No. 358 Apr. - May 2013

MES completes 56,000DWT type bulk carrier OCEAN SPLENDOR

—150th ship of "Mitsui 56" series—

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) completed and delivered the 56,000DWT type bulk carrier OCEAN SPLENDOR (HN: 1841) at its Tamano Works on January 17, 2013 to Mingtai Navigation Co., Ltd., Taiwan.

This vessel is a handy-max type bulk carrier of 56,000DWT with a large cargo hold capacity of over 70,000m³ and marks the 150th deliveries of the series, which is widely called "Mitsui 56" and is highly appreciated in the market. More than 170 units of this series have been ordered from MES.

- 1. The vessel is designed in accordance with IACS Common Structural Rules. As a result, structural safety and operational flexibility are improved.
 - The vessel is designed to have the following same features as "Mitsui 56":
 - (a) Good manageable size of 56,000DWT at the summer draft.
 - (b) Length and draft in consideration for accessibility to world main ports
 - (c) Low fuel oil consumption based on good propulsive performance
- 2. The vessel has five cargo holds and four cranes for handling cargo.
- 3. In order to load various kinds of cargoes, the vessel is designed to have enough strength of tank top of cargo holds and to be suitable for efficient cargo handling.
 - (a) The size of hatch opening is the largest for this type

of vessel in terms of both length and width.

- (b) Each cargo hold has a sufficient clear length in order to load long pipes.
- (c) Cargo holds are well strengthened to load heavy cargo such as hot coils, etc.
- 4. The main engine is MITSUI-MAN B&W diesel engine 6S50MC-C, which is a light, compact and high output engine complying with MARPOL NO_x restriction for exhaust gas. It has good enough power margin to provide a high degree of flexibility (at normal service output = 75% maximum continuous output) and the lowest fuel oil consumption will be realized by the optimum matching at normal service output.
- 5. Ballast water can be changed during navigation for protection of marine environment.
- 6. Generator engines also comply with MARPOL NO_{x} restriction for exhaust gas.

Principal Particulars

L (o.a.) x L (b.p.) x B x D: 189.99m x 182.00m x 32.25m x 18.10m

DWT/GT: 56,108t/31,756 Main engine: MITSUI-MAN B&W diesel 6S50MC-C x 1 unit

MCO: 9,480kW x 127.0rpm
Speed, service: about 14.5kt
Complement: 24
Classification: NK
Registry: Panama





For further information please contact:

Website: http://www.jsea.or.jp

JAPAN SHIP EXPORTERS' ASSOCIATION

JMU completes Aframax tanker KAIMON MARU

Japan Marine United Corporation (JMU) has delivered the Aframax tanker, KAIMON MARU (HN: 3335), to JX Tanker Company Limited at the Kure Shipyard as the first vessel delivered by JMU.

JMU was created by management integration of two companies, Universal Shipbuilding Corporation and IHI Marine United Inc. on January 1, 2013.

The KAIMON MARU is one of the largest classes of Aframax tankers with a cargo tank capacity of 142,000m³ and deadweight of 120,000 tons, and JMU devoted its sophisticated shipbuilding technology and experience to this vessel.

For the sake of the highest propulsion performance, the L.V. Fin (Low Viscous resistance Fin) and A.T. Fin (Additional Thrusting Fin) are provided.

The cargo spaces consists of six pairs of cargo oil tanks and one pair of



slop tanks and are segregated into three groups. Three steam turbine-driven cargo oil pumps with a self-stripping system (AUS), three cargo segregation systems, and cargo oil heating systems are adopted. A vapor emission control system (VECS) is used in compliance with the US Coast Guard requirements.

Principal particulars

L (o.a.) x B x D: about 246.80m x 44.40m x 22.00m

DWT/GT: about 120,000t/66,000 Cargo oil tank: about 142,000m³ Main engine: DU-WARTSILA 6RTA58T-D diesel x 1 unit

MCR: 12,210kW x 94.5rpm Classification: NK Completion: January 11, 2013

MHI completes 6,500-vehicle-transport carrier TOSCA

The TOSCA is a pure car and truck carrier (PCTC) capable of carrying 6,500 units for delivery to the owner, Wallstraits Shipping Pte. Ltd. This carrier was designed and built by the Nagasaki Shipyard & Machinery Works of Mitsubishi Heavy Industries, Ltd. (MHI) and delivered to the owner on January 18. 2013. The vessel has now entered worldwide ser-

vice.

The single screw and the eco-engine propulsion system are adopted for the vessel to save fuel oil consumption, reducing CO₂ emissions. Furthermore, a ballast water treatment system is installed on the vessel for the environmental conservation.

Cargo holds are constructed with center pillars (except the aft part) for

optimum flexibility during loading and unloading vehicles. Twelve car decks (including the tank top) are available for the carriage of 6,459 cars (RT-43).

Four of these decks (Nos. 2, 4, 6 and 8) are liftable decks, and their deckpanel sections can be lifted up and down by a panel-lifter car. Internal transit between the decks is achieved via 14 movable hold ramps and one fixed hold ramp.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d: 199.99m x 192.00m x 32.26m x 36.02m x 11.00m

DWT/GT: 22,585t/61,106 Speed, service: about 20.0kt Vehicle loading capacity: 6,459 cars (RT-43)

Main engine: 7UEC60LSII-Eco diesel x 1 unit

MCR: 13,240kW x 105min⁻¹
Complement: 32
Registry: Singapore
Classification: DNV



Namura completes post-Panamax bulk carrier RTM DIAS

Namura Shipbuilding Co., Ltd. delivered RTM DIAS, an 89,892 DWT bulk carrier, to Rio Tinto Shipping Limited at its Imari Shipyard & Works on January 11, 2013.

This is the first vessel of the 89,000DWT type post-Panamax bulk carrier equipped with a ballast water treatment system.

The vessel is designed with a wide beam and shallow draft, which can achieve cargo loading more efficiently, mainly to carry bauxite to an Australian alumina refinery.

The ship hull is designed and constructed in accordance with the Common Structural Rules (CSR). Improved propulsion performance and fuel oil saving are attained by adoption of the Namura flow Control Fins (NCF) and rudder fins, developed by Namura, and a high-efficiency propeller. Corners of the superstructure are flattened to reduce the air resistance.

The vessel has water ballast pumps of large capacity to speed cargo loading operations. IMO PSPC-WBT is



applied for corrosion protection of the water ballast tanks to increase safety of the vessel. A fixed hold cleaning machine is fitted under each cargo hatch cover to reduce cleaning work.

The electronically controlled main engine, which complies with MARPOL NO_x limitation tier II, is adopted.

Principal particulars

Length: 234.87m

Breadth: 38.00m Depth: 20.00mDraught: 13.90m DWT/GT: 89,892t/51,057 Main engine: Mitsubishi 6UEC60LSII-Eco diesel x 1 unit Speed, service: about 14.0kt 26 Complement: Classification: LR United Kingdom Registry:

Sumitomo completes 156,000DWT crude oil carrier KARVOUNIS

Sumitomo Heavy Industries Marine & Engineering Co., Ltd. has completed construction of the 156,000DWT crude oil carrier, KARVOUNIS, for delivery to Pagonda Shipping S.A. at its Yokosuka Shipyard in 2013.

The main particulars of the vessel have been optimized to obtain maximum competitiveness in the market both for the owner and the charterer.

The vessel is equipped with various energy saving devices of Sumitomo's patented technology such

as SILD (Pat.), NBS propeller (Pat.), HLES Rudder (Pat.) and SUP Fins (Pat.) as well as the smooth surface AF paint and PBCF in order to achieve the highest fuel saving and maneuverability.

Furthermore, as the features for environmental protection, the main engine and the generator engines comply with NO_x emission control Tier II.

Principal Particulars:

 Length (o.a.):
 274.00m

 Breadth:
 48.00m

 Depth:
 22.80m

 DWT:
 about 156,000t

 GT:
 about 80,400

 Main engine:
 Mitsui MAN B&W

 6S70MC-C8 diesel x 1 unit

Speed, service: About 15.4kt
Classification: LR
Completion: March 22, 2013



Naikai completes 19,000DWT black and white petroleum product tanker

Naikai Zosen Corporation completed construction of the 19,000DWT black and white petroleum product tanker, KIRANA SANTYA, for Kona Maritime S.A. at the Setoda Works on February 28, 2013. The tanker is now servicing transport of light and heavy oil products in the Southeast Asia area.

The tanker has a broad beam and shallow draught for waters with navigational draught limited to about 7.13m. Cargo oil tanks including slop tanks are segregated into 12 tanks, and construction of double side shells and bottom are employed as an eco-friendly countermeasure to protect cargo tanks from damage and prevent leakage of cargo oil. Moreover, fuel oil tanks are protected by double-side shells and bottom to prevent fuel leakage.



The total cargo tank capacity is about 23,900 cubic meters, and cargo oil handling is achieved by three electric-drive pumps with a capacity of 600 cubic meters per hour.

This wide beam and shallow draught tanker has a superior hull form and a large rudder developed by considering propulsion performance and maneuverability. Consequently, even in shallow ports, the tanker can maintain a steady course and make smooth turns. In addition, the vessel can navigate on an even keel, which can be attained by alternately shifting its own fuel oil between bunker tanks installed at the bow and stern areas.

Principal particulars

 $L\,(o.a.)\,x\,L\,(b.p.)\,x\,B\,x\,D\,x\,d;\\ 160.00m\,x\,152.00m\,x\,27.90m\\ x\,11.20m\,x\,7.124m$

DWT/GT: 19,000t/13,201 Cargo oil tank capacity: about 23,900m³ Main engine: Hitachi-MAN B&W 7S35MC7.1 diesel x 1

MCR: 4,900kW x 170min⁻¹
NCR: 4,165kW x 161 min⁻¹
Speed, service: about 13.5kt
Complement: 25
Classification: NK
Registry: Panama
Completion: February 28, 2013

Shin Kurushima completes 11,483GT RO/RO ship for Nitto Kaiun

Shin Kurushima Dockyard Co., Ltd. completed construction of the 11,483GT RO/RO ship, NISSEI-MARU, for Nitto Kaiun Corporation of the Fujitrans Corporation group headquartered in Yokohama at the Onishi Shipyard in January 2013.

This vehicle carrier was built as a replacement for the predecessor, NISSEI, owned by the Nitto Kaiun, and was designed using the RO/RO system for handling vehicles including trailer chassis to achieve a greater loading capacity than that of the NISSEI.

Based on the design concept "Smart Ship," the NISSEI-MARU uses advanced technologies suitable for the next generation of eco-friendly ships with a low load to the environment.

Special technologies include adoption of an electronically controlled main engine, use of electric drives for the RO/RO equipment, windlasses, and mooring winches (not using the

hydraulic drives), installation of solar panels (electric power generated is supplied to accommodation quarters via storage cells), and provision of the power connector from the shore for cargo handling convenience.

 $\begin{aligned} & Principal \ particulars \\ & L \ (o.a.) \ x \ L \ (b.p.) \ x \ B \ x \ D \ x \ d: 169.98m \end{aligned}$

x 160.00m x 26.00m x 24.60m x 7.167m

DWT/GT: 7,200t/11,483

Main engine: Mitsui MAN B&W 8S50MEC8 diesel x 1 unit

MCR: 13,280kW (18,056ps) x 127rpm Speed, service: 21.2kt

Classification: NK (Limited to coastal area)

Completion: January 2013

Loading capacity

Passenger cars: 804 units Trailer chassis: 113 units



JSEA participates in NOR-SHIPPING 2013



The 24th NOR-SHIPPING 2013 (The 24th International Shipping Exhibition) will take place at the Lillestrom Exhibition Centre in Lillestrom for four days from June 4 through 7. This event is organized by the Norway Trade Fairs (NORGES VAREMESSE) and is sponsored by the Norwegian Shipowners' Association and organizations related to the maritime industry. The Japan Ship Exporters' Association consisting of 10

Japanese shipbuilders will participate in the exhibition with the financial support of The Nippon Foundation and in cooperation with The Shipbuilders' Association of Japan. JSEA will use a 280m² exhibition area where Japanese shipbuilding technology will be presented.

Particular ship hull forms and newly developed ship designs will be introduced with the liquid crystal display (LCD) system and other displays.

advanced technologies. The details of

lished by the Japan Ship Exporters'
Association (JSEA). The publication
(210mm wide x 285mm tall, four color
and 64 pages) outlines the latest shipbuilding achievements, both ships and

ships and shipbuilding technology are compiled in a CD-ROM for convenient access.

Major contents include current status of Japan shipbuilding industry, recent trends in ship technology, new completions, new shipbuilding technology, navigation systems, energy-saving equipment and systems, main engines, software for shipbuilding rationalization, and building and repairing facilities, which have been introduced in the last two years.

JSEA will also hold a reception at the Radisson Blu Scandinavia Hotel in Oslo on June 5 hosted by the Japanese ambassador to Norway and the President of JSEA (by invitation only).

Exhibitors:

Imabari Shipbuilding Co., Ltd.
Japan Marine United Corporation
Kawasaki Heavy Industries, Ltd.
Mitsubishi Heavy Industries, Ltd.
Mitsui Engineering & Shipbuilding
Co., Ltd.

Namura Shipbuilding Co., Ltd.
Oshima Shipbuilding Co., Ltd.
Sanoyas Shipbuilding Corporation
Shin Kurushima Dockyard Co., Ltd.
Sumitomo Heavy Industries Marine
& Engineering Co., Ltd.

JSEA moves to new office

The Japan Ship Exporters' Association (JSEA) moved to a new office building on April 8, 2013.

New address:

Japan Ship Exporters' Association 3F, The Japan Gas Association Building, 15-12, Toranomon 1-chome, Minato-ku, Tokyo 105-0001, Japan

Phone No.:

03-6206-1661 (Domestic) +81-3-6206-1661 (International)

Fax No.:

03-3597-7800 (Domestic) +81-3-3597-7800 (International)

E-mail address:

postmaster@jsea.or.jp (No change)

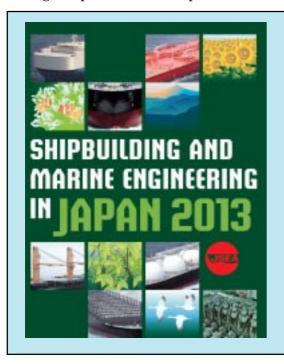
Website address:

http://www.jsea.or.jp (No change)



Shipbuilding and Marine Engineering in Japan 2013 published

Shipbuilding and Marine Engineering in Japan 2013 has been pub-



MARATHA PRUDENCE

Owner: Sea Link Llc

Builder: The Hakodate Dock Co., Ltd.

Hull No.: 855

Ship type: Bulk carrier

L (o.a.) x B x D x d: 175.5m x 29.4m x

 $13.7 \text{m} \times 9.6 \text{m}$

DWT/GT: 32,070t/19,785

Main engine: Mitsubishi 6UEC45LSE

diesel x 1 unit Speed, service: 14.4kt Classification: NK Complement: 24

Completion: November 27, 2012



MORNING CINDY

Owner: Lucia Navigation S.A. Builder: Imabari Shipbuilding Co.,

Ltd.

Ship type: Pure car carrier

 $L\left(o.a.\right)$ x B x D: 199.97m x 32.26m x

34.48m

DWT/GT: 18,954t/59,432

Main engine: Kobe Diesel-Mitsubishi

UE diesel x 1 unit Speed, service: 20.0kt Classification: NK Completion:



NBA REMBRANDT

Owner: NYK Bulkship (Atlantic) NV Builder: Oshima Shipbuilding Co.,

Ltd.

Hull No.: 10701

Ship type: Bulk carrier

L (o.a.) x B x D x d (ext.): 254.99m x 43.00m x 19.39m x 13.599m

DWT/GT: 107,236t/58,592

Main engine: Mitsubishi

6UEC60LSII diesel x 1 unit Speed, service: 14.10kt

Registry: VALLETTA Classification: NK

Completion: December 19, 2012



JUBILANT GLORY

Owners: Chiba Shipping Co., Ltd./ Kashima Naviera S.A.

Builder: Sanoyas Shipbuilding Corp.

Hull No.: 1312

Ship type: Bulk carrier

L (o.a.) L (b.p) x B x D x d: 245.00m x 238.00m x 43.00m x 21.65m x

15.404m

DWT/GT: 119.406t/64,647

Cargo hold capacity: 135,645m³

(Grain)

Main engine: MAN B&W 6S60MC-C

diesel x 1 unit MCR: 13,560kW

Speed, service: about 14.6kt

Classification: NK Registry: Panama

Delivery: January 17, 2013



FELICIA K

Owner: Sea Wealth Navigation S.A. Builder: Kanda Shipbuilding Co., Ltd.

Hull No.: 533

Ship type: Open hatch cargo ship L (o.a.) \times B \times D \times d (ext.): 181.1m \times 28.40m \times 14.25m \times 10.034m

DWT/GT: 32,813t/20,992

Main engine: 6UEC45LSE diesel x 1 $\,$

unit

Speed, service: 14.15kt Registry: Panama Classification: NK

Completion: November 29, 2012



EISHO

Owner: MI-DAS LINE S.A.

Builder: Sasebo Heavy Industries Co.,

Ltd.

Hull No.: S808

Ship type: Bulk carrier

L (o.a.) x B x D: 225.00m x 32.26m x

19.80m

DWT/GT: 74,930t/40,334

Main engine: B&W 7S50MC-C8 die-

sel x 1 unit

Speed, service: 14.5kt

Classification: ABS
Completion: December 11, 2012

