



The Ship of the Year 2007 award given to BRASIL MARU, advanced iron ore carrier



The Japan Society of Naval Architects and Ocean Engineers has awarded its 18th Ship of The Year 2007 Award to the BRASIL MARU for the large cargo vessel category, the SHIGE MARU for the small cargoship category, and Dr. KAIYO for the special purpose vessel category. These vessels were selected from 10 vessels considered for the respective awards of six categories classed by ship types. The commendation ceremony took place at the Nippon Kaiun Club in Tokyo on July 25, 2008.

The BRASIL MARU, which was built by Mitsui Engineering & Shipbuilding Co., Ltd. for Tamou Line, employs the most advanced ship technology and is the largest class among iron ore carriers. For transport of a massive volume of iron ore with heavy specific gravity, the hull form with sufficient capacity against heavy load has been developed, and the fatigue strength of welded parts of shells have been increased greatly using ultrasonic impact treat-

ment (UIT) for longer life of the hull.

Due to transport capacity of the 320,000DWT class, the transport efficiency of the vessel has increased while decreasing the load on the environment because of less emission of CO₂, NO_x and SO_x per navigation. This responds to the request in the times.

BRASIL MARU

Ship type: Bulk carrier

Shipowner: Tamou Line

Shipbuilder: Mitsui Engineering & Shipbuilding Co., Ltd.

L (b.p.) x B x D: 325.00m x 60.00m x 28.13m

Gross tonnage: 160,774

Speed, service: 15.0kt

Main engine: MITSUI MAN-B 7S80MC-C (23,640kW) x
1 unit

Cargo: Iron ore (327,180MT)

(Continued on page 2)



For further information please contact:

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

JAPAN SHIP EXPORTERS' ASSOCIATION

2-2, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 Tel: (03) 5425-9671 Fax: (03) 5425-9674 E-Mail: postmaster@jsea.or.jp

MHI completes 147,798m³ Moss type LNG Carrier ALTO ACRUX

Mitsubishi Heavy Industries, Ltd. (MHI) completed construction of the ALTO ACRUX (HN: 2219), a Moss type LNG carrier with a tank capacity of 147,798m³, and delivered to Kanto Leasing Limited at the Nagasaki Shipyard & Machinery Works on Mar. 31, 2008.

The ship is designed to be compatible with Japanese, Korean and Taiwanese unloading terminals as well as Australian, South East and Middle East loading terminals.

Main features are as follows. High propulsive performance and good maneuverability with less vibration level are achieved by the refined hull form and optimum design of propeller. Double side fuel oil tanks are adopted for purpose of environmental protection. Design fatigue life of 40 years based on North Atlantic wave data is applied to essential areas of hull structure and cargo tanks. Distributed control system is provided to



carry out the monitoring and control of the principal machinery and cargo handling, including main turbine, main boilers, feed water pumps, generator power management, boil-off gas treatment, auto ballast exchange, gas compressors, cargo pumps, spray pumps, and auxiliary machines.
Principal Particulars

L (o.a.) x L (b.p.) x B x D x d: 288.0m x 274.0m x 49.0m x 26.8m x 11.27m
Gross tonnage: 122,361
Cargo tank capacity: 147,798m³
Main engine: Mitsubishi Marine Steam Turbine MS32-2
Output: 22,930kW x 76rpm
Speed, service: 19.5kt
Classification: LR

(Continued from page 1)

SHIGE MARU

The SHIGE MARU was constructed as a verification ship in the Super-Eco Ship Phase II. Propelled with a super marine gas turbine, the ship was tested with electric-drive propulsion and two contra-rotating pod propulsion systems. The vessel also uses a manpower-saving system as the next generation coastal ship.

Ship type: Coastal tanker

Shipowner: Eiyu Kaiun Co., Ltd.

Shipbuilder: Niigata Shipbuilding & Repair, Inc.

L (b.p.) x B x D x d: 92.32m x 16.00m x 8.50m x 6.4m

Gross tonnage: 4,289

Deadweight: 4,999t

Speed, service: 14.9kt

Main engine: Wartsila 9L20-1,650kW x 2 units (23,640kW)

Cargoes: Oil products (white oil) 6,127m³



DR. KAIYO

The DR. KAIYO is designed to collect floating refuse and spilt oil from the sea surface, and has facilities to estimate water quality. Versatile functions are provided for efficient refuse and oil recovery, ensuring the protection of the marine environment.

Ship type: Marine maintenance vessels (refuse and oil skimming ship)

Ship owner: The Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

Shipbuilder: IHI AMTEC Co., Ltd.

L (b.p.) x B x D x d: 31.0m x 11.6m x 4.2m x 2.64m

Gross tonnage: 196t

Speed: 15.4kt

Main engine: MTU4000M60 diesel (1,320kW) x 2 units

Cargo accommodated: Refuse and oils



3,600GT passenger/car ferry CYPRIA SOYA completed

Naikai Zosen Corporation has completed construction of the CYPRIA SOYA (HN: 729), a 3,600GT passenger/car ferry for Heart Land Ferry Company headquartered in Hokkaido, Japan, at the Setoda Works.

The ferry has the two-shaft and two-rudder propulsion and maneuvering system, and cars are accommodated on the continuous car decks by loading through the stern ramp door. The bulbous bow and split stern are employed for increased propulsion efficiency.

Fin stabilizers are used for decreasing ship rolling, and the bow thruster and Schilling rudder are used to facilitate the berthing and unberthing work. Barrier-free equipment for the senior and/or disabled passengers can easily move with lifts that connect directly between car decks, passenger boarding deck, and cabin entrance.

The cabin interior will offer very comfortable space to the passengers



with coordination of colors and furnishings based on the concept of "memory in the travel" and "travel with affectionate nature."

Principal particular

L (o.a.) L (b.p) B x D x d: 95.70m x 85.00m x 15.00m x 9.95m x 4.00m
DWT/GT: 623t/3,555

Car carrying capacity:

8t trucks only: 21 units

Passenger car only: 55 units

Passengers:

600 people within 3hrs/5hrs

475 people within 6hrs

Crew: 18

Main engine: Daihatsu 8DKM-28 diesel x 2 units (twin propellers)

MCR: 2,350kW x 750/215 min⁻¹

NCR: 2,000 kW x 710/204 min⁻¹ (85%)

Speed, service: 19.6kt

Classification: Japanese Government

Completion: Apr. 22, 2008

NAMURA completes Capesize bulk carrier, OCEAN COMET

Namura Shipbuilding Co., Ltd. has delivered the OCEAN COMET (HN: 276), a 176,943 DWT Capesize bulk carrier, to Fair Wind Navigation S.A. at its Imari Shipyard & Works on March 19, 2008.

The vessel has nine cargo holds, nine hatches, five pairs of water ballast tanks, and fore peak tank, aft peak tank and the No.6 cargo holds that can be used as water ballast tank.

The Nos. 2, 4 and 8 cargo holds are adapted for the port-use ballast tank to cope with various ship conditions, such as trim adjustment, air draft etc., at loading and unloading ports.

The vessel is equipped with the B&W 6S70MC (Mark VI) type main engine mounted with the alpha lubricating system that reduces cylinder oil consumption.

The Namura flow Control Fin

(NCF) and high-efficiency N-PAI NHV type propeller are also used for improved propulsion performance and fuel oil saving.

The water ballast system of the vessel has main and separate stripping lines that enable de-ballasting and stripping simultaneously. Water ballast lines are arranged in the duct keel at the center part of the double bottom for preventing damage or corrosion and permitting easy maintenance.

Principal particulars

L (o.a.) x L (b.p.) x B (mld) x D (mld) x d (mld): 288.97m x 279.00m x 45.00m x 24.40m x 17.93m

DWT/GT: 176,943t/89,603T

Main engine: MAN B&W 6S70MC Mark VI x 1 unit

M.C.R.: 16,860 kW x 91.0rpm

Speed, service: 14.6kt

Complement: 25

Classification: NK

Flag: Panama

Completion: March 19, 2008



Koyo completes 6,350TEU container carrier, MOL PRESENCE for Southern Route Maritime S.A.

Koyo Dockyard Co., Ltd. of Imabari Group delivered the MOL PRESENCE, a 6,350TEU container carrier, on March 19, 2008 to Southern Route Maritime S.A. The MOL PRESENCE is the 11th of 6,350TEU type container carrier series operated by Mitsui O.S.K. Lines (MOL), and the 6,350TEU type is the main container carrier series of Koyo Dockyard.

The vessel can carry 2,912TEUs in container holds and 3,438TEUs on the upper deck. The holds can stow nine tiers (including two tier of high cube containers) and 14 rows, and the upper deck can stack seven tiers and 16 rows of containers.

Each hatch coaming has three hatch cover panels. 18 sets of lashing bridges are installed for on-deck containers. The vessel can load 1,084 units of 45ft containers on the upper deck.

Total of 500 plugs for air cooling type reefer containers are arranged on

the upper deck. Moreover, container holds can carry dangerous goods including class 1 (explosives). The vessel hull strength was designed by considering various container handling operation.

Fuel oil tanks are arranged below the water line to prevent oil flow caused by damage of a tug boat or berth fenders, etc. The fuel oil overflow piping is arranged in the 2nd deck passage space to avoid oil flow on the upper deck.

The crew can access the bosun store, steering gear room, and container holds through the second deck passage only.

The turbo generator is equipped for economical operation, and the propeller boss cap fin is used to improve pro-



pulsion efficiency. The adoption of the stern tube air sealing device prevents marine oil pollution.

Principal particulars

L (o.a.) x B x D x d: 293.18m x 40.00m x 24.30m x 14.00m

DWT/GT: 72,912t / 71,776

Main engine: MITSUBISHI MAN B&W 11K98MC (Mark VI) x 1 unit

MCR: 62,920kW x 94.0rpm

Speed, service: 26.0kt

Complement: 25

Classification: NK

Flag: Panama

Completion: Mar. 19, 2008

Universal Shipbuilding delivers 150t bollard pull AHTSV

Universal Shipbuilding Corporation delivered the 150t bollard pull anchor handling tug and supply vessel (AHTSV), TURQUOISE (HN: 0028) to CH Offshore Ltd, a Singaporean owner, at its Keihin Shipyard, Yokohama on May 30, 2008.

The vessel is the fourth vessel of the MX-A150 series, designed and constructed by Universal and ten more vessels will be constructed and delivered within two years.

The vessel is designed to provide services for offshore oil and gas industries, such as anchor handling for drilling rigs, towing rigs, transporting various cargoes including fuel oil, drilling water, fresh water, mud, dry bulk cement, foods, etc. The vessel also carries 12 passengers.

Universal has developed a new type of AHTSV (MX-A180DH) with double hull, and bollard pull capacity of more than 180t with main engine horse

power of 2 x 6,000kW under new rules and regulations including MARPOL ANNEX I. The first vessel of this new type is scheduled to be delivered in December 2010.

Principal Particulars of MX-A150
L (o.a.) x L (b.p.) x B x D x d: 64.0m x 60.0m x 16.4m x 7.2m x 6.0m

DWT/GT: approx.2,440MT/2,400T

Bollard pull capacity: approx. 150t

Main engine: Wartsila 9L32 diesel

(4,500kW at 750rpm) x 2 units

AHT Winch: 300 ton line pull with wire of 76mm diameter x 2,500m long

Dynamic positioning system:

Converteam DP2

Trial speed: 14.7kt

Complement: 30

Class: ABS

Completion: May 30, 2008



Oshima completes 4,300,000 ft³ wooden chip carrier, HOKUETSU IBIS

Oshima Shipbuilding Co., Ltd. delivered the 4,300,000 cubic feet type wooden chip carrier, HOKUETSU IBIS, on Apr. 23, 2008. The vessel has the maximum level deadweight and capacity of wooden chip carriers and attains excellent fuel cost performance.

The vessel consists of six cargo holds of single hull construction with double bottom tanks and side hopper tanks, and the vessel has a large capacity unloading system consisting of three deck cranes of about 325 t/h per unit as well as four hoppers and conveyors.

The resistance in waves is reduced by adopting the no sponson bow, and the hold capacity is increased. The vessel also has several new technical special features for improvement of the propulsive performance and more economical transportation.

The Seaworthy Bow demonstrates excellent seaworthiness contributing



to improvement of speed performance in rough weather conditions (about 5% power saving compared with the ordinary bulbous bow). The Flipper Fins, a set of fins of the simplest structure, is used to improve propulsive efficiency for fuel oil saving.

Principal Particulars
 Length, o.a.: 210.00m
 Length, b.p.: 205.00m
 Breadth, mld.: 36.50m

Depth, mld.: 22.95m
 Summer draft, mld.: 11.50m
 DWT/GT: 60,527t/49,166
 Loading capacity: 122,153m³
 (4,313,796 ft³)
 Main engine: KAWASAKI MAN
 B&W 7S50MC-C diesel x 1 unit
 MCR: 9,670kW at 125.0rpm
 Speed, service: 14.5kt
 Classification: NK
 Completion: April 23, 2008

Diesel engine production marked record-high 4.52 mil. HP

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) attained output horsepower of the Mitsui-MAN B&W slow speed marine diesel engine manufactured at its Machinery Factory of Tamano Works amounting to the record of 4.52 million horse power (as 200 units) in fiscal 2007, which exceeds the previous record of 4.01 million horse power (as 195 units)

Since the technical agreement with B&W, Denmark (presently MAN Diesel) in 1926 on the production of die-

sel engines, MES has been producing engines with excellent performance records as a leading engine manufacturer of the world. The annual production this fiscal year is expected to reach 4.74 million horse power, the highest ever.

To cope with the growing demand of marine diesel engines, MES extended its production factory adopting assembly line production (tact system) at the north side of the existing No. 1 machinery factory in the

Tamano Works in November 2005 to increase its production capacity to 4 mil-

lion horse power. Furthermore, the extension of heavy machinery Shop C was also completed in March 2007 also in Tamano Works to establish annual production capacity of 5 million horse power.

MES is also strengthening the after-service sector of the engine business including the newly developed Marine Diesel Engine Performance/Life Expectancy Diagnosis System of marine diesel engine (product names e-GICS and e-GICSW) to which the communications satellite and internet are fully utilized, and is committed to ensure high quality customer service.

Outputs of Diesel Engine Horsepower over the past 5 years are shown below.

Fiscal year 2003: 2.57 million HP by 125 engines
 Fiscal year 2004: 3.48 million HP by 177 engines
 Fiscal year 2005: 3.52 million HP by 186 engines
 Fiscal year 2006: 4.01 million HP by 195 engines
 Fiscal year 2007: 4.52 million HP by 200 engines
 Fiscal year 2008: 4.74 million HP by 215 engines
 (Expected for 2008)



NAVIOS ARMONIA

Owner: MI-DAS LINE S.A.
 Builder: Kawasaki Shipbuilding Corporation
 Hull No.: 1607
 Ship Type: Bulk carrier
 L (o.a.) x L (b.p.) x B x D x d: 189.90m x 185.00m x 32.26m x 17.80m x 12.50m
 DWT/GT: 55,100t/31,000
 Main engine: Kawasaki-MAN B&W 6S50MC-C Mark VII diesel x 1 unit
 MCR: 8,200kW x 110rpm
 Speed, service: 15.9
 Complement: 25
 Classification: NK
 Completion: June 6, 2008

**TORM SALTHOLM**

Owner: Solar Oceania Corp.
 Builder: Sanoyas Hishino Meisho Corporation
 Hull No.: 1271
 Ship Type: Bulk carrier
 L (o.a.) x L (b.p.) x B x D x d: 229.00m x 223.00m x 32.24m x 20.20m x 14.555m
 DWT/GT: 83,685t/44,146
 Cargo hold capacity: 96,152m³ (grain)
 Main engine: MAN B&W 6S60MC-C diesel x 1 unit
 MCR: 10,740kW
 Speed, service: abt. 14.0kt
 Complement: 25
 Classification: NK
 Completion: May 28, 2008

**CHALLENGE POINT**

Owner: Seven Ocean Lines, S.A.
 Builder: Shin Kurushima Dockyard Co., Ltd.
 Hull No.: 5453
 Ship type: Product tanker
 L (o.a.) x B x D x d: 179.88m x 32.20m x 18.70m x 10.922m
 DWT/GT: 45,997t/28,049
 Main engine: B&W 6S50MC-C Mark VII diesel x 1 unit
 Speed, service: 15.1kt
 Classification: NK
 Completion: Apr. 17, 2008

**SUNNY LEO**

Owner: Solar Shipping and Trading S.A.
 Builder: Niigata Shipbuilding & Repair, Inc.
 Hull No.: 0027
 Ship Type: Chemical tanker
 L (o.a.) x L (b.p.) x B x D x d: 109.61m x 103.00m x 17.20m x 8.90m x 6.65m
 DWT/GT: 6,717.55t/4,550
 Main engine: Hitachi Zosen-MAN B&W 5L35MC Mark VI diesel x 1 unit
 Output: 3,250 kW x 210rpm
 Speed (trial Max): 14.67kt
 Classification: NK
 Completion: Mar. 26, 2008

**AZUL LEGENDA**

Owner: Funada Kaiun Co., Ltd.
 Builder: Imabari Shipbuilding Co., Ltd./Saijo Shipyard
 Hull No.: 8053
 Ship type: Bulk carrier
 L (o.a.) x L (b.p.) x B x D x d: 299.94m x 291.40m x 50.00m x 24.50m x 18.083m
 DWT/GT: 206,331t/104,719
 Main engine: MAN B&W 6S70MC-C diesel x 1 unit
 MCR: 18,630kW x 91rpm
 Speed, service: 15.1kt
 Complement: 25
 Classification: NK
 Completion: Mar. 18, 2008

**CHALLENGE PEARL**

Owner: Ocean Line Maritime S.A.
 Builder: Onomichi Dockyard Co., Ltd.
 Hull No.: 532
 Ship type: Product tanker
 L (o.a.) x L (b.p.) x B x D x d: 182.50m x 172.00m x 32.20m x 18.10m x 12.60m
 DWT/GT: 47,451t/26,897
 Main engine: MITSUI B&W 6S50MC Mark VI diesel x 1 unit
 Output: 8,580kW x 127rpm
 Speed, trial max.: 16.116kt
 Classification: NK
 Completion: June 10, 2008

