTH AMERICA

UNITED STATES

Offshore wind vessels using British designs

U.S. offshore wind farm support company Atlantic Wind Transfers (AWT) said it has ordered six crew transfer vessels (CTV) from U.S. yard St. John's Ship Building. The vessels are designed by British company Chartwell Marine. AWT currently owns and operates two crew transfer vessels servicing the Block Island Wind Farm since 2016 and Coastal Virginia since December 2020. The first two vessels now ordered are expected to be delivered in Summer 2023 and January 2024. The vessels will be compliant with the U.S. Environmental Protection Agency's Tier 4 regulations, which rank among the most stringent emissions rules for marine engines in the world.

CONTACT

St. John's Ship Building, 560 Stokes Landing Road, Palatka, FL 32177, United States. Tel. ++1 386 328 60 54. Fax ++1 386 328 60 46. Email info@stjohns-ship.com Web www.stjohnsshipbuilding.com/contact

AFRICA

EGYPT

Newbuilding of a floating hotel to sail on the Nile

The Polish Register of Shipping (PRS) said it has an agreement with Wings AMA of Cairo to supervise construction of a floating hotel that will provide tourist cruises on the Nile. The vessel will be built by Egyptian shipyard Maasara. The PRS scope of work includes acceptance of technical documentation, supervision of the ship's construction and assignment of PRS class. The newly built Nile cruise hotel will be able to accommodate 86 passengers. It will feature 43 suites on four cabin decks, restaurants, a lounge bar and sundeck with a pool and bar and a lower deck with a spa and gym.

CONTACT

Maasara Shipyard, Corniche El Nil, Al Maasara, Cairo, Egypt. Tel. ++20 223 69 70 65. Email acship@arabcont.com Web www.arabcont.com/english/shipBuilding.aspx

INSIDE REPORT

Russian Government to finance development of ship equipment

The Russian government plans to allocate seven billion roubles (US$116.5 million) in 2022 to develop ship equipment manufacturing in Russia after western sanctions disrupted supplies to Russian shipyards. Russian shipyards have faced difficulties with

equipment supplies due to the failure of foreign companies to perform their delivery obligations during sanctions, Russian President Mr Vladimir Putin said at a Russian shipbuilding industry development meeting in August (New Ships 34/2022). Russian Prime Minister Mr Mikhail Mishustin said. "The imposed sanctions have disrupted collaborative ties in many industries, including shipbuilding, where difficulties have arisen regarding completing oceangoing tankers, gas carriers, as well as fishing, passenger and other vessels, primarily owing to the failure on the part of partners to fulfil their obligations and the impossibility of purchasing a number of components." The prime minister said the Russian Government will allocate seven billion roubles this year for designing, developing and manufacturing the most important ships' equipment. "This will allow us to prepare our own schematic designs for 40 types of the equipment that should render it possible to complete construction on over 100 ships in the coming years at a total cost of over 500 billion roubles," the prime minister said. Mishustin continued that an additional 22 billion roubles would be required in order to replace imported components with Russian-produced equipment. "It is important to use all means as efficiently as possible. Developing each piece of equipment must necessarily be completed through mass production with further implementation. I will request that the Industry Ministry maintain constant oversight of these operations," Mishustin said.

South Korean yards agree cooperation to develop green ship engines

South Korean yards Samsung Heavy Industries and Daewoo Shipbuilding & Marine Engineering have signed a cooperation agreement with Korean ship engine maker HSD Engine for the joint development of environment-friendly ship engines. The memorandum of understanding calls mainly for joint research on the development of low-pollution engines and other equipment, Daewoo Shipbuilding said. The three companies will also seek other business areas of cooperation, it added. There is an urgent need to develop next-generation, eco-friendly ship engines, though large vessels have been increasingly powered by LNG rather than fossil fuels.

DSME files lawsuit after strike cost it over US$400 million

South Korean yard Daewoo Shipbuilding & Marine Engineering (DSME) said it has filed a lawsuit seeking 47 billion won (US$35.3 million) against the leaders of a labour union who organised a long strike at the yard this year. Daewoo Shipbuilding said it had filed the suit in order to prevent the recurrence of strikes, and that it has limited the subjects of the suit to the leaders of the sub-contractor union. The yard suffered major disruption to shipbuilding in June and July from the 51-day strike. The move could renew friction between the yard and sub-contract workers, who occupied the shipbuilder's main dock to protest, they said, against wages falling behind those of regular workers. Daewoo previously said the dispute cost it more than US$400 million by mid-July. About 100 contract workers at Daewoo demanded a 30% wage rise in June. They accepted a 4.5% increase after occupying and stopping construction at Daewoo's main dock in a strike that lasted for 51 days. Contract workers said they were only paid about the minimum wage of 9,160 won per hour, even for critical work such as welding and even though many had more than 10 years' experience. Since the strike ended, Daewoo has foregone much of the South Korean shipbuilding industry's traditional summer holidays to make up for delayed construction.

U.S. seeking faster submarine construction times

The U.S. Navy is seeking a six-month reduction in the construction times of the Columbia-class ballistic nuclear missiles submarines to prevent operational gaps. The Navy is looking to reduce the build time of Columbia-class submarines (SSBN) from the current 84 months down to 78 months, in a bid to reduce the potential for gaps as the incumbent Ohio-class gradually leaves service. The Columbia class is the Navy's main acquisition priority and is scheduled to see its first submarine delivery in 2027, with the introduction into service of the future USS District of Columbia. The vessels, displacing 20,810 tonnes, will be the largest class of submarines ever built by the U.S. and are expected to remain in service until around 2080. Rear Admiral Scott Pappano, programme executive officer for strategic submarines at the Navy, said that the Columbia construction was the priority for the service. Pappano added that the current build schedule for the first-in-class was estimated to be 84 months, although efforts were underway to reduce that by up to six months. "We have worked on planning for a 78-month delivery schedule, we are behind that now and still at 84 months," he said. The Navy, alongside U.S. shipbuilder Electric Boat, began the conceptual designs for Columbia in 2007 as a replacement for the Ohio-class SSBNs. "We want at least 12 Columbia SSBNs," said Pappano, who added that it would "certainly reduce the risk" if a decision were taken to acquire an additional two hulls, which could be made towards the end of the decade. The programme is being developed at the same time as that of the British navy's Dreadnought SSBN programme, which will see four new submarines replace the Vanguard class currently in service which involves substantial U.S. construction support. In addition, the U.S., UK, and Australia plan a class of nuclear-powered hunter-killer submarines for Australia likely to be built in U.S. shipyards which could take capacity away from programmes such as the Columbia class. In 2021, Australia announced its decision to withdraw from its agreement with French shipbuilder Naval Group to build six conventionally powered submarines based on the nuclear-powered Barracuda design. Instead, Australia will seek to develop a class of nuclear-powered submarines that it said would be more suited to operating in the big expanses of the Asia-Pacific region. An 18-month study to determine the best ways to deliver a nuclear-powered submarine fleet to Australia through the AUKUS alliance will come to a conclusion at the end of the the first quarter of 2023.

Approval for new rota sail to cut ship fuel use

South Korean yard Hyundai Heavy Industries said has received design approval for a new type of rotor sail to provide wind-assisted propulsion for ships. Approval for the sail, called Hi-Rotor, has been received from classification society Korean Register of Shipping (KR). The rotor sail is a cylinder-shaped structure installed on the deck of a ship. A rotor sail can contribute to reducing fuel consumption and carbon emissions by about 6 to 8%, the yard said. Hyundai Heavy acquired a basic certificate for its in-house developed Hi-Rotor in December 2020 from the KR. The Hi-Rotor uses a reduction gear method for the mechanism that connects the electric motor with the rotor which aims for improved safety compared to the belt-type method of existing commercial products. This also increases the stability of the driving system compared to the existing commercial rota sails. Hyundai Heavy Industries plans to start demonstrating the sail on land from the second half of this year.

New concept for inland waterways vessel model

A new type of 15m-long model of an inland waterways vessel will enter service in Germany this year to test autonomous operation and electric power for river and canal ships. The vessel, named ELLA, is part of a project to test new designs coordinated by German development centre Entwicklungszentrum für Schiffstechnik und Transportsysteme e. V. (DST) in Duisburg. The vessel is being constructed by boatbuilder Uwe Feller in Wetter in the Ruhr region and should be completed in Autumn this year. The vessel will have battery/electric propulsion. It will be capable of full sailings and will be able to test data for the new hull form and automatic operation/manoeuvrability. The experience gained will be used to develop new designs of inland waterways vessels. ELLA will be used to test autonomous operations such as arriving/leaving berths plus lock and bridge transit in the restricted water space common in inland waterways sailings.

Fast conversion of ships to hydrogen propulsion

Norwegian energy company HAV Hydrogen is to launch a deck-based containerised hydrogen (H2) storage system for ships in order to speed up the commercial use of hydrogen as ship fuel. "The containerised, deck-based system is our response to shipowners who want a retrofit option that represents significantly lower cost and risk for vessels that have not already been prepared for a conventional retrofit installation below deck," said Kristian Osnes, managing director at HAV Hydrogen, a system integrator for marine fuel cell solutions. "For newbuild vessels it can be a solution that reduces risk and complexity for a technology that is new to most shipyards." HAV Hydrogen containerised concept is a stand-alone, scalable power supply where all support and safety systems as well as electrical power management are included. The concept is based on 200-kW hydrogen fuel cells modules and can be set up with 1,000 kW output from a standard 20-foot shipping container. By using larger containers, or combining several containers, larger capacity energy systems will also be available. Installed effect can be used for the main propulsion systems, or for additional power supply on board the vessel. Output effect will be dimensioned to provide optimal zero-emission power in desired operating situations, sailing patterns and vessel type. The containerised H2 concept is based on the hydrogen-based energy system developed in the FreeCO2ast project, in which a maritime hydrogen-based energy system with a liquid hydrogen tank below deck was developed. Earlier this year, the Norwegian Maritime Authority and DNV granted preliminary approval for the below deck system.

New Ships is published weekly by DVV Media Group GmbH
Address: Heidenkampsweg 73-79, D-20097 Hamburg/P.O. Box 105605, D-20038 Hamburg, Germany.
Managing Director: Martin Weber; Publishing Director: Manuel Bosch;
Editor-in-Chief (responsible): Kathrin Lau Tel +49 40 23714-137, e-mail kathrin.lau@dvvmedia.com;
Director Advertising Sales: Markus Wenzel, e-mail markus.wenzel@dvvmedia.com;
Subscription/Distribution: Markus Kukuk (Director Sales + Marketing); Additional digital subscriptions: lizenzen@dvvmedia.com; readers' and Subscribers' Service: Tel +49 40 23714-260, Fax +49 40 23714-243.
Annual subscription rates: Email version EUR 668 (Germany plus 19 % VAT). Cancellation is possible at the end of a billing period (12 months).
Internet: new-ships.net VAT ID. No. DE 811 230 424.