

IHIMU completes 9,040TEU container ship, HUMBER BRIDGE



IHI Marine United Inc. has delivered the 9,040TEU container ship, Humber Bridge (Hull No: 3205), to Kawasaki Kisen Kaisha, Ltd. (K Line) at its Kure Shipyard. It is the first of eight ships to be assigned to the Asia/North Europe trade.

The Humber Bridge is the largest container ship ever built in Japan and has incorporated various new environmental aspects into its design as follows.

This vessel has adopted a wider beam hull design which enables better stability and results in much less ballast water being required during sea voyages than with existing vessels. This vessel has fuel oil tanks located in the bulkheads (space between the holds) as well as a double bottomed hull. This will help avoid fuel oil leakage in the event of vessel collision involving hull damage.

The electronically controlled main engine is installed on the vessel, which can control combustion conditions under all load situations by adjusting fuel injection and exhaust valves at suitable timing. This conserves fuel oil consumption and reduces emissions.

Carcinogen-free paint has been adopted for protection

of the marine environment as well as the health of shipyard workers and vessel crews. This vessel carries a Green Passport and takes advantage of measures in accordance with the Ship Recycling Guidelines adopted by IMO in December 2003.

Furthermore, in order to realize good propulsion performance, economical operation, and good maneuverability of the ship, IHIMU designed the ship with its technical/engineering knowhow, CFD analysis, 3D-FEM ship model analysis, walk-through simulation and apparatus installation simulation utilizing the 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:	abt. 87,000t/98,800t
Loading Capacity (containers):	9,040TEUs
Main engine:	MAN B&W 12K98ME diesel x 1 unit
MCR:	67,270kW x 93.4rpm
Service speed:	24.5kt
Classification:	NK
Delivery Date:	Oct. 31, 2006



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Koyo completes 4,923TEU container carrier, YM NEW JERSEY, for Paraiso Shipping S. A.

Koyo Dockyard Co., Ltd. of the Imabari Group delivered YM NEW JERSEY, a 4,923TEU container carrier, on Nov. 24, 2006 to Paraiso Shipping S. A. The YM NEW JERSEY is the first of two sister carriers to be operated by Yang Ming Marine Transport Corporation.

The Panamax size vessel can carry 2,142TEUs in container holds and 2,781TEUs on the upper deck. The holds can stow eight tiers (including two tiers of 9'-6" high cube containers) and 11 rows, and the upper deck can stack seven tiers and 13 rows of containers.

The upper deck allows loading of 803 units of 45ft containers and is equipped with 400 plugs for air cooled reefers. The container holds are permitted to carry dangerous goods including class 1 (explosives).

The simplified hull construction is adopted for the container holds to increase container stowage space. The ship's hull is provided with sufficient strength to cope with loading and han-

dling of various types of containers.

Each container hold has three hatch cover panels, and 18 sets of lashing bridges are installed for the containers on the upper deck. The automatic heeling system is applied to ship-heeling adjustment during cargo handling operations.

Other safe ship operation measures are as follows. The fuel oil overflow pipes are arranged in the second deck passage space to avoid oil flow over the upper deck. Low sulphur tanks are

employed as the countermeasure to the MARPOL Annex VI. The crew can access the bosun store, steering gear room and the container holds through the second deck passage only. Stern tube air sealing device is provided for

prevention of marine oil pollution.

Principal particulars

L (o.a.) x B x D x d: 294.03m x 32.20m x 21.50m x 13.50m

DWT/GT: 65,123t / 54,828

Main engine: MITSUI MAN B&W 8K98MC (MARK VI) diesel x 1 unit

MCR: 45,760kw x 94.0rpm

Speed, service: 23.8kt

Classification: NK

Flag: Panama

Completion: Nov. 24, 2006



Naikai delivers 2,450TEU container carrier, HELENE S

Naikai Zosen Corporation completed construction of the 2,450TEU container carrier, HELENE S (HN: 700), built at its Innoshima Works for H+H Schepers Reederei GmbH & Co. KG on Dec. 20, 2006.

The carrier can exclusively carry 2,450TEU containers including 400 reefers by loading in six cargo holds

and on the upper deck. The cargo holds use the full cell guide system, and ten hatches and three deck cranes are provided. This arrangement facilitates cargo-handling work.

The main engine is the Hitachi MAN B&W 7S70MC-C diesel engine of the long-stroke type. The combined efficiency with energy-saving hull

form increases propulsion performance, achieving low fuel consumption.

Ship operation installations include the bow thruster for efficient berthing and unberthing, auto-heel control unit for safety in cargo handling, and collision avoidance system for safe ship operation.

Principal particulars

Length, o.a.: 199.93m

Length, b.p.: 188.00m

Breadth, mld.: 32.20m

Depth, mld.: 16.60m

Draft, designed: 9.80m

DWT/GT: 32,878t/27,213t

Complement: 23

Main engine: MAN B&W 7S70MC-C diesel x 1 unit

MCR: 21,735 kW x 91min⁻¹

Speed, service: 22.2kt

Classification: NK

Completion: Dec. 20, 2006



Kawasaki completes large bulk carrier, CAPE PROGRESS



Kawasaki Shipbuilding Corporation has completed the 185,000DWT bulk carrier, CAPE PROGRESS (HN: 1589) at the Sakaide Shipyard and delivered the vessel to its owner, Ocean Transit Carrier S. A.

This large bulk carrier built with the most advanced design concept has simple and rational ship machinery including cargo-handling equipment. For in-

creased ship safety, the carrier complies with the new regulations for bulk carriers.

The new hull form minimizes the propulsion resistance. The latest fuel conserving diesel engine, efficient propeller, and the Kawasaki Rudder Bulb with Fin are employed. The combined performance decreases the fuel consump-

tion.

Measures are taken to reduce NO_x emission from the engines, and foam agent is used for the fire extinguishing system instead the conventional CO₂ type. Air conditioners and refrigerators use a new refrigerant. Thus, the vessel is considered adaptable for the environment.

Principal particulars

Length, o.a.:	290.00m
Length, b.p.:	280.00m
Breadth, mld.:	47.00m
Depth, mld.:	24.40m
Draught, mld.:	17.95m (extreme)
DWT:	185,920t
GT:	92,993t
Cargo hold capacity:	205,722m ³
Main engine:	Kawasaki-MAN B&W 6S70MC (Mk 6) diesel x 1 unit
MCR:	16,860kW x 91rpm
Speed, service:	about 14.7kt
Complement:	28
Classification:	NK
Completion:	Nov. 28, 2006

MES completes 13th Dunkerquemax bulker, SHIN-SHO

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) recently completed the 177,000DWT bulk carrier, SHIN-SHO (HN: 1624), built at its Chiba Works and delivered to the owner Lepta Shipping Co., Ltd., Liberia.

This is the 13th ship of the very popular series of Capesize bulk carrier of Dunkerquemax type and has super-wide hatch openings for an efficient cargo handling. The ship has a deadweight of 177,489 tons, which is one of the biggest among the series.

The SHIN-SHO has an efficient cargo hold arrangement with 9 holds and 9 hatches and can secure a capacity of 197,050m³, bigger than that for conventional Capesize bulk carriers.

The main engine is a MITSUI-MAN B&W 6S70MC diesel engine, which satisfies the IMO environment standards for exhaust gas and achieves massive improvement of fuel saving by optimum matching at normal service output. The generator engine also satisfies the IMO Standards for exhaust gas.



Ballasting and deballasting work can be efficiently achieved by separation of the topside tank and bottom side tank. Ballast water can be changed during navigation for protection of the marine environment.

Principal particulars

Length, o.a.:	289.00 m	Depth, mld.:	24.40 m
Length, b.p.:	279.00 m	Draft, mld.:	17.95 m
Breadth, mld.:	45.00 m	GT:	88,541 tons
		DWT:	177,489t (at draft 17.95 m)
		Main Engine:	MITSUI-MAN B&W 6S70MC diesel x 1 unit
		MCR:	16,860kW x 91rpm
		Speed:	15.0kt
		Complement:	25
		Classification:	NK
		Completion:	Sept. 15, 2006

Universal completes 200,000DWT bulk carrier, SHIN OHGISHIMA

Universal Shipbuilding Corporation delivered the 200,000DWT type bulk carrier, SHIN OHGISHIMA, to Erica Navigation S. A. at the Ariake Shipyard on Aug. 15, 2006. The vessel is the 15th vessel of this type built by Universal Shipbuilding Corporation.

The vessel is called Newcastle-maxim that is not only the most efficient for shallow draft, but also has over 203,000DWT at scantling draft. The bow above the waterline of the vessel is shaped as the Ax-Bow that can decrease wave resistance at sea, and the hold part consists of nine holds and nine hatch covers, with high suitability for loading and unloading operations.

The long stroke, low speed, 2-stroke turbocharged diesel engine, which attains very high energy saving, together with the effect of the sophisticated hull form and the device Surf-Bulb (Rudder Fin with Bulb) provided



after the propeller.

The ballast tank arrangement enables the vessel to carry out sequential ballast water exchange at sea for prevention of marine pollution. MARPOL Annex VI is applied to reduce NO_x for prevention of air pollution.

Principal particulars

L(o.a.) x L(b.q.) x B x D x d: 299.95m x 290.00m x 50.00m x 24.10m x

17.88m

DWT/GT: 203,280MT/101,953t

Loading Capacity: 217,968m³

Main engine: Hitachi Zosen MAN

B&W 6S70MC (Mk 6) diesel x 1 unit

Speed: 16.25kt

Complement: 25

Classification: NK

Flag: Liberia

Completion: August 15, 2006

SHI-ME delivers 105,000 MTDW D/H product tanker to Wealth Line Inc.



Sumitomo Heavy Industries Marine & Engineering Co., Ltd. (SHI-ME) has delivered the 105,000 MTDW double-hull Aframax clean petroleum product carrier RIVER ETERNITY to Wealth Line Inc. at the SHI-ME Yokosuka Shipyard. The vessel was designed to carry clean petroleum products such as naphtha, jet fuel, gasoline, diesel oil, fuel oil and gas oil.

The hull form is optimized to achieve high propulsive efficiency and is designed with highly reliable structures. The Sumitomo Stern System (SILD, NBS propeller and HLES Rudder) can save fuel by 8-14%, improve maneuverability and reduce hull vibrations.

Cargo oil tanks and piping systems are arranged in triple-segregation groups for flexible cargo handling, and

cargo oil tank painting systems and materials are well suited for carrying clean product oil and crude oil. Water ballast tanks are coated with modified epoxy coating with backup anodes for easy maintenance and inspection.

The vapor emission control system (VECS) is installed, complying with the US Coast Guard requirements to prevent air pollution during cargo handling. For ship safety, fixed flammable gas detection systems are provided in water ballast tanks adjacent to cargo oil tanks.

Principal particulars

L (o.a.) x L(b.p.) x B x D x d: 239.00m x 229.00m x 42.00m x 21.30m x 12.19m

DWT/GT: 105,200t/56,285t

Loading capacity: 122,330m³

Main engine: DU-Sulzer 6RTA58T diesel x 1 unit

Speed, service: 15.2kt at 12.19 draft

Complement: 25

Classification: NK

Completion: November 2006

Special pipe method-applied ballast water management system

The Japan Association of Marine Safety (JAMS) has successfully developed a ballast water management system using a special pipe that can be installed and operated on board vessels. The new system, one of the most promising ballast water management systems, was designed to destroy organisms in ballast water using shear stress and cavitation.

A prototype system was installed onboard a container ship in 2003 to ensure effectiveness and practicability. After adoption of the Ballast Water Management Convention, system development successfully led to the Hybrid System that uses active substances such as ozone to kill pathogenic bacteria indicated in D-2 Standard of the Convention.

Recently a land-based test using the Hybrid System with 300 m³/h treatment capacity

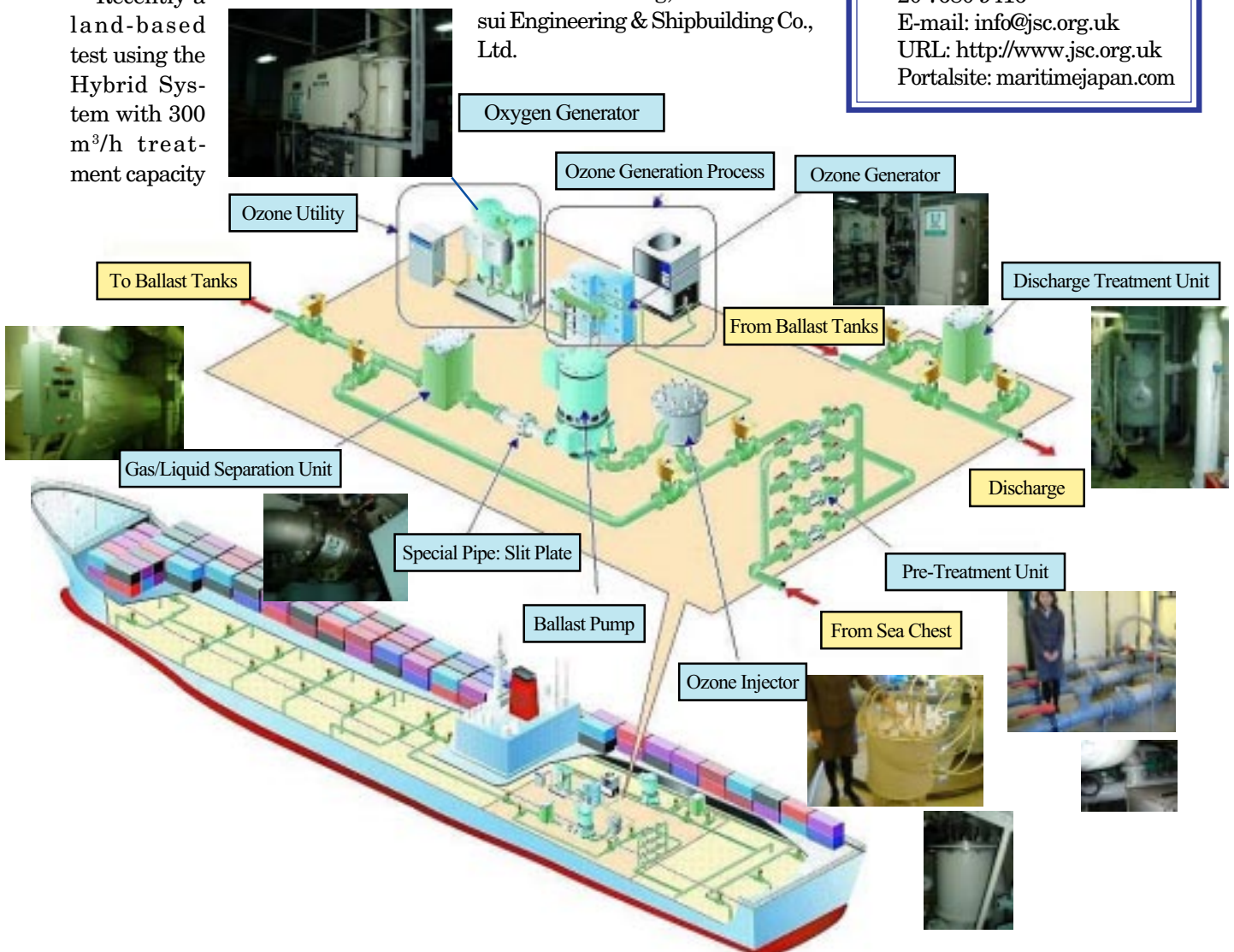
proved ability to comply with the D-2 Standard, showing 100% elimination of organisms including bacteria.

The active substance of the system, ozone, have been given Basic Approval under the G9 Guidelines by the MEPC/IMO at its 55th session held in October 2006. Onboard testing of the System with 300 m³/h treatment capacity will start from November 2006 using the 4,646TEU full-container ship, MOL EXPRESS, operated by Mitsui O.S.K. Lines.

The system has been developed mainly by JAMS with financial support from The Nippon Foundation. Technical assistance was provided by Marine Technology Institute Co., Ltd, Laboratory of Aquatic Science Consultant Co., Ltd, Shinko Ind. Ltd, M.O. Marine Consulting, Ltd. and Mitsui Engineering & Shipbuilding Co., Ltd.

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BRITISH COMMERCE

Owner: Hazel Shipping Company Ltd. (BP Shipping Ltd.)
Builder: Mitsubishi Heavy Industries, Ltd.
Hull No.: 2204
Ship type: LPG Carrier
L (o.a.) x B x D x d: 230.0m x 36.6m x 21.65m x 11.60m
DWT/GT: 54,478t/48,772t
Cargo tank capacity: 83,269 m³
Main engine: MAN B&W 7S60MC (Mark 6) diesel x 1 unit
Output: 13,700kW x 104min-1
Speed, service: 17.0kt
Classification: LR
Completion: Nov. 30, 2006



SEA SENATOR

Owner: Valles Steamship Company, Limited
Builder: Namura Shipbuilding Co., Ltd.
Hull No.: 262
Ship type: Tanker
L (o.a.) x L (b.p.) x B x D x d: 241.03m x 232.00m x 42.00m x 21.20m x 14.953m
DWT/GT: 105,715t/56,489t
Main engine: Hitachi B&W 6S60MC (Mark 6) diesel x 1 unit
Output: 12,240 kW x 105.0rpm
Speed, service: 15.38kt
Classification: ABS
Completion: Jan. 5, 2007



ICE FIGHTER

Owner: Raymond Enterprises S. A.
Builder: Onomichi Dockyard Co., Ltd.
Hull No.: 519
Ship type: Tanker
L (o.a.) x L (b.p.) x B x D x d: 228.56m x 218.00m x 32.20m x 19.60m x 13.718m
DWT/GT: 70,374t/38,832t
Cargo tank capacity: 82,012.6m³
Main engine: Mitsui MAN B&W 6S60MC (Mark-6) diesel x1 unit
Output: 12,240kW x 105min⁻¹
Speed, service: 15.5kt
Classification: ABS
Completion: Sept. 26, 2006



FAVORITE ACE

Owner: Glory Ocean Shipping S. A.
Builder: Shin Kurushima Dockyard Co., Ltd.
Hull No.: 5308
Ship type: PCC
L (o.a.) x B x D x d: 199.99m x 32.26m x 34.26m x 9.70m
DWT/GT: 17,709t/60,118t
Main engine: Kobe Diesel-Mitsubishi 8UEC60LSII diesel x 1 unit
Speed, service: 20.65kt
Classification: NK
Completion: Nov. 11, 2006



MIZUNAGI MARU

Owner: Bluemountains Shipping S. A.
Builder: Tsuneishi Holdings Corporation
Hull No.: 1351
Ship type: Bulk carrier
L (o.a.) x B x D x d: 229.00m x 32.26m x 20.03m x 14.40m
DWT/GT: 82,619t/43,143t
Main engine: Mitsui MAN-B&W 7S50MC-C diesel x 1 unit
Output: 9,800kW x 113rpm
Speed, service: 14.5kt
Classification: NK
Completion: Oct. 25, 2006



CAPE KNOX

Owner: Cape Knox Limited
Builder: Shimanami Shipyard Co., Ltd.
Hull No.: 507
Ship type: Bulk carrier
L (o.a.) x B x D x d: 169.26m x 160.40m x 27.20m x 13.60m x 9.761m
DWT/GT: 28,442t/16,951t
Main engine: Makita-Mitsui-MAN B6W 6S42MC (Mk 6) diesel x 1 unit
Output: 5,850kW x 129rpm
Speed, service: 14.kt
Classification: ABS
Completion: Nov. 22, 2006

