

New Mitsui 110BC Series

MES completes NORD HERCULES, 110,000DWT bulk carrier

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) completed the 110,000DWT bulk carrier, NORD HERCULES (HN: 1817), at its Chiba Works for delivery to Clio Marine Inc., Liberia, on Jan. 21, 2011. This is the first ship of the MES overPanamax type bulk carrier series.

This series is newly designed aiming for better efficiency in the marine transport of iron ore, coal and grain in view of the future expansion of the Panama Canal. New regulations are incorporated for better environmental performance, greater flexibility in operation, and safer construction.

The vessel is designed as an overPanamax type to have broader versatility satisfying the harbor regulations of major coal unloading ports while maximizing its deadweight. Mooring equipment matches the facilities of iron ore loading ports in Brazil. The structural strength and cargo hold capacity can accommodate the expected cargoes such as iron ore, coal, and grain.

The ship design also complies with the Common Structural Rules for bulk carriers (CSR-B) of the International Association of Classification Societies (IACS), achieving both structural safety and operational freedom.

Energy saving can be achieved by employing the most advanced bow and stern forms, a high efficiency propeller, and other energy-saving devices. Enhanced safety is assured by satisfying new regulations for forecastle arrangement and bow part reserve buoyancy. Arrangement of fixed inspection devices and portable ladders in the cargo holds and ballast tanks based upon the SOLAS regulations has increased the safety of the ship. The ship meets the fuel oil tank protection regulations of the MARPOL convention and has a sewage tank to protect the marine environment.

The main engine is a compact and high-powered MIT-



SUI-MAN B&W 6S60MC-C diesel, which satisfies IMO environment standards for exhaust emissions.

Principal particulars

L (o.a.) x L (b.p.) x B x D:	240.00m x 233.00m x 43.00m x 20.70m
DWT/GT:	110,944t/60,997
Main engine:	MITSUI-MAN B&W Diesel Engine 6S60MC-C diesel x 1 unit
MCR:	13,560kW x 105rpm
Speed:	14.5kt
Complement:	25
Classification:	NK
Registry:	Panama
Delivery:	Jan. 21, 2011



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

IHIMU completes Handymax bulk carrier, JEWEL OF DUBAI

IHI Marine United Inc. has delivered the Future 56 (F56) type Handymax bulk carrier, JEWEL OF DUBAI (Hull No. 3301) to Sun Cordia Marine S.A. at its Kure Shipyard.

The Future 56 series was developed for flexible operation for worldwide trade with five cargo holds and four deck cranes, which can load various cargoes such as coal, ore, grain, steel products, etc.

For the sake of superior economical operation, the vessel is equipped with the electronically controlled main engine (Flex Engine). By adjusting fuel injection and exhaust valves at suitable timing, the engine can control combustion conditions regardless of any loaded condition. These mechanisms enhance the decrease in fuel oil consumption as well as emissions of pollutants.

To achieve good propulsion performance, economical operation, and good maneuverability, IHIMU designed the vessel with sophisticated



technology such as CFD analysis, 3D-FEM ship-model analysis, walk-through simulation, and the equipment installation simulation utilizing CIM system "Ajisai" that IHIMU developed.

Principal particulars:
L (o.a.) x B x D: 190.00m x 32.26m x

18.10m
DWT/GT: abt. 55,800t/31,600
Main engine: DU-WARTSILA 6RT-flex50 x 1 unit
MCR: 8,890kW x 116.0rpm
Classification: NK
Completion: Jan. 31, 2011

Imabari completes "IS" BARI-STAR, 38,000DWT type bulker

Imabari Shipbuilding Co., Ltd. completed construction of the NORD IMABARI (HN:S-761), a 38,271DWT double hull bulk carrier called "IS" BARI-STAR, and delivered the vessel to its owner, I.M.S. MARITIME S.A., at the Imabari Shipyard on Oct. 8, 2010.

The vessel has the double side skin construction for cargo holds and fuel oil tanks to reduce flooding risk due to side damage. Designed to be suitable for loading grain, the cargo holds have top side tanks, and wide tank top areas are provided without hopper parts. The vessel has five wide hatches with folding type hatch covers and four deck cranes to facilitate cargo-handling work.

For high propulsion efficiency, the

vessel uses the energy saving device called the "hybrid fin," which is a two-dimensional aerofoil fin and asymmetric aerofoil fins located behind the propeller.

Principal particulars
L (o.a.) x L (b.p.) x B x D x d: 179.97m x 173.00m x 29.80m x 15.00m x 10.536m
DWT/GT: 38,271t/23,264
Cargo hold capacity: 47,125 m³
Main engine: Makita-Mitsui-MAN B&W 6S46MC-C (Mk 7) diesel x 1 unit
MCR: 7,860kW x 129rpm
Speed, service: 14.7kt
Complement: 25
Classification: NK
Delivery: Oct. 8, 2010

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.
- We welcome your comments about SEA-Japan. Please address all correspondence to the Japan Ship Exporters' Association (JSEA), or the Japan Ship Centre (JETRO) in London.
- Address (Tokyo): 2-2, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 / Tel: (03) 5425-9671 Fax: (03) 5425-9674
E-mail: postmaster@jsea.or.jp
- Address (London): 2nd Floor, 6 Lloyd's Avenue, London EC3N 3AX, UK / Tel: +44 (0) 20 7680 9456 / Fax: +44 (0) 20 7680 9416
E-mail: info@jsc.org.uk
URL: <http://www.jsc.org.uk>
Portalsite: maritimejapan.com



Kawasaki delivers 5th 180,000DWT bulker to Lucky Harvest Shipping

Kawasaki Heavy Industries, Ltd. delivered the 182,674DWT bulk carrier, FRONTIER CORONET (HN: 1669), to Lucky Harvest Shipping S.A., on Jan. 1, 2011. The vessel is the fifth Dunkerquemax type developed by Kawasaki, which has maximised cargo loading capacity for the ship size limited to entering the Port of Dunkerque, France. The FRONTIER CORONET adopts the Common Structural Rule (CSR) of the hull structural strength required for bulk carriers to increase safety of the vessel.

The vessel uses a fuel-saving main diesel engine together with highly efficient propeller, Kawasaki SDS-F (Semi-Duct System with contra Fins), and Kawasaki RBS-F (Rudder Bulb System with Fins). With the increased propulsion efficiency, the fuel consumption of the main engine is drastically decreased. Fuel oil tanks are double hull construction, and deck machinery is directly operated by elec-

tric power without using hydraulic oil. Therefore, the possibility of accidental marine pollution is decreased in the event of collision or damage.

The Performance Standard for Protective Coatings (PSPC)

is applied to ballast water tanks for the improvement of quality of coatings, which provides preventive measures against corrosion of the tanks.

Principal particulars

Owner: Lucky Harvest Shipping S.A.
 Builder: Kawasaki Heavy Industries, Ltd.
 Hull No.: 1669
 Ship type: Bulk carrier
 L (o.a.) x L (b.p.) x B x D x d: 292.00m



x 288.00m x 45.00m x 24.70m x 18.20m

DWT/GT: 182,674t/93,286

Main engine: Kawasaki-MAN B&W 6S70MC-C7 diesel x 1 unit

MCR: 17,780kW x 87rpm

Speed, service: about 15.5kt

Complement: 25

Classification: NK

Delivery: Jan. 11, 2011

35,000GT Luxury ROPAX Ferry, ISHIKARI, now in service

The ISHIKARI is one of the largest and most luxurious ROPAX ferries in Japan built at Mitsubishi Heavy Industries' Shimonoseki Shipyard and Machinery Works. The ferry was delivered to Taiheiyo Ferry Co., Ltd. on Mar. 8, 2011 and put into regular service between Nagoya, Sendai and Tomakomai. Its sister vessel, KISO, built at the same yard in 2005 is also used on the same service routes.

The combination of efficient hull form and CPP leads to the outstanding propulsive performance. High maneuverability is achieved in normal voyage and harbour operation with

two propellers, two rudders, and three side thrusters. A pair of fin-stabilizers decreases the ship rolling motion in a rough sea. The double hull construction is applied to the fuel oil tanks to reduce the risk of oil pollution in case of damage.

The ISHIKARI has full state-of-the-art features to provide comfortable and interesting voyages to every passenger. In particular, special attention is given to the reduction of the hull vibration and noise caused by the main engine and propeller. There is a wide variety of white-blue-themed cabins and public spaces, which are designed in the image of the "Shining Aegean Sea".

In the lounge MIKONOS, live shows and concerts are performed by professional artists on the stage.

Passengers can also enjoy movies here. In the restaurant SANTORINI, passengers can have meals with a panoramic ocean view. Some cabins and public spaces are equipped with various barrier-free facilities for the disabled. Every passenger can enjoy their onboard trip.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d: abt.

199.90m x 188.00m x 27.00m x

20.20m (No.5 Deck) x 6.85m

DWT/GT: 6,792t/35,028

Main engines: JFE 16PC2-6B diesel x 2 units

MCR: 12,000kW x 600min⁻¹/unit

NOR: 10,200kW x 568min⁻¹/unit

Speed, service: 23.0kt

Complement

Passengers: 783

Crew: 73

Loading capacity

12m truck: 184 units

8.5m truck: 5 units

Passenger car: 47 units

Classification: JG



Sanoyas completes Handy-cape bulk carrier, NORD VELA

Sanoyas Hishino Meisho Corp. delivered the 120,000DWT Handy-cape bulk carrier, NORD VELA, to Sun Lanes Shipping S.A. at the Mizushima Works and Shipyard on Jan. 24, 2011. The vessel is the 3rd of the series of the Sanoyas 120,000DWT type. This new series features a very sophisticated hull design of a large deadweight capacity with shallow draft and will help promote trade expansion in the coal and iron ore market. The wide beam and shallow draft will be admitted by ports that restrict entry of large bulk carriers. So the series has been named "Handy-cape" because this is the most flexible Cape-size bulker.

For improvement of propulsion efficiency, the vessel is equipped with a low-speed and long-stroke main engine combined with a high-efficiency propeller. The SANOYAS energy-saving device called "STF" (Sanoyas-Tandem-Fin (patent): max. 6% energy saving) on the stern shell also contributes to the reduction of CO₂ emissions.

This vessel applies "Common Structural Rules" (CSR) by the International Association of Classification Societies. Considering the environ-

mental conservation, various countermeasures are incorporated, which include fuel oil tanks of double hull structure, holding tank for accommodation discharges, and dirty hold bilge and independent bilge segregation system for the engine room. For efficient cargo handling, cargo hatches are widened as much as possible, and the hatch widths from the No. 1 through No. 7 are the same.

Dedicated fresh water tanks are provided for storing hold washing water generated by a large capacity type fresh water generator. A special fuel oil heating system is applied to fuel oil storage tanks to avoid cargo damage by over-heating and save steam consumption. Safe maneuverability is achieved with organized arrangements in the wheelhouse together with improved rear visibility. In addition, wooden furnishings in the accommodation provide the officers and crew with comfortable quarters.



Principal particulars

Owner:	Sun Lanes Shipping S.A.
Hull No.:	1290
Ship type:	Bulk carrier
L (o.a.) x 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:	119,503mt/64,647
Cargo hold capacity:	135,717m ³ (grain)
Main engine:	MAN B&W 6S60MC-C diesel x 1 unit
MCR:	13,560kW
Speed, service:	about 14.6kt
Complement:	25
Classification:	NK
Port of registry:	Panama
Delivery:	Jan. 24, 2011

300,000DWT Unimax ore carrier, He Li, completed by Universal

The 300,000 DWT type ore carrier, He Li, was delivered at the Ariake Shipyard of Universal Shipbuilding Corporation on Dec. 22, 2010. The He Li is the 13th vessel of the new design series of the Unimax Ore Carrier.

Universal's Unimax Ore Carrier is optimized to have the largest capac-

ity of the 300,000 DWT class to enter major iron ore loading ports in western Australia, with a hull form most suitable for deep water ports in Brazil, the largest iron ore shipping country. Adequate hull strength is provided to be applicable to various loading and unloading ports, and every cargo hold is equipped with the world's largest single panel hatch cover to facilitate cargo handling.

With energy saving devices of Surf bulb, SSD and Ax-bow developed by Universal, the vessel

dramatically improves propulsive efficiency, decreasing fuel consumption compared with the conventional large ore carrier.

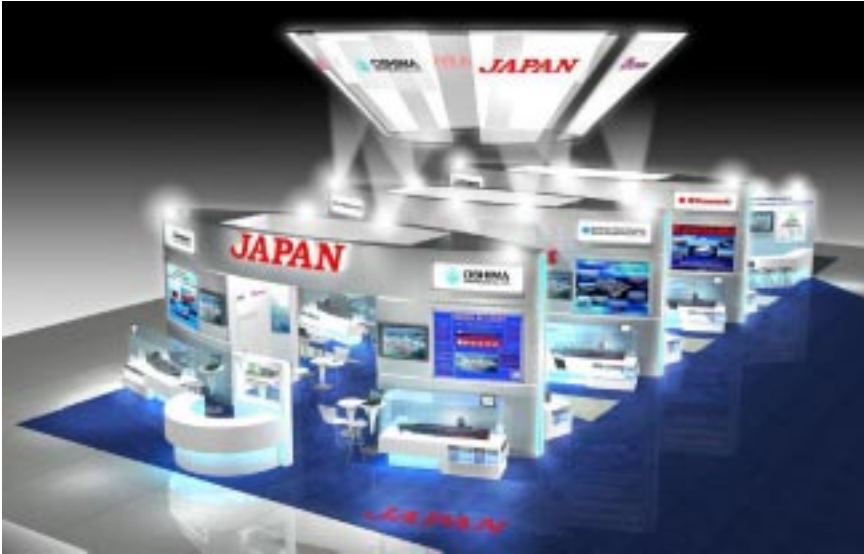
Universal will flexibly and actively respond to the diversifying needs in transport of steel material, amidst expected future expansion in marine transport triggered by the global increase in demand for iron ore.

Principal particulars

L (o.a.) x B x D x d:	327.0m x 55.00m x 29.25 m x 21.40 m
DWT/GT:	297,381t / 151,161
Main engine:	Hitachi MAN-B&W 6S80MC-C diesel x 1 unit
Sea speed:	14.5 knots
Classification:	NK
Delivery:	Dec. 22, 2010



JSEA participates in NOR SHIPPING 2011



The 23rd NOR-SHIPPING 2011 (The 23rd International Shipping Exhibition) will take place at the Lillestrom Exhibition Centre in Lillestrom for four days from May 24 through 27. This event is organized by the Norway Trade Fairs (NORGES VAREMESSE) and sponsored by the Norwegian Shipowners' Association and organizations related to the mari-

time industry.

The Japan Ship Exporters' Association consisting of 12 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 240m² 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. JSEA will also be holding a reception at the Radisson Blu Scandinavia Hotel in Oslo on May 25 hosted by the Japanese ambassador and the President of JSEA (only by invitation).

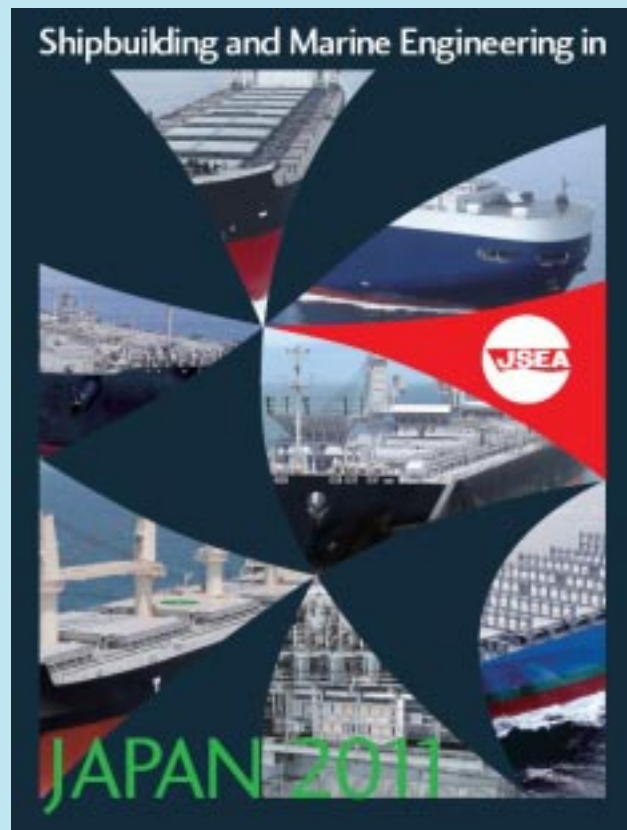
Exhibitors:

IHI Marine United Inc.
 Imabari Shipbuilding Co., Ltd.
 Kawasaki Heavy Industries, Ltd.
 Mitsubishi Heavy Industries, Ltd.
 Mitsui Engineering & Shipbuilding Co., Ltd.
 Namura Shipbuilding Co., Ltd.
 Oshima Shipbuilding Co., Ltd.
 Sanoyas Hishino Meisho Corporation
 Sasebo Heavy Industries Co., Ltd.
 Shin Kurushima Dockyard Co., Ltd.
 Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
 Universal Shipbuilding Corporation

“Shipbuilding and Marine Engineering in Japan 2011” issued

Shipbuilding and Marine Engineering in Japan 2011 has been published 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 advanced technologies. The details of ships and shipbuilding technology are compiled in a CD-ROM for readers' convenience.

Major contents include the Japanese 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, emphasizing technical features and R&D activities introduced in the last two years.



FRONTIER KOTOBUKI

Owner: Kotobuki Shipping Corporation, S.A.
 Builder: Namura Shipbuilding Co., Ltd.
 Hull No.: 317
 Ship type: Bulk carrier
 L(o.a.) x B x D x d: 289.98m x 45.00m x 24.70m x 18.00m
 DWT/GT: 174,810t/91,508
 Main engine: Mitsui MAN-B&W 6S70MC-C (Mk 7) diesel x 1 unit
 Speed, service: 14.60kt
 Classification: NK
 Complement: 25
 Completion: Jan. 27, 2011



ANDROMEDA

Owner: Argus Shipping Ltd.
 Builder: Oshima Shipbuilding Co., Ltd.
 Hull No.: 10537
 Ship type: Bulk carrier
 L(o.a.) x B x D x d: 199.98m x 32.26m x 18.33m x 12.845m
 DWT/GT: 61,501t/33,997
 Main engine: KAWASAKI MAN B&W 6S50MC-C (Mk 7) diesel x 1 unit
 Speed, service: 14.5kt
 Registration: Majuro
 Classification: DNV
 Completion: Jan. 7, 2011



KALAMAS

Owner: Priscilla Enterprises Inc.
 Builder: Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
 Hull No.: 1358
 Ship type: Tanker
 L(o.a.) x B x D: 228.60m x 42.00m x 21.50m
 DWT/GT: 105,000t/56,000
 Main engine: Mitsui MAN B&W 6S60MC-C diesel x 1 unit
 Speed, service: About 14.8kt
 Classification: LR
 Completion: January 18, 2011



ROYAL HARMONY

Owner: Venus Ocean Navigation S.A.
 Builder: Onomichi Dockyard Co., Ltd.
 Hull No.: 655
 Ship type: Super box-shaped bulker
 L(o.a.) x B x D x d: 177.80m x 28.60m x 15.00m x 10.85m (ext.)
 DWT/GT: 37,000t/22,850
 Main engine: Mitsubishi 6UEC45LSE diesel x 1 unit
 Speed, service: 15.0kt
 Registration: Panama
 Classification: NK
 Completion: Jan. 25, 2011



WANGARATTA

Owner: Oshima Shipping S.A.
 Builder: Tsuneishi Shipbuilding Co., Ltd.
 Hull No.: 1442
 Ship type: Bulk carrier
 L(o.a.) x B x D x d (ext.): 228.99m x 32.26m x 20.05m x 14.429m
 DWT/GT: 82,206t/43,012
 Main engine: Mitsui MAN B&W 6S60MC-C (Mk 7) diesel x 1 unit
 Speed, service: 14.5kt
 Registration: Panama
 Classification: NK
 Completion: Feb. 8, 2011



SUMIHO

Builder: Sasebo Heavy Industries Co., Ltd.
 Hull No.: S801
 Ship type: Bulk carrier
 L(o.a.) x B x D x d: 225m x 32.20m x 19.80m x 14.136m (ext.)
 DWT/GT: 74,940t/40,341
 Main engine: Mitsui MAN B&W 7S50MC-C diesel x 1 unit
 Speed, service: 14.5kt at design draft
 Registration: Panama
 Classification: NK
 Completion: Feb. 10, 2011

