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Sanoyas completes first 120,000DWT type handy-cape bulker

Sanoyas Hishino Meisho Corporation delivered the 120,000DWT type handy-cape bulk carrier, SPRING SAMCHEONPO (HN: 1285) constructed at the Mizushima Works and Shipyard, to the owner, Primavera Montana S.A. of Panama, on July 14, 2009.

The vessel is the first Sanoyas 120,000DWT class handy-cape bulk carrier jointly developed with Mitsui O.S.K. Lines. The vessel has a large capacity with a shallow draught, and the advanced design as a handy-cape bulker will meet demand for the expanding trade in coal and iron ore.

The wide beam and shallow draught will permit entering ports that have limitations to vessels with deep draught. Thus, the vessel has more flexible routing compared with the conventional cape-size vessel.

The propulsion efficiency of the vessel is ensured with employment of a low-speed and long-stroke main engine combined with a high efficiency propeller. The energy-saving device called the Sanoyas-Tandem-Fin (STF, patented) is attached to the stern shell. The device provides superior cost performance, consisting only of a pair of planes with simple construction, which contributes to energy saving by six percent as well as reduction of CO_2 emissions. Additionally, the newly developed High Lift Rudder Form (patented) provides better maneuverability in comparison to the conventional rudder form. This rudder can reduce rudder area attributed to high lift force compared to the conventional type. Small rudder size also contributes to reduction of frictional resistance.

Various measures are taken to comply with requirements for the environmental protection: Fuel oil tanks are designed with double hull structures. Light color and tar-free coating is applied to ballast tanks. A holding tank is provided temporarily to store wastewater from accommodation quarters and used water for cleaning cargo holds for later treatment. Bilge treatment can be carried out by sources, such as discharges of accommodation, dirty hold

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Photos show newly developed High Lift Rudder Form (above), STF attached to the stern shell (top of right), and maximized cargo hatch openings (right)

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bilge and independent bilge segregation system for the engine room.

The width of cargo hatch opening is maximized for cargo holds of the Nos. 1 through 7, and they have the same width. Wider hatch opening will help to increase the cargo-handling efficiency. Cargo holds can be cleaned by water stowed in a dedicated fresh water tank whenever the type of cargo changes. Fresh water is supplied by a large capacity fresh water generator.

A special fuel-oil-heating system is adopted for the fuel-oil storage tanks in order to avoid cargo damage by overheated fuel oil and to reduce the steam consumption.

Amenities are provided for officers and crew with wooden furniture in the living quarters, and the wheelhouse is well arranged according to functions and operability of equipment. A wide rear view through windows in the wheelhouse also ensures safe ship maneuvering.

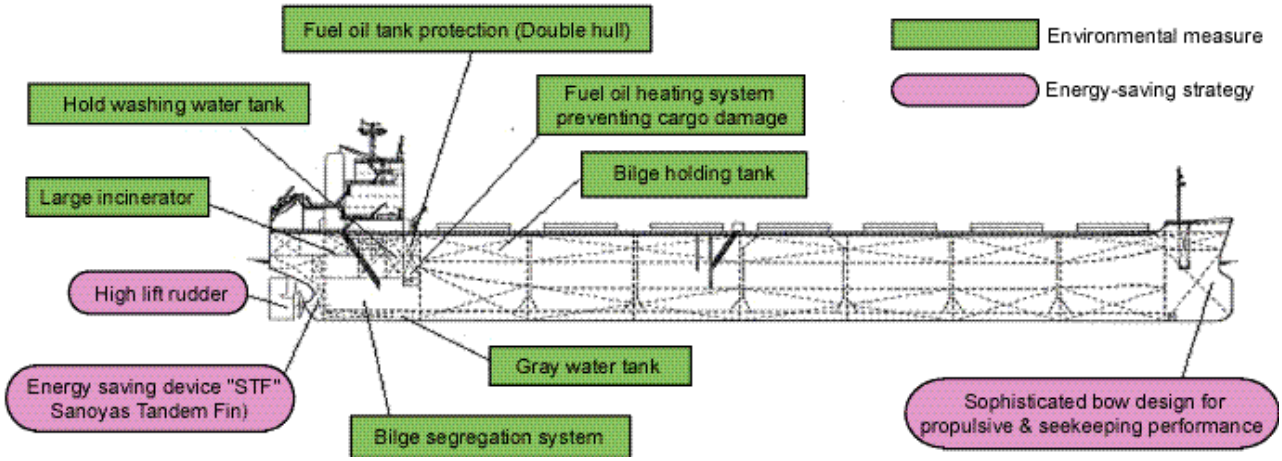
Principal particulars

Length (o.a.):	245.00m
Length (p.p.):	238.00m
Breadth (mld.):	43.00m
Depth (mld.):	21.65m
Summer draft (ext.):	15.404m
DWT/GT:	119,597mt/64,618
Cargo hold capacity:	135,684m³ (grain)
Classification:	NK
Complement:	25

Speed, service: about 14.5 knots (at C.S.O. with 15% sea margin)

Main engine: MAN B&W 6S60MC-C diesel x 1 unit

MCR:	13,560kW
Delivery:	July 14, 2009



IHIMU completes 9,040TEU container ship, HAMBURG BRIDGE

IHI Marine United Inc. has delivered the 9,040TEU container ship, the HAMBURG BRIDGE (HN: 3232), to Kawasaki Kisen Kaisha (K Line) at its Kure Shipyard, which is the seventh of the sister ships assigned to Asia-Europe trade.

The HAMBURG BRIDGE is one of the largest container ships ever built in Japan and has incorporated various new environmentally friendly designs. This vessel uses a wider beam hull design that can achieve better stability. This results in less ballast water requirement during sea voyages than existing vessels.

The vessel has fuel oil tanks located in the bulkheads (compartment between the cargo holds) as well as the double bottom hull, which will help avoid fuel oil leakage in the event of collision involving hull damage. The electronically controlled main engine is installed on this vessel, combustion conditions for which can be controlled under any load conditions by adjusting fuel injection and exhaust valves at suitable timing. This conserves fuel oil consumption and reduces emissions.

To realize good propulsion performance, economical operation and good maneuverability, IHIMU designed the vessel with its sophisticated technology such as CFD analysis, 3D-FEM ship-model analysis, walk-through simulation and apparatus installation simulation utilizing CIM system "Ajisai" which IHIMU originally developed.

Principal particulars

L (o.a.) x B x D:	336.0m x 45.8m x 24.4m
DWT/GT:	about 87,000t/98,800
Loading capacity:	9,040 TEUs
Main engine:	MAN B&W 12K98ME diesel x 1 unit
MCR:	67,270kW x 93.4rpm
Speed, service:	24.5kt
Classification:	NK
Completion:	Aug. 25, 2009

MHI completes 83,000m^3 type LPG Carrier, BW TOKYO

Mitsubishi Heavy Industries, Ltd. (MHI) completed construction of the BW TOKYO (HN: 2239), an LPG carrier with a tank capacity of 83,270m^3, at the Nagasaki Shipyard & Machinery Works and delivered the vessel to Clio Marine Inc. as the first vessel of two sister vessels on Apr. 28, 2009. The vessel is MHI's fifth 83,000m^3 LPGC, the series of which was developed based on the MHI 78,000m^3 LPGC series of 35 vessels.

The vessel is designed as a straight LPG carrier to carry propane and butane. The sophisticated hull form, optimum design of propeller, and Mitsubishi-Reaction fin achieve high propulsive performance with less vibration. Fuel oil tanks are protected by double hull construction and fuel oil storage/settling/service tanks for low sulfur fuel are provided independently.

Main dimensions and cargo equipment are designed considering compatibility with worldwide terminals. Considering various shore facilities, large booster cargo pumps and cargo heater/vaporizer are equipped. The vessel is designed to improve reliability and has the NK notation of PS-DA/FA.

Principal particulars

Length (o.a.):	230.0m
Length (b.p.):	219.0m
Breadth:	36.6m
Depth:	21.65m
Summer draft:	11.628m
Gross tonnage:	47,985
Cargo tank capacity:	83,270m^3
Main engine:	MAN B&W 7S60MC (Mark 6) diesel x 1 unit
Output:	13,700kW x 104rpm
Service speed:	17.0kt
Classification:	NK

MES completes DARYA LAKSHMI, 56,000 DWT type bulk carrier

Mitsui Engineering & Shipbuilding Co., Ltd., (MES) delivered the 56,000DWT type bulk carrier, DARYA LAKSHMI (HN: 1754), at its Tamano Works to the Owner, Lakshmi Navigation Limited of Hong Kong managed by Chellaram Shipping (Hong Kong) Ltd., on July 31, 2009.

The vessel is a handymax type bulk carrier of 56,000DWT with a huge cargo hold capacity of over 70,000m^3 and is the 89th ship of its series. The series is widely called "Mitsui's 56" and is highly appreciated in the market. More than 150 ships of this series have been ordered from MES.

To load various types of cargoes, the vessel is designed to have adequate strength of the tank top of cargo holds and to be suitable for efficient cargo handling together with the following arrangements: The vessel has five cargo holds and four deck cranes, and the size of hatch opening is the largest for this type of vessel in terms of both length and width. Each cargo hold has sufficient clear length to load long pipes. The cargo hold is well strengthened to load heavy cargoes such as hot coils, etc. The vessel is designed in accordance with IACS URS25 so that loading flexibility has been secured, and structural safety has been improved.

The main engine is the MITSUI-MAN B&W 6S50MC-C diesel, which is a light, compact, and high output engine satisfying the Environment Standards for Exhaust Gas.

Ballast water can be changed during navigation for protection of marine environment.

Generator engine also satisfies the IMO Standards for the Environment.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d: 189.99 m x 182.00m x 32.26m x 17.90m x 12.55m
DWT/GT: 55,469t/31,284
Main engine: Mitsui-MAN B&W 6S50MC-C diesel x 1 unit
MCR: 9,480kW x 127.0rpm
Speed, service: 14.5 kt
Complement: 25
Classification: LR

Kawasaki completes 55,100DWT bulk carrier, AFRICAN KINGFISHER

Kawasaki Shipbuilding Corporation delivered the AFRICAN KINGFISHER (HN: 1616), a 55,100DWT bulk carrier completed by its Kobe Shipyard, to its owner, Handbell Shipping S.A., on Aug. 24, 2009. The vessel is the 27th of the Kawasaki 55,000DWT bulk carrier series.

The bulk carrier is the flush deck type with the forecastle and has five cargo holds, the shape of which are optimized for loading and transport of bulk cargoes of cereals, coal, ore, steel products, etc. The vessel has the smooth bow shape developed by Kawasaki which eliminates bow resistance to increase propulsion efficiency, which leads to decrease of fuel consumption.

Four deck cranes with a hoisting capacity of 30 tons are arranged between hatches on the ship centerline to cope with cargo handling work at a port where shore equipment is not available.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d: about 189.90m x 185.00m x 32.26m x 17.80m x 12.50m
DWT/GT: about 55,100t/31,000
Main engine: Kawasaki-MAN B&W 6S50MC-C (Mark 7) diesel x 1 unit
MCR: 8,200kW x 110rpm
Complement: 25
Classification: NK
Completion: Aug. 24, 2009

Toyohashi Shipbuilding Co. renames SHIN KURUSHIMA TOYOHASHI SHIPBUILDING CO., LTD.

Toyohashi Shipbuilding Co., Ltd. has been renamed SHIN KURUSHIMA TOYOHASHI SHIPBUILDING CO., LTD. The new company will continue business as an alliance member of SHIN KURUSHIMA DOCKYARD CO., LTD. and will specialize in construction of 200m-long vehicle carriers, which will be ranked among the world's largest class, and bulk carriers. The shipyard located in Toyohashi City, Aichi Prefecture, has modern facilities equipped with three large gantry cranes (one 800-ton and two 300-ton cranes in hoisting capacity) and is capable of building large vessels up to 300,000 DWT class.

Onomichi completes 47,000DWT product tanker, GOLD EXPRESS

Onomichi Dockyard Co., Ltd. has completed construction of the GOLD EXPRESS, a 47,000DWT product carrier, for Venus Ocean Navigation S.A. of Panama. The vessel is 182.50m long, 32.20m wide, and 18.10m deep, and has a total cargo tank capacity of 53,500m^3 capable of carrying four different types of cargo liquids such as gasoline, light oil, naphtha, etc. simultaneously.

The GOLD EXPRESS was designed to comply with the latest international regulations. The hull structural strength of the vessel was developed with 3-dimensional model analysis and fatigue strength analysis to provide high reliability so that it can endure repetitive navigation in the rough-sea season

The vessel has many features considering the environmental preservation. The double hull structure is employed for the fuel oil tank compartment to prevent fuel oil leakage in an accident. Air pollution prevention is ensured by providing an advanced gas detecting system to avoid emission of harmful gases into the atmosphere. The main engine uses a low-speed and log-stroke diesel engine that has superior performance of low fuel consumption.

Moreover, unattended main engine and auxiliary machinery, a fail-safe satellite navigation system, and a self-stripping system are adopted to reduce manual labor required for ship operation and improve the working environment on board.

Principal particulars

Length, o.a.:	172.60m
Breadth:	32.20m
Depth:	18.10m
Draught:	55,100t (ext.)
DWT/GT:	47,410t/26,900
Main engine:	Mitsui MAN-B&W 6S50MC diesel x 1 unit
Speed, service:	15.3kt
Registration:	Panama
Classification:	NK
Completion:	July 15, 2009

Shin Kurushima completes chemical tanker, SUNNY DREAM

Shin Kurushima Dockyard Co., Ltd. (SKD) completed construction of the 12,000DWT chemical tanker, SUNNY DREAM (HN: 5572), for the co-owners, Asahi Tanker Co., Ltd. and Solar Shipping and Trading S.A., at the Hashihama Shipyard.

The vessel has 16 cargo tanks and 2 cargo tanks on the upper deck, the material of which is high-grade stainless steel. Loading of various types of chemicals is possible.

Cargo tank bulkheads are vertically corrugated bulkheads, and deck longitudinals and transversals are arranged on the upper deck. This design eliminates hull members inside the cargo tanks to facilitate tank cleaning.

Each cargo tank has a submerged pump as cargo-handling equipment. This permits unloading several different cargoes separately and simultaneously and avoids contamination between cargoes.

Shin Kurushima has developed a new hull design that has increased propulsion efficiency for the vessel based on R&D achievements at the company's Research Institute, and the vessel is mounted with the Turbo Ring and A.S. Fin as energy-saving attachments. Combined effects of the new hull and these attachments can demonstrate an increased navigation speed together with energy saving performance.

Fuel oil tanks are based on double hull construction to ensure safe and environmentally friendly navigation.

The vessel has obtained the Class NK Notification "M0." Therefore, the main engine can be operated remotely from the bridge, and at the machinery control room, the main engine and auxiliary machinery can easily be operated by the remote control or centralized-control systems.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d:	124.03m x 118.50m x 19.60m x 11.50m x 8.278m
DWT/GT:	12,222t/7,771
Main engine:	B&W 6L35MC (Mark6) diesel x 1 unit
Speed, service:	13.3kt
Classification:	NK
Completion:	Aug. 5, 2009

PHOENIX VIGOR

Owner: a Singaporean owner
Builder: Imabari Shipbuilding Co., Ltd. (Saijo Shipyard)
Hull No.: 8062
Ship type: VLCC
L (o.a.) x L (b.p.) x B x D x d: 332.99m x 324.00m x 60.00m x 29.00m x 21.100m
DWT/GT: 309,887t/160,160
Main engine: MAN B&W 8S80MC-C diesel x 1 unit
MCR: 31,040kW x 76.0rpm
Speed, service: 16.2kt
Complement: 35
Classification: NK
Completion: July 27, 2009

SPRING SWEETBRIER

Owner: Primavera Montana S.A.
Builder: Namura Shipbuilding Co., Ltd.
Hull No.: 281
Ship type: Ore carrier
L (o.a.) x L (b.p.) x B x D x d: 319.58m x 308.00m x 54.00m x 24.30m x 18.127m
DWT/GT: 228,531t/113,932
Main engine: Mitsubishi 6UEC85LSII diesel x 1 unit
MCR: 22,432kW x 76.0rpm
Speed, service: 15.1kt
Classification: NK
Completion: June 11, 2009

ZEBRA WIND

Owner: Eastern Cross Shipping S.A.
Builder: Oshima Shipbuilding Co., Ltd.
Hull No.: 10517
Ship Type: Bulk Carrier
L (o.a.) x B x D x d: 182.98m x 32.26m x 17.15m x 12.149m
DWT/GT: 50,820t/29,105
Main engine: Mitsui MAN B&W 6S50MC-C diesel x 1 unit
Output: 7,760kW x 107.0rpm
Speed, service: 14.5kt
Classification: NK
Completion: May 27, 2009

HIGH EFFICIENCY

Owner: DM Shipping Limited
Builder: Naikai Zosen Corporation
Hull No.: 724
Ship type: Product tanker
L (o.a.) x L (b.p.) x B x D x d: 179.90m x 172.00m x 32.20m x 19.25m x 11.65m
DWT/GT: 46,547t/28,231
Main engine: Hitachi MAN B&W 6S50MC-C diesel x 1 unit
MCR: 9,480kW x 127 min^{-1}
Speed, service: about 15.7kt
Classification: NK
Completion: July 31, 2009

BALTIC GALAXY

Owner: Grand Falcon Maritime S.A.
Builder: Sasebo Heavy Industries Co., Ltd.
Hull No.: 758
Ship type: Crude oil tanker
L (o.a.) x B x D x d: 245.6m x 42.0m x 21.5m x 15.643m (ext.)
DWT/GT: 114,824t/59,408
Main engine: B&W 6S60MC-C diesel x 1 unit
Speed, service: 15.1kt
Classification: ABS
Completion: June 1, 2009

ONOZURU MARU

Owner: Erica Navigation S.A.
Builder: Universal Shipbuilding Corp.
Hull No.: 087
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: 207,973t/106,367
Main engine: MAN B&W 6S70MC-C diesel x 1 unit
Speed, service: 14.6kt
Classification: NK
Completion: July 17, 2009