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MES delivers GOOD HORIZON, 182,000DWT type bulker

— First vessel of MES's Eco-Ship neo182BC —

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) completed and delivered a 182,000DWT type bulk carrier, GOOD HORIZON (HN: 1927) at its Chiba Works on March 30, 2017. This is the first vessel of neo182BC, the next-generation Eco-Ship design of Dunkerque-max Capesize bulk carrier, which features high fuel efficiency. The neo 182BC is the 4th Eco-Ship design in MES neo series, which follows the neo 66BC, neo 56BC and neo 60BC.

The vessel achieves over 182,000 deadweight tons with the Dunkerque-max dimension of overall length of 292 meters and breadth of 45 meters, and offers improved transportation efficiency with the adoption of a newly developed highly efficient hull form and adequate cargo holding capacity. The new form of bow and stern, highly efficient propellers and energy-saving devices minimize energy consumption.

Environmental protection is achieved through measures such as the ballast water treatment system based on the BWM Convention, the double-side skin fuel oil tanks according to the MARPOL regulation on fuel oil tank protection and low sulfur fuel oil tanks to satisfy the strengthened restriction for SO_x emission.

The main engine, MITSUI-MAN B&W 6S70ME-C9.5 Diesel Engine, complies with the MARPOL NO_x restriction (Tier-II) for exhaust gas emissions, and has superior fuel consumption over a wide range of output through optimal engine tunings.

Compliance with facility requirements for transit of the Panama Canal Third Set of Locks enhances the operational flexibility. Compliance with the SOLAS Noise Code contributes to improved crew working and living environments.

Principal particulars

Length (o.a):	292.00m
Breadth (molded):	44.98m
Depth (molded):	24.70m
DWT/GT:	182,342mt/94,818
Main Engine:	Mitsui-MAN B&W 6S70ME-C9.5 Diesel Engine x 1 unit
Service Speed:	abt. 15.0kt
Complement:	25
Registry:	Panama
Classification:	NK
Delivery:	March 30, 2017

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JMU completes mega container ship, NYK HAWK

Japan Marine United Corporation (JMU) delivered the NYK HAWK, a mega container ship, to Vista Ship Holding S.A. at its Kure Shipyard on March 31, 2017. This is the fifth of a series of 15 vessels, which are being newly constructed by JMU with its expertise and experience and based the data and information based on the actual operation of the Far East - Europe route.

The vessel can load containers in 18 rows and 11 tiers in the cargo holds, and 20 rows and nine tiers on the deck, and the total loading capacity is 14,000 TEUs (including 1,120 reefer containers.

The vessel achieves high propulsion efficiency through its sophisticated lower resistance hull form and JMU's original energy saving devices such as the Surf-Bulb® (Rudder Fin with Bulb) and L.V. fin (Low Viscous resistance Fin).

The vessel is designed to operate with minimum ballast water at loading conditions, due to the superior stability and hull strength. The hull construction incorporates the structural brittle crack arrest design for ultra large container ships which was developed by JMU and JFE Steel Corporation.

The main engine is a Diesel United Wartsila W9X82, which is electronically controlled with common rail system and environmentally friendly, contributing to reduced fuel oil consumption at various speed ranges.

Principal particulars

L (o.a.) x B (mld.) x D (mld.) x d (mld.):	364.15m x 50.6m x 29.5m x 15.75m
DWT/GT:	139,335t/144,285
Main engine:	WARTSILA W9X82
diesel x 1 unit	694
Speed:	22.5kt
Complement:	30
Classification:	NK

LNG fuel gas supply system

Sanoyas receives AIP from ABS for standard design

Sanoyas Shipbuilding Corporation and Seika Engineering Corporation have received an Approval in Principle (AIP) from the American Bureau of Shipping (ABS) under the IGF code* for the low pressure type LNG fuel gas supply system (FGSS) for medium speed engines, which was jointly developed by Sanoyas and Seika. Approval was granted for the standard design of the FGSS and standard construction of a fuel tank and vaporizer of the gas-fueled propulsion system for ships. Since the IMO regulation of SO_x emission in global sea areas is scheduled to be effective in 2020, LNG fuel will be widely accepted as a clean fuel. Therefore, Sanoyas will also target overseas customers for the FGSS.

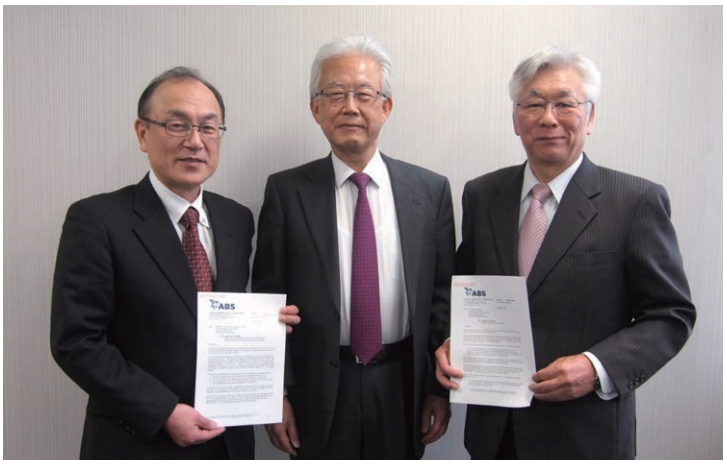

Photo shows Mr. Katsuji Fukutani, President of Seika Engineering Corporation (left) and Mr. Shuhei Yamamoto, Director & Senior Managing Executive Officer of Sanoyas Shipbuilding Corporation (right), receiving the AIP from Mr. Akira Akiyama, Vice President of ABS Japan.

Sanoyas has extensive experience in building vessels and LPG tanks together with piping systems, and they will help in the development of ship arrangements, bunker system design, gas supply and control systems, as well as monitoring and safety features. Seika also has superior experience in the construction of ultra-low temperature gas tanks with vacuum insulation, and the company has modified its own land-use equipment for marine applications based on the IGF code.

[IGF Code*: The International Code of Safety for Ships using Gases or other Low-flashpoint Fuels]

FGSS model specifications

Type of ship: Bulk carrier of 749GT for coastal service
Type of prime mover: 4 stroke, internal combustion engine
Fuel tanks: 2 sets with 41m^3 capacity
Horizontal and cylindrical type with vacuum insulation
Vaporizers: 2 sets with 400kg/h capacity
Vertical and cylindrical type with vaporizer for fuel tank pressurizing
Buffer tank: Vertical and cylindrical type

MHI completes 31,000GT car/passenger ferry, LAVENDER

Mitsubishi Heavy Industries, Ltd. (MHI) delivered the LAVENDER, a 31,000GT passenger and car ferry, to Shin Nihonkai Ferry Co., Ltd. on February 28, 2017. The ferry was designed and built at the Shimonoseki Shipyard & Machinery Works of MHI and is now plying the route between Niigata and Otaru in the Sea of Japan.

The LAVENDER was constructed with a new hull design and efficient propulsion system to increase the service speed and reduce the fuel consumption compared with previous vessels. The Vertical Stem Form, a newly-developed hull design, reduces the hull resistance, and the Proximity Twin-Screw System with shaft brackets, which achieves a closer clearance between the two screws, has improved the propulsion efficiency and reduced the hull resistance. Moreover, the vessel adopts the Mitsubishi Air Lubrication System (MALS) that covers the ship bottom with air bubbles to reduce frictional resistance between the hull and seawater.

The LAVENDER provides passengers with a heart-warming experience. The accommodations have bright and warm designs intended to evoke nostalgia in the passengers, and has an open-air bath and entrance hall built in the wellhole style. The space combines old and modern themes. The vessel's coastal route in the Sea of Japan gives views of very beautiful scenery at dusk on the terrace or the decks.

Principal particulars

L (o.a.) x L (b.p.) x B (mld.) x D (mld.) x d (mld.):	197.45m x 188.00m x 26.60m x 20.30m x 7.20m
Gross tonnage:	31,389
Speed, service:	25.0 kt
Cargo loading capacity	
Tracks:	150 units
Cars:	22 units
Complement	
Passengers:	600 persons (Coasting service)
Crew & others:	54 persons
Machinery	
Main diesel engines:	2 units
Main propeller (CPP):	2 units
Port of registry:	Otaru, Japan

Naikai completes passenger/car ferry, CALANTHE OKUSHIRI

Naikai Zosen Corporation completed construction of the CALANTHE OKUSHIRI, a 3,650GT passenger/car ferry, at the Setoda Shipyard for its owner Heart Land Ferry headquartered in Sapporo, Hokkaido, on April 20, 2017. The ferry is now plying between Esahi, Okushiri Island, and Setana in Hokkaido.

The CALANTHE OKUSHIRI is powered by two engines and two propellers and steered by twin rudders. The ferry hull form employs the bulbous bow and the ordinary catamaran type stern, which have improved propulsion performance and seaworthiness. Fin stabilizers are installed at the ship mid section to decrease rolling motion during navigation. Maneuverability is also increased by a bow thruster and the twin Schilling rudder with maximum rudder angle of 70 degrees effective at slow speed.

Cargo vehicles embark through the aft ramp door and are accommodated on the car decks. A starboard elevator allows the aged and the disabled to move from the vehicle decks to passenger cabin decks, achieving a barrier-free environment.

Principal particulars

Length (o.a.):	87.05m
Breadth (mld.):	15.00m
Depth (mld.):	9.60m
Draught:	4.00m (scantling, mlod.)
DWT/GT:	593t/3,631
Passenger/vehicle carrying capacity	
	460 passengers (Limited to six-hour travel)
	16 crew members
	18 8-ton trucks
	48 passenger cars
Main engine:	Daihatsu-6DKM-28e diesel x 2 units (two propellers)
MCO:	2,207kW x 750/240min^{-1} x 2 units
Speed, service:	about 17.5kt
Classification:	JG, Class II (Limited to coasting area)
Port of registry:	Wakkanai, Japan
Completion:	April 20, 2017

New JSEA President appointed

The 114th Annual General Meeting of the Japan Ship Exporters' Association (JSEA) selected 28 directors and two auditors in Tokyo on May 25, 2017. Subsequently, the 610th Directors' Meeting selected Mr. Shigeru Murayama, Chairman of the Board, Kawasaki Heavy Industries, Ltd., as the new JSEA President. Mr. Murayama's tenure will last the usual two years. Mr. Murayama will complete a two-year term as Chairman of the Shipbuilders' Association of Japan (SAJ) on June 20, 2017, having held the position since 2015.

Mr. Murayama, New JSEA President

At the same meeting, four Executive Vice Presidents of the JSEA were appointed: Mr. Kazuo Ohmori, Chairman of the Board, Sumitomo Corporation (reappointment); Mr. Yukito Higaki, President, Imabari Shipbuilding Co., Ltd. (reappointment); Mr. Yoshio Hinoh, Senior Executive Adviser, Sumitomo Heavy Industries, Ltd. (reappointment); and Mr. Hiroshi Sato, Executive Officer, ITOCHU Corporation (reappointment).

Standing officers of JSEA include Mr. Satoshi Ito, Senior Managing Director (reappointment) and Mr. Hidetsugu Ueki, Managing Director and Secretary General (reappointment).

To our readers

- Please notify us of any change in address by letter, telefax, or E-mail together with the old mailing label to ensure you continue to receive SEA-Japan.
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MHI-MME delivers regas boiler for FSRU to Hoegh/HHI

Further eco-protestions with NO_x reduction and higher heat efficiency

Mitsubishi Heavy Industries Marine Machinery & Engine Co., Ltd. (MHI-MME) delivered a regas boiler to Hyundai Heavy Industries Co. Ltd.(HHI) on January 30, 2017. The regas boiler was installed on a floating storage and regasification unit (FSRU) developed by Norwegian shipowner, Hoegh.

The FSRU is a marine floating facility that stores, regasifies, and transfers liquefied natural gas (LNG) to land pipelines. The regas boiler mounted on the FSRU provides the regasification unit with the required heat power (evaporation). As the regas boiler is the key equipment for the FSRU, MHI-MME has been chosen as a qualified supplier based on high evaluations of its technology, quality and reliability.

The boiler type for this project is a dual fuel (oil/gas) MAC type boiler MAC-90BF (evaporation capacity 90t/h), which has the reputation of high reliability and long life in the marine market. For this project, recovery of the exhaust gas heat from the regas boiler has improved the boiler efficiency by 12.5% from 82.5% to 95%. MHI-MME also achieved huge NO_x reduction to less than 100 mg/Nm^3, so is acceptable in severe environmental regulation areas. (*Only in the case of Gas Firing Mode.)

MHI-MME has delivered many main boilers (*dual fuel boiler), totalling more than 400 units. By applying this highly reliable technology to the dual fuel aux. boiler including regas boiler, MHI-MME will satisfy severe environmental regulations and attract many customers.

Changes to new company name

Mitsubishi Heavy Industries Marine Machinery and Engine Co., Ltd was renamed Mitsubishi Heavy Industries Marine Machinery and Equipment Co., Ltd. as of April 1, 2017, due to the business restructuring that separated the marine diesel engine business. (Refer to related article entitled "MHI-MME's Marine Engine Division and Kobe Diesel Co. integrated" on Page 2 of SEA-Japan No. 382)

NOR-SHIPPING held successfully

The Japan Ship Exporters' Association (JSEA) took part in the 26th NOR-SHIPPING 2017 international maritime exhibition (organized by Norges Varemesse) in cooperation with The Shipbuilders' Association of Japan (SAJ) and with support from The Nippon Foundation. The exhibition was held from Tuesday May 30 through Friday June 2 at the Lillestrom Exhibition Centre in Norway. According to its organizer, 870 exhibitors from 75 countries participated in NOR-SHIPPING 2017, which attracted 15,500 visitors.

The JSEA set up a national stand in cooperation with the Japan Ship Machinery and Equipment Association (JSMEA) as in previous years. Under this arrangement of national participation, individual Japanese exhibitors could engage in aggressive public relations activities in their own booths. European and American shipowners and other guests who visited the booths were impressed with the unique technologies of Japanese shipbuilding centered on new-generation ships and technical features exemplified by new hull forms and high fuel efficiency, and development of Eco-ships and environmentally friendly ships satisfying the tightened rules on CO_2, NO_x and SO_x discharges. Japanese exhibitors had successful exchanges with the many visitors, succeeding in promotion of Japanese ship exports and enhancing recognition of the Japanese presence in the maritime world.

Seminar (below)

A sponsored seminar was held on Wednesday May 31, which included an invited lecture entitled "The Dry Bulk Market - On a recovery track?" given by Mr. Bjorn Bodding, senior analyst at Clarksons Platou AS, and presentations by three Japanese exhibitors, Japan Marine United, Kawasaki Heavy Industries and Mitsubishi Heavy Industries, which gave presentations on "RoPax Ferry with Enhanced Propulsion System", "Approach to the Expansion of Usage of Gas as a Marine Fuel" and "Application of SO_x Scrubber to Large Size Container Ship", respectively. The seminar had almost 100 participants including Norwegian Ambassador Erling Rimestad to Japan.

Opening Ceremony

The opening ceremony of the Japanese stand was held on May 30 with the participation of senior executives of the JSEA and JSMEA member companies, presided over by Toshio Kunikata, Japanese Ambassador to Norway (center), JSEA president Shigeru Murayama (left) and JSMEA chairman Motoyoshi Nakashima (right). The NOR-SHIPPING 2017 Official Opening Conference was held in the conference room of Thon Hotel Arena adjoining the exhibition site in the presence of His Royal Highness Crown Prince Haakon, as well as Ambassador Kunikata and Mr. Murayama.

Japan Stand (above)

The JSEA stand occupied a 220m² space in the closest position (Hall B) to the main entrance, set up in collaboration with the neighboring JSMEA stand (occupying another 220m²), with 10 association members as exhibitors. Every booth featured 46-inch liquid crystal monitor TV sets and photograph panels to display the latest models of typical hull forms designed by the exhibitors. In addition, a promotional video recording edited and produced with the support of The Nippon Foundation was shown on two 49-inch liquid crystal monitor TV sets installed within the stand behind the bar counter.

SUSHI luncheon at Japanese stand

Party (left)

A party jointly hosted by Toshio Kunikata, Japanese Ambassador to Norway, Mrs. Kunikata, and JSEA president Shigeru Murayama and Mrs. Murayama was held in the evening of May 31, and was attended by JSEA vice president Hinoh and Mrs. Hinoh, and JSEA vice president Sato. This event was attended by 617 people including officials of the co-hosting organizations. Major shipowners and ship brokers in Norway and other Western countries, the financial community, the press, the Norwegian government and foreign embassies in Norway were represented. Ambassador Kunikata delivered a welcome speech.

TAMPA TRIUMPH

Owner: Cypress Maritime, S.A.
Builder: Imabari Shipbuilding Co., Ltd.
Ship type: Container carrier
L (o.a.) x B x D: 365.9m x 51.2m x 29.9m
DWT/GT: 146,792t/150,709
Main engine: MAN B&W 11S90ME-C10.5 diesel x 1 unit
Speed, service: 23.0kt
Classification: LR
Completion: March 31, 2017

OLGA V

Owner: Sealink Navigation Corp.
Builder: Namura Shipbuilding Co., Ltd.
Hull No.: 409
Ship type: Bulk carrier
L (o.a.) x B x D x d: 228.99m x 32.26m x 20.10m x 14.50m
DWT/GT: 81,645t/44,425
Main engine: MAN B&W 6S60ME-C8.2 diesel x 1 unit
Speed, service: about 14.10kt
Classification: LR
Complement: 25
Delivery: March 1, 2017

LOWLANDS LIGHT

Owner: CLdN Bulk S.A.
Builder: Oshima Shipbuilding Co., Ltd.
Hull No.: 10821
Ship type: Bulk carrier
L (o.a.) x B x D x d (ext.): 228.36m x 36.50m x 20.39m x 14.343m
DWT/GT: 87,605t/48,172
Main engine: Kawasaki-MAN B&W 6S60ME-C8.2 diesel x 1 unit
Speed, service: 14.3kt
Registry: Singapore
Classification: DNV GL
Completion: January 13, 2017

COSMIC POLARIS

Builder: Shin Kurushima Dockyard Co., Ltd./Shin Kochi Jyuko Co., Ltd.
Hull No.: S-5923
Ship type: Cargo ship
L (o.a.) x B x D x d: 114.00m x 21.20m x 14.05m x 9.10m
DWT/GT: 13,568t/9,929
Main engine: B&W 6S35MC7.1 diesel x 1 unit
Speed, service: 12.45kt
Registry: Panama
Classification: NK
Completion: January 27, 2017

SAND TOPIĆ

Owner: Sumitomo Corporation
Builder: Onomichi Dockyard Co., Ltd.
Hull No.: 720
Ship type: Bulk carrier
L (o.a.) x B x D x d (ext.): 199.90m x 32.26m x 18.60m x 13.00m
DWT/GT: 60,155t/34,905
Main engine: MAN B&W 6S50ME-B9.3 diesel x 1 unit
Speed, service: 14.5kt
Registry: Marshall Islands
Classification: LR
Completion: February 20, 2017

TENWA MARU

Builder: Tsuneishi Shipbuilding Co., Ltd.
Hull No.: 1575
Ship type: Bulk carrier
L (o.a.) x B x D: 189.99m x 32.26m x 18.00m
DWT/GT: 57,763t/32,431
Main engine: MAN-B&W 6S50ME-C 8.2 diesel x 1 unit
Speed, service: 14.5kt
Registry: Marshall Islands
Classification: DNV GL
Completion: January 27, 2017