

MHI completes membrane type LNG Carrier, SERI BALQIS



Mitsubishi Heavy Industries, Ltd. (MHI) completed construction of the SERI BALQIS (HN:2224), a No.96 Membrane type LNG carrier with a tank capacity of 157,610m³, and delivered the vessel to MISC Berhad at the Nagasaki Shipyard & Machinery Works on Mar. 31, 2009.

The main features are as follows:

- Electric propulsion motors with the dual fuel engine (DFE) plant system that has better fuel oil efficiency are applied as the main propulsion system.
- LNG tanks employ the GTT No.96E 2F membrane tank system.
- High propulsive performance is achieved by the refined hull form using CFD (computational fluid dynamics) and optimum dimensions for the membrane tank system.
- The distributed control system is provided for monitoring and controlling the principal machinery and equip-

ment of the main engine as well as cargo handling areas from the centralized control room. Thus, easy operation is attained.

Principal Particulars

Length (o.a.):	294.6m
Length (b.p.):	281.6m
Breadth:	46.5m
Depth:	25.8m
Design draft:	11.15m
Gross tonnage:	107,633
Cargo tank capacity:	157,610m ³
Main generator engine:	Dual fuel engines 11,400 kW x 3 units and 5,700 kW x 1 unit
Main engine:	Propulsion motors x 2 units
Propulsion output:	24,750kW x 78rpm
Speed, service:	19.5kt
Classification:	BV



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

CAPE GARLAND 177,000DWT new Cape size Dunkerque-max type bulk carrier delivered

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) completed and delivered the 177,000DWT type bulk carrier CAPE GARLAND (HN: 1693) at its Chiba Works on Jan. 30, 2009.

This ship is the newly designed Cape-size bulk carrier of Dunkerque-max type. Effective cargo handling, easy maintenance of cargo holds and structural safety are obtained by adopting a double-side skin for cargo hold construction.

The other features are as follows: In spite of cargo holds bounded by a double-side skin according to SOLAS, the cargo capacity of the ship is equivalent to that of conventional Cape-size bulk carriers with holds bounded by a single-side skin. The ship was designed in accordance with IACS URS25 so that loading flexibility has been secured and structural safety has been improved. Suitable arrangement of means of access required by SOLAS enables safe and effective inspection in cargo holds and ballast tanks. Improvement of safety has been achieved by installation of a forecastle and by application of new requirements con-

cerning reserve buoyancy to the ship. One separate settling and service tank for Low Sulphur H.F.O. and one for usual H.F.O. are provided for convenience during changeover between Low Sulphur H.F.O. and usual H.F.O. in the SO_x emission control area (SECA). Low Sulphur D.O. tank and usual D.O. tank are provided for the same reason.

The main engine of the ship is a MITSUI-MAN B&W diesel engine 6S70MC-C, which satisfies IMO Environment Standards for Exhaust Gas and achieves improvement of fuel saving by optimum matching at normal service output. An electronic controlled cylinder oiling system is applied to the main engine achieving operational cost saving. Ballasting and de-ballasting work can be effi-



ciently performed by separation of the topside tank and bottom side tank.

Principal particulars

L (o.a) x L (b.p.) B x D x d: 292.00m x 282.00m x 44.98m x 24.70m x 17.95m
 DWT/GT: 178,394t (at draft 17.95m)/ 92,278
 Main engine: MITSUI-MAN B&W 6S70MC-C diesel x 1 unit
 MCR: 18,660 kW x 91rpm
 Speed: 15.3kt
 Complement: 28
 Classification: NK
 Delivery: Jan. 30, 2009

Kawasaki delivers bulk carrier, CALYPSO COLOSSUS, to "K" Line

Kawasaki Shipbuilding Corporation has completed construction of the 55,000DWT bulk carrier, CALYPSO COLOSSUS (HN: 1610), to "K" Line Pte. Ltd. at the Sakaide Shipyard. The carrier is the 23rd of the 55,000DWT series.

The carrier is the flush deck type with forecastle and has five cargo holds. The shape of the cargo holds is suitable for carrying cargoes such as cereals, coal, ore, and steel products. The carrier employs the smooth bow form having low resistance against

waves, which was developed for this series.

Four 30t deck cranes are installed between the hatch covers on the ship centerline. This facilitates cargo-handling work at a port without adequate cargo-handling equipment.

Principal particulars

Length, o.a.: 189.90m
 Length, b.p.: 185.00m
 Breadth, mld.: 32.26m
 Depth, mld.: 17.80m
 Draught, ext.: 12.50m
 DWT/GT: 55,429t/30,811
 Main engine: KAWASAKI-MAN B&W 6S50MC-C Mk7 diesel x 1 unit
 MCR: 8,200kW x 110rpm
 Speed, service: about 14.6kt
 Complement: 28
 Classification: NK
 Completion: Jan. 8, 2009



Naikai Zosen completes 2,450TEU containership, LOS ANDES BRIDGE



Naikai Zosen Corporation has completed construction of the container carrier, LOS ANDES BRIDGE (HN: 726), for Kono Shipping Inc. at the Innoshima Shipyard. The carrier can exclusively transport 2,450TEU containers including 250 reefer containers.

The cargo hold consists of six compartments, and ten hatch openings

are provided. The full cell guide system is employed for each container hold. Three deck cranes installed on the carrier facilitate cargo-handling activity.

The main engine is the super long-stroke type diesel engine, the Hitachi Zosen MAN B&W 7S70MC-C to reduce fuel oil consumption, and the improved ship propulsion efficiency is

achieved by adoption of the energy-saving hull form.

Safe ship operation at a port, or in navigation, is ensured with a bow thruster for easier berthing and unberthing, auto-heeling control equipment for safe cargo handling, and a collision avoidance-assisting unit.

Principal particulars

Length, o.a.:	199.93m
Length, b.p.:	188.00m
Breadth, mld.:	32.20m
Depth, mld.:	16.60m
Draught, extreme:	9.80m
DWT/GT:about 32,600t/about 27,300	
Complement:	25
Main engine:MAN B&W 7S70MC-C	
diesel x 1 unit	
MCR:	21,735kW x 91min ⁻¹
NCR:	19,560kW x 88min ⁻¹
Speed, max.:	about 24.4kt
Speed., service:	about 22.2kt
Classification:	NK
Registration:	Panama
Hull No.:	726
Completion:	Mar. 18, 2009

Imabari completes bulker, TOHOKU MARU

Imabari Shipbuilding Co., Ltd. has completed the 88,000 M.T. D/W type bulk carrier, TOHOKU MARU (HN: 1491), at the Marugame Shipyard on Feb. 2, 2009.

The vessel has been designed to meet recent bulk carrier safety requirements as an ocean-going bulk carrier suitable for carrying coal cargo, with greater breadth and shallower draught design suitable for coal unloading at the principal coal berths in Japan.

The vessel consists of five cargo holds of double hull construction with top side tanks and side hopper tanks. The design makes cargo handling and cargo hold cleaning easier, providing owners and operators with superior cost performance. Each cargo hold has a side sliding type hatch cover that is operated by the hydraulic drive and well fitted to the cargo hatch coaming on the upper deck. The hatch size is designed wider for convenience of

cargo-handling operation.

An energy saving device, hybrid fin developed by Imabari, is installed at the fore edge of the rudder just after the propeller to increase the propulsion performance and contribute to less CO₂ emission.

Principal particulars

Length, o.a.:	229.93m
Length, b.p.:	220.00m
Breadth, mld.:	38.00m

Depth, mld.:	19.90m
Draught, mld.:	13.801m
DWT:	88,159t
GT:	48,026
Cargo hold capacity:	101,695m ³
Main engine: HITACHI-MAN B&W	
6S60MC diesel x 1 unit	
MCR:	12,240kW x 105rpm
Service Speed:	14.7kt
Complement:	25
Classification:	NK



Sanoyas completes Panamax bulker, ATLANTIC LEGEND

Sanoyas Hishino Meisho Corporation has completed the 83,685DWT Panamax bulk carrier, ATLANTIC LEGEND (HN: 1282), for Solar Oceania Corporation of Liberia at the Mizushima Works and Shipyard. Sanoyas has previously constructed 70 vessels of 70,000 to 75,000DWT class. This is the eighth vessel of the series of the Sanoyas newly developed 83,000DWT type, featuring the largest deadweight and cargo hold capacity for Panamax bulk carriers.

For improvement of propulsion efficiency, the vessel is equipped with a low-speed and long-stroke main engine combined with a high-efficiency propeller and Sanoyas developed energy saving device called STF (Sanoyas-Tandem-Fin, patented: maximum 6% energy saving) on the stern shell, which also contribute to the reduction of CO₂ emission.

For efficiency of cargo handling, cargo hatches are widened as much as possible. Dedicated fresh water

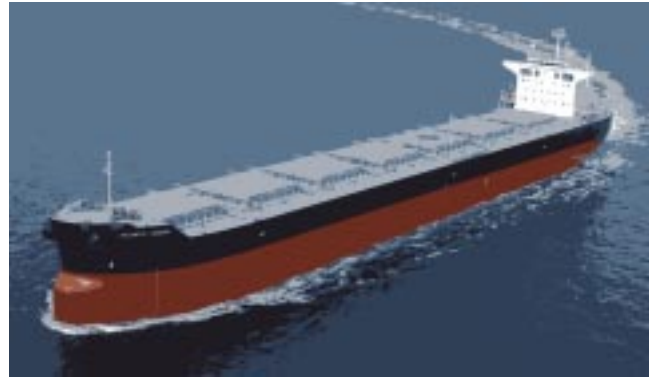
tanks are provided for storing hold-washing water from a large-capacity fresh water generator. A special fuel oil heating system is adopted for fuel oil storage tanks to avoid cargo

damage by overheating and to save the steam consumption.

In consideration of environment preservation, the various provisions such as fuel oil tanks of double hull structures, light color and tar-free coating for ballast tanks, holding tank for accommodation discharges and dirty hold bilge, and independent bilge segregation system for engine room, are adopted.

Principal particulars

Length, o.a.:	229.00m
Length, b.p.:	223.00m



Breadth, mld.:	32.24m
Depth, mld.:	20.20m
Draught, mld.:	14.555m (extreme, summer)
DWT/GT:	83,685mt/44,146
Main engine:MAN B&W 6S60MC-C diesel x 1 unit	
MCR:	10,740kW
Speed, service:	about 14.0kt
Cargo hold capacity:96,152m ³ (grain)	
Classification:	ABS
Complement:	25
Completion:	Mar. 12, 2009

Namura completes ore carrier, BAOSTEEL EDUCATION

Namura Shipbuilding Co., Ltd. delivered BAOSTEEL EDUCATION, a 228,527 DWT ore carrier, to Emerald Marine Ltd. at its Imari Shipyard & Works on Mar. 31, 2009.

The vessel is the seventh 230,000DWT type ore carrier built by Namura, and its strengthened hull offers flexible cargo loading of iron ore.

The vessel has five cargo holds, and

nine wide hatches with one panel double-skin (box) type side-rolling hatch cover.

The double-hull like cargo holds are suitably designed for the handling and transport of iron ore.

Fatigue crack arrestor applied to hatch corners between the No. 3 hatch fore part and the No.8 hatch fore part.

The engine room machinery is au-

tomated based on the M0 concept, and main engine is the MITSUBISHI 6UEC85LSII type equipped with an SIP lubricating system for saving lube oil.

The central fresh water-cooling system is applied to main engine and auxiliary machinery.

Special attention is given to safety, environmental protection, and reduction of labor and operation costs, and compliance with the recent international regulations.

Principal Particulars

L (o.a.) x L (b.p.) x B (mld) x D (mld) x d (mld):	319.58m x 308.00m x 54.00m x 24.30m x 18.10m
DWT/GT:	228,527t/113,932
Main engine:	Mitsubishi 6UEC85LSII diesel x 1 unit
M.C.R.:	22,432kW x 76.0rpm
Speed, service:	15.1kt
Complement:	25
Classification:	NK



New JSEA President appointed

The 98th Annual General Meeting of the Japan Ship Exporters' Association (JSEA) selected 31 directors and two auditors in Tokyo on May 21, 2009. Subsequently, the 558th Directors' Meeting selected Mr. Masamoto Tazaki, Chairman of Kawasaki Heavy Industries, Ltd. as the new JSEA President. Mr. Tazaki's tenure will last the usual two years. Mr. Tazaki has just completed a two-year term as Chairman of the Shipbuilders' Association of Japan (SAJ), having held the position since 2007.

At the same meeting, three Executive Vice Presidents of the JSEA were



*Mr. Tazaki,
New JSEA
President*



*Mr. Motoyama,
New SAJ
Chairman*

appointed: Mr. Akira Matsuda, Senior Consultant of Marubeni Corporation; Mr. Sho Minami, Company CEO of Oshima Shipbuilding Co., Ltd. and Mr. Kazuo Ohmori, Member of the board and Executive Vice President

of Sumitomo Corporation; and Mr. Taizo Fukuda was appointed as the Senior Managing Director of the JSEA.

Mr. Takashi Nishioka, the former President of the JSEA, was also appointed as a new Advisor to the JSEA at the meeting.

New SAJ Chairman appointed

The annual general meeting of the Shipbuilders' Association of Japan (SAJ) held on June 16 elected Mr. Takao Motoyama as the Chairman. Mr. Motoyama is concurrently Chairman and Representative Director of Mitsui Engineering & Shipbuilding Co., Ltd.

Japanese shipbuilding industry at NOR-SHIPPING 2009

NOR-SHIPPING 2009, the 22nd international shipping exhibition and conference organized by Norway Trade Fairs (NORGE S VAREMESSE), was held at the Lillestrom Exhibition Centre in Lillestrom, Norway, from June 9 through 12. 1,105 companies from 52 nations participated, and the exhibition was visited by an estimated 15,599 people.

At 9:00AM on June 9, the Japanese stand was opened by Mr. H. Yamaguchi, the Japanese Ambassador to Norway; Mr. M. Tazaki, President of JSEA; and Mr. Y. Fujimoto, vice Chairman of JSMEA, and at 9:30AM, the official opening took place in the presence of King Harald V of Norway and many honorable guests

from related circles including the sponsors.

A cocktail party was held in the evening on June 10 at the Radisson SAS Scandinavia Hotel, Oslo, co-sponsored by Ambassador Yamaguchi and Mrs. Yamaguchi as well as the JSEA president Mr. Tazaki. About 700 guests joined from various circles including Norwegian shipowners.

The Japan Ship Exporters' Association (JSEA) participated in the exhibition in cooperation with The Shipbuilders' Association of Japan and 12 Japanese shipbuilders under a grant from The Nippon Foundation, to showcase the Japanese shipbuilding industry today, using photos, scale-model ships, and a liquid crystal display system.

The JSEA stand located by the main entrance of the exhibition center used an area of 240m² for 12 shipbuilders, and formed the Japanese stand area together with the adjoining Japan Marine Equipment Association (JSMEA). Shipbuilding features of each shipbuilder were demonstrated using liquid crystal display system, photographs, and scale models. Expert attendants from the shipbuilders received visitors to provide further explanations. PR videotapes of 12 companies were digitized for display on a 100-inch screen at the exhibition with the support of the Nippon Foundation. This collaborative exhibition procedure was a great success in demonstrating the whole shipbuilding industry.



Opening ceremony of Japanese stand: from the second at left side of the front row are Mr. Tazaki, Mr. Yamaguchi, the Japanese Ambassador to Norway, and Mr. Fujimoto (left photo) and a cocktail party held on June 10 (right photo)

RAINBOW STAR

Owner: Neptune Navigation Corporation Limited
 Builder: Onomichi Dockyard Co., Ltd.
 Hull No.: 539
 Ship type: Product Tanker
 L (o.a.) x B x D x d (ext.): 172.00m x 32.20m x 18.10m x 12.60m
 DWT/GT: 47,333t/26,914
 Main engine: Mitsui MAN B&W 6S50MC (MK-6) diesel x 1 unit
 Speed, service: 15.3kt
 Registration: Hong Kong
 Classification: NK
 Completion: Feb.27, 2009

**OASIS RIVER**

Owner: "K" Line Pte. Ltd.
 Builder: Sasebo Heavy Industries Co., Ltd.
 Hull No.: S762
 Ship type: Crude oil tanker
 L (o.a.) x B x D x d (ext.): 243.8m x 42.0m x 21.5m x 15.64m
 DWT/GT: 115,126t (scantling)/59,258
 Main engine: Mitsui MAN B&W 6S60MC-C diesel x 1 unit
 Speed, service: 14.5kt
 Registration: Singapore
 Classification: ABS
 Completion: Mar. 3, 2009

**JOSE PROGRESS**

Owner: ASL Shipholding S.A.
 Builder: Shin Kurushima Dockyard Co., Ltd.
 Hull No.: 5546
 Ship type: Chemical tanker
 L (o.a.) x B x D x d: 185.93m x 32.20m x 19.30 x 11.60m/11.95m
 DWT/GT: 47,018t/30,969
 Main engine: Kobe Diesel 6UEC60LS diesel x 1 unit
 Speed, service: 15.3kt
 Registration: Panama
 Classification: NK
 Completion: Feb. 19, 2009

**CRANE HARMONY**

Owner: Grulla Oceano Inc.
 Builder: Niigata Shipbuilding & Repair, Inc.
 Hull No.: 0019
 Ship type: Chemical tanker
 L (o.a.) x B x D x d (ext.): 119.22m x 20.00m x 11.65m x 8.70m
 DWT/GT: 11,705t/7,248
 Main engine: Makita-Mitsui-MAN B&W diesel x 1 unit
 Output: 4,550kW x 210 min⁻¹
 Speed, service: 13.00kt
 Classification: ABS
 Completion: Mar. 13, 2009

**K. ASTER**

Owner: Aster Maritime S.A.
 Builder: Universal Shipbuilding Corporation
 Hull No.: 114
 Ship Type: Bulk carrier
 L(o.a) x B x D x d: 299.70m x 50.00m x 25.00m x 18.20m
 DWT/GT: 207,942t/106,367
 Main engine: MAN B&W 6S70MC-C diesel x 1 unit
 Speed, service: 14.6kt
 Classification: KR
 Delivery: Apr. 3, 2009

**FLORENCE LILY**

Owner: MI-DAS LINE S.A.
 Builder: Oshima Shipbuilding Co., Ltd.
 Hull No.: 10482
 Ship Type: Bulk carrier
 L(o.a) x B x D x d: 224.86m x 32.26m x 20.05m x 14.40m
 DWT/GT: 82,356t/42,647
 Main engine: KAWASAKI MAN B&W 6S60MC diesel x 1 unit
 Output: 9,378kW x 88.0rpm
 Speed, service: 14.5kt
 Classification: NK
 Completion: Feb. 3, 2009

