SEA-Japan

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JMU completes mega container ship, NYK BLUE JAY

Japan Marine United Corporation (JMU) delivered NYK BLUE JAY, a mega container ship, to Rindou Ship Holding S.A. at its Kure Shipyard on February 22, 2016.

This is the first vessel of a series of 15 vessels, which are being newly constructed by JMU based on its expertise and experience, and on data and information obtained from 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, with a total capacity of 14,000TEUs (including 1,120 reefers).

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 under loading conditions, due to the superior stability and hull strength. The hull construction uses the structural brittle crack arrest design for ultra large container ships developed by JMU and JFE Steel Corporation.

The main engine is a Diesel United Wartsila W9X82, which is electronically controlled with the common rail system and contributes to reducing the fuel oil consumption in various speed ranges.

Principal particulars

Length (o.a.):	364.15m
Breadth (mld):	50.6m
Depth (mld):	29.5m
Draught (mld):	15.75m
DWT:	139,335t
GT:	144,285
Main engine:	WARTSILA W9X82 diesel x 1 unit
Speed:	22.5kt
Complement:	30
Classification:	NK

For further information please contact:
Website: http://www.jsea.or.jp
JAPAN SHIP EXPORTERS' ASSOCIATION
15-12, Toranomon 1-chome, Minato-ku, Tokyo 105-0001 Tel: (03) 6206-1661 Fax: (03) 3597-7800 E-Mail: postmaster@jsea.or.jp

Imabari delivers Aero-Citadel bulker mounted with Japan's first EGCS SO_x scrubber

Imabari Shipbuilding Co., Ltd. has become the first shipyard in Japan to successfully install a SO_x Scrubber on a bulk carrier. The SO_x Scrubber, manufactured by Fuji Electric Co., Ltd., has been installed on the NADESHIKO, an 84,000DWT bulk carrier, which was completed on March 24, 2016 for a domestic ship owner.

This installation is a joint research support project together with Class NK called the "Main Engine Exhaust Gas Cleaning System (EGCS) installation on operating newbuilding vessel, and closed loop practicing test." The Fuji Electric SO_x Scrubber adopts the cyclone system and can be installed without changing the dimensions of the superstructure thanks to its compact size.

The main engine EGCS is a system that reduces SO_x in exhaust gas even if high sulfur content fuel is used. Installation is necessary to satisfy IMO EGCS guidelines and to obtain approval from relevant authorities. After its completion, the vessel will conduct data collection and verification on the system, maintenance and operation.

Aero-Citadel bulker NADESHIKO

Sulfur Oxides (SO_x) emission control regulations of the IMO require the sulfur content upper limit to be 0.1% and have already been implemented since 2015 in the Emission Control Area (ECA). The regulation will be tightened in 2020 or by 2025 outside the ECA, and the present upper limit of 3.5% will become 0.5%.

SO_x scrubber manufactured by Fuji Electric Co., Ltd.

Imabari Shipbuilding Co., Ltd. is now positively involved in developing such environmental measures, and will emphasize safer and environment-friendly shipbuilding.

Kawasaki delivers 82,200m³ LPG carrier, SUMIRE GAS

Kawasaki Heavy Industries, Ltd. delivered the LPG carrier SUMIRE GAS (HN: 1721) to Astomos Energy Corporation on March 30, 2016. This vessel is the third 82,200m³ SEA-Arrow LPG carrier developed by Kawasaki.

This vessel design expanded the cargo section of the conventional 80,000m³ LPG carrier hull to increase cargo tank capacity to 82,200m³. Despite the expansion, the propulsion performance has also been improved. This vessel adopts Kawasaki's uniquely developed bow shape called SEA-Arrow which significantly improves propulsion performance by minimizing bow wave resistance.

The main engine powering the vessel is an energy-efficient, electronically-controlled, ultra-long stroke, two-stroke low speed diesel engine. In addition, the Kawasaki rudder bulb system with fins (RBS-F), and the semi-duct system with contra fins (SDS-F) contribute to reducing fuel consumption.

Four independent cargo tanks are installed in the cargo holds for carrying liquefied petroleum gas. The tanks are designed to provide optimal thermal insulation and absorb low-temperature contraction. The cargo tanks are made with special cryogenic steel for loading LPG with a minimum temperature of -46°C. The tanks are wrapped in urethane foam for thermal insulation. The vessel is designed to be fully compliant with the New Panamax requirements and will be able to navigate the new Panama Canal once it opens this year.

Principal particulars

L (o.a.) x L (b.p) x B x D x d:	229.90m x 226.00m x 37.20m x 21.00m x 11.20m
DWT/GT:	54,243t/46,796
Hold capacity:	82,416m³
Main engine:	Kawasaki-MAN B&W 7S60ME-C8.2 diesel x 1 unit
Complement:	30
Registry:	Panama
Classification:	ABS
Delivery:	March 30, 2016

MHI completes 986GT training vessel, SHINYO MARU

Mitsubishi Heavy Industries, Ltd. (MHI) completed construction of the training vessel SHINYO MARU (HN:1193) and delivered the vessel to Tokyo University of Marine Science and Technology at the port of Tokyo on March 31, 2016.

This vessel was built for the contemporary requirements of Tokyo University of Marine Science and Technology and also other universities and institutes, which desire to promote education and research in a wide range of fields including fisheries, ocean resources, marine biology, and marine vessel operations. This ship is the fourth SHINYO MARU since the completion of the first ship in 1937.

The SHINYO MARU is an on-the-job ocean-going training facility for the next-generation of undergraduate and graduate students. The students will become highly-trained experts educated with modern knowledge and skill in fisheries including trawling, squid jigging and long-line tuna fishing, as well as qualifications in marine-work, and will be important in the future of fisheries and the oceans not only of Japan but of the world.

As the ocean-going research facility, the SHINYO MARU is equipped with up-to-date instruments with advanced capabilities, such as underwater structure survey using a 2-D seismic reflection profiling seafloor survey using acoustics. The extensive equipment will allow leading studies on the oceans including scientific investigations on resources and marine life.

Principal particulars

Length (o.a.):	64.55m
Length (b.p.):	58.00m
Breadth:	12.10m
Depth:	7.00m (from superstructure deck)
Design draft:	4.50m
GT (Domestic):	986t
Main propulsion system	
	Electric motor 800kW x 2 units
	Controllable pitch propeller x 2 units
Speed, service:	12kt
Cruising range:	about 7,000n.m.
Complement:	76
Classification:	JG

MES achieves 3.28 mil. HP marine diesel engine production for FY2015

Mitsui Engineering and Shipbuilding Co., Ltd. (MES) has announced production volume of 181 MAN B&W low-speed diesel engines manufactured at the Tamano Works Machinery Factory in fiscal 2015, representing 3.28 million horsepower (results in the previous fiscal year were 181 engines and 3.54 million horsepower).

Since MES formed a technical tie-up with the Denmark-based B&W (now known as MAN Diesel & Turbo) on diesel engines in 1926, it has built a production track record as one of the world's leading manufacturers, with cumulative horsepower production of over 90 million horsepower. MES plans production volume of 3.8 million horsepower during the current fiscal year, and expects increases due to the production of super-large engines for large container vessels.

In addition, a four-cylinder test engine with 500-mm diameter cylinders has been installed at the Tamano Works Machinery Factory, and MES is currently developing products aimed at the Tier III NO_x restrictions advocated by the International Maritime Organization (IMO) as well as products that will lead to reduced CO_2 emissions.

Moreover, to develop a framework that better meets the demands of the market moving forward, MES plans to make capital investments in super-large engines and gas-fired diesel engines at the Tamano Works Machinery Factory, as well as equipment that accommodates Tier III NO_x restrictions.

MES will leverage its track record of orders for gas-fuelled diesel engines to expand orders moving forward, while continuing its focus on receiving orders for a wide range of engines for bulk carriers, tankers, car carriers, LPG carriers and other vessels.

Production record of Mitsui-MAN B&W diesel engines

FY2008	214 units, 4.7 mil. HP
FY2009	218 units, 4.37 mil. HP
FY2010	221 units, 4.18 mil. HP
FY2011	220 units, 4.31 mil. HP
FY2012	187 units, 3.83 mil. HP
FY2013	164 units, 3.57 mil. HP
FY2014	181 units, 3.54 mil. HP
FY2015	181 units, 3.28 mil. HP
FY2016	180 units, 3.8 mil. HP

*Figures for FY2016 are planned.

Sanoyas completes Handy Cape bulker, CIELO D'EUROPA

Sanoyas Shipbuilding Corporation completed the 117,000DWT Handy Cape bulk carrier, CIELO D'EUROPA, which had been ordered by Mitsui & Co., Ltd. for d'Amico Dry Limited, at the Mizushima Shipyard and delivered on March 17, 2016.

This is the second vessel of the new version of Sanoyas 117,000DWT Handy Cape bulk carrier. The vessel with large deadweight and cargo hold capacity has improved fuel consumption by 10% compared with the previous version of the 120,000DWT type.

For improvement of propulsion efficiency, the vessel is equipped with a low-speed, ultra-long-stroke, electronically controlled main engine combined with a high-efficiency propeller and associated energy saving devices such as the Sanoyas developed "STF" (Sanoyas-Tandem-Fin (patent): max. 6% energy saving) on the stern shell and highly efficient appendages on the rudder, which also contribute to the reduction of CO_2 emissions.

Various eco-friendly features such as the main engine compliant with the NO_x emission Tier II limit for prevention of air pollution, and The Ballast Water Treatment System and fuel oil tank protection for the protection of the marine environment, are incorporated. In addition, independent holding tanks for accommodation discharges, dirty hold bilge and rainwater on upper deck are provided.

For efficient cargo handling, cargo hatches are widened as much as possible and have the same width from No. 1 to No. 7 hatch. Dedicated fresh water tanks are provided for storing hold washing water generated by a large-capacity fresh water generator. For improvement of the vessel's maintenance, access trunks are arranged to make it possible to gain access from upper deck to double bottom even under the laden condition.

Principal particulars

L (o.a.) x B x D x d:	245.00m x 43.00m x 21.60m x 15.626m
DWT/GT:	117,378t/63,087
Cargo hold capacity:	135,644m^3
Main engine:	MAN B&W 6G60ME-C9.2 diesel x 1 unit
MCO:	11,010kW
Speed, service:	about 14.5kt
Complement:	25
Registry:	Panama
Classification:	ABS
Delivery:	March 17, 2016

Naikai completes car carrier, TOYO MARU NO 3, for domestic owner

Naikai Zosen Corporation completed construction of the TOYO MARU NO 3, a RO-RO-type car carrier with a carrying capacity of 630 units, for the owner Santoku Senpaku Co., Ltd. of Osaka, Japan, at its Setoda Works on February 24, 2016. The carrier is now engaged in coastal car transport service between Hiroshima, Uno, Sakaide, Kinuura, and Chiba.

The car carrier has a stern shore ramp at the portside. The cargo vehicles embark, or disembark, through the shore ramp and travel to each cargo bay on the car decks via inboard ramps. The bow and stern thrusters are installed to improve ship maneuverability in a narrow port, so the vessel can enter and leave safely and smoothly. Similarly, berthing and unberthing can be easier.

The upper structure of the ship hull is raised for the boarding gate with a higher opening to allow trucks to pass smoothly. The new ship hull form has superior speed performance, which has been developed based on a theoretical calculation technique, and hull performance has also been confirmed with tests in a water tank.

Principal particulars

Length (o.a.):	125.00m
Breadth:	20.60m
Depth:	14.36/11.80 at upper and boarding decks
Draught:	5.55m
DWT/GT:	2,888t/3,990
Transport capacity	
Passenger cars:	631
Trucks (medium size):	7
Trucks (large size):	6
Crew members:	14
Main engine:	Hitachi Zosen-MAN B&W 6S35MC-C9.2 diesel x 1 unit
MCO:	5,220kW x 167.0min^{-1}
NCO:	4,437kW x 158.2min^{-1}
Speed, service:	18.0kt
Classification:	NK (Limited to coastal areas)

JSEA to Participate in SMM 2016 International Maritime Exhibition

The Japan Ship Exporters' Association (JSEA) will participate in the SMM 2016 (Shipbuilding, Machinery & Marine Technology - International Trade Fair Hamburg), the biggest maritime exhibition in Europe, to be organized by Hamburg Messe und Congress GmbH at Hamburg Messe for four days from September 6 through 9, 2016. JSEA will exhibit in the event for the second time, following the last SMM.

JSEA intends to emphasize the technical excellence of the Japanese shipbuilding industry with the main focus on new ship types, eco-ships and other fuel-efficient vessels of the new generation developed by its members participating in this event, which will enhance the presence of Japanese shipbuilders in the single world market.

Above photo shows the JSEA's first participation in SMM 2014

JSEA will have a 74m² area for its booth to display audiovisual images and photographic panels focusing on the most popular and newly developed ship types, products and technological features of each exhibiting member of JSEA. Ship models will also be displayed with displays of promotional images on liquid crystal monitor screens or other attractive media, all of which will stress the excellence of Japanese shipbuilding.

Participating shipbuilders

Japan Marine United Corporation
Namura Shipbuilding Co., Ltd.
Oshima Shipbuilding Co., Ltd.
Sanoyas Shipbuilding Corporation

25th POSIDONIA 2016 held successfully

The Japan Ship Exporters' Association (JSEA) participated in the 25th International Shipping Exhibition Posidonia 2016 held at the Metropolitan Expo Centre in Greece for five days from June 6 to 10. 22,366 people visited Posidonia 2016 that attracted 1,825 companies and organizations from 90 countries. The number of visitors was a 14 percent increase compared with the previous record-breaking attendance.

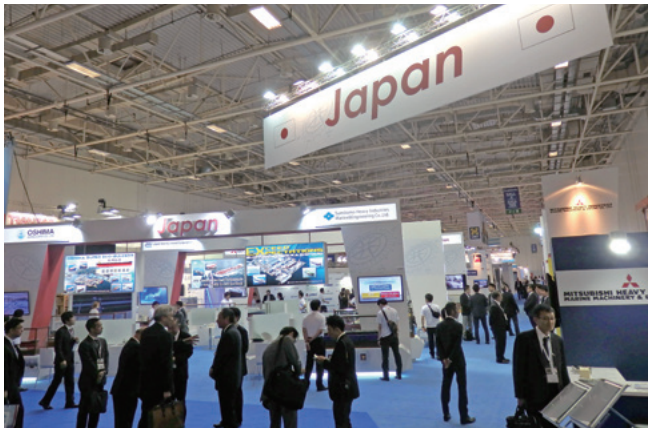
Mr. A. Tsipras (right) welcomed by K. Tsukuda (left) to Japan pavilion. Mr. Theodore Vokos, Executive Director of Posidonia Exhibitions SA, seen at the center.

Mr. Alexis Tsipras, the Greek Prime Minister, together with guests was welcomed to the Japan pavilion by Mr. Masuo Nishibayashi, Japanese Ambassador to Greece, Mr. Kazuo Tsukuda, JSEA president, and Mr. Motoyoshi Nakashima, chairman of the Japan Ship Machinery & Equipment Association (JSMEA).

On June 7, the Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT), and JSMEA jointly held the Japan-Posidonia 2016 Seminar - Introduction to Japanese advanced technologies for efficiency, safety and environment with over 180 participants focused on shipowners in Greece.

In the evening of June 8, Japanese Ambassador and Mrs. Nishibayashi, and JSEA president and Mrs. Tsukuda co-sponsored a reception at the Athenaeum Inter-Continental Hotel with 897 guests including government officials and participants involved with the shipping and shipbuilding industries.

The JSEA consisting of 10 Japanese shipbuilders participated with the financial support of The Nippon Foundation and in cooperation with The Shipbuilders' Association of Japan. The JSEA and the JSMEA contributed to the national exhibition stand presenting Japanese shipbuilding technology. The expertise of each shipbuilder was demonstrated, and expert delegates from the shipbuilders received visitors to provide further explanations. PR videotapes of 10 firms were digitized for a 120-inch screen with the support of the Nippon Foundation. This collaborative exhibition procedure was a great success in demonstrating the entire shipbuilding industry.



AUDREY-TRACY

Owner: Lavender Maritime S.A.
Builder: Namura Shipbuilding Co., Ltd.
Hull No.: 389
Ship type: Bulk carrier
L (o.a.) x B x D x d:179.96m x 30.00m x 14.05m x 9.80m
DWT/GT: 34,874t/21,545
Main engine: MAN B&W 6S46ME-B8.3 diesel x 1 unit
Speed, service: about 14.0kt
Classification: NK
Complement: 24
Delivery: February 18, 2016

ADA

Builder: Oshima Shipbuilding Co., Ltd.
Hull No.: 10778
Ship type: Bulk carrier
L (o.a.) x B x D x d (ext.): 228.99m x 32.26m x 20.01m x 14.486m
DWT/GT: 81,841t/43729
Main engine: Kawasaki-MAN B&W 6S60ME-C8.2 diesel x 1 unit
Speed, service: 14.30kt
Registry: Malta
Classification: DNV GL
Completion: February 9, 2016

PRIMERO

Owner: Lundquist Shipping Company Limited
Builder: Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
Hull No.: 1383
Ship type: Tanker
L (b.p.) x B x D: 224.64m x 42.00m x 21.45m
DWT/GT: 106,200t/57,312
Main engine: Mitsui MAN B&W 6S60ME-C8 diesel x 1 unit
Speed, service: about 15.0kt
Classification: LR
Completion: February 26, 2016

AFRICAN SPOONBILL

Owner: Cardinal Maritime S.A.
Builder: Onomichi Dockyard Co., Ltd.
Hull No.: 707
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: 60,033t/34,806
Main engine: MAN B&W 6S50ME-B9.3 diesel x 1 unit
Speed, service: 14.5kt
Registry: Panama
Classification: NK
Completion: February 23, 2016

GLOBAL HIGHWAY

Owner: Kawasaki Kisen Kaish, Ltd.
Builder: Shin Kurushima Dockyard Co., Ltd.
Hull No.: S-5875
Ship type: Car carrier
L (o.a.) x B x D x d (ext.): 199.96m x 38.00m x 14.65m x 10.227m
DWT/GT: 20,686t/75,036
Main engine: 7UEC60LSE-Eco-A2 diesel x 1 unit
Speed, service: about 20.0kt
Classification: NK
Completion: March 16, 2016

EPIC BORINQUEN

Owner: Epic Borinquen Pte. Ltd.
Builder: Sasaki Shipbuilding Co., Ltd.
Hull No.: 691
Ship type: LPG carrier
L (o.a.) x B x D x d (ext.): 113.08m x 19.00m x 9.10m x 6.80m
DWT/GT: 7,182t/6,220
Main engine: Hitachi MAN B&W 5L35MC Mk6.1 diesel x 1 unit
Output: 2,750kW x 178min^{-1} (100%)
Speed, service: 13.5kt
Registry: Singapore
Classification: BV
Completion: February 29, 2016