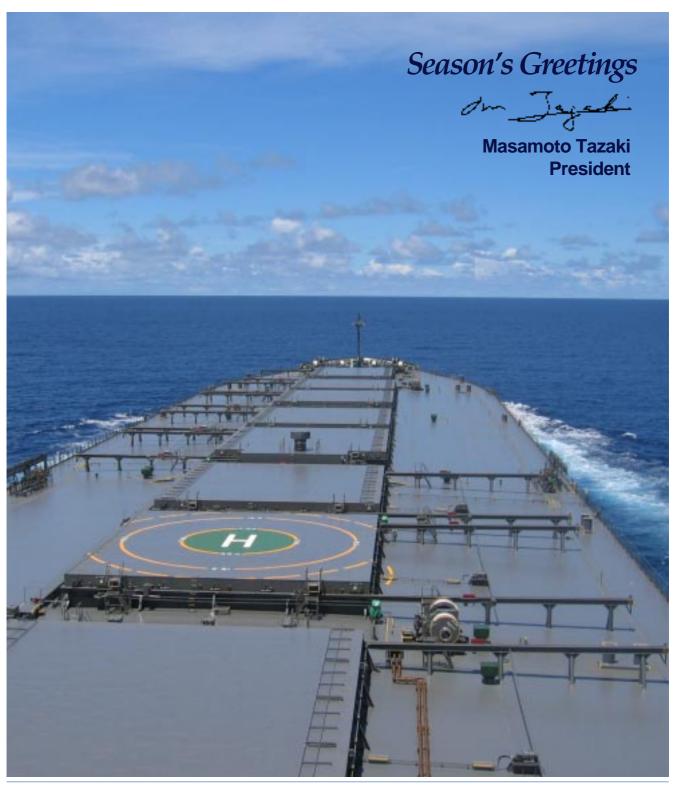
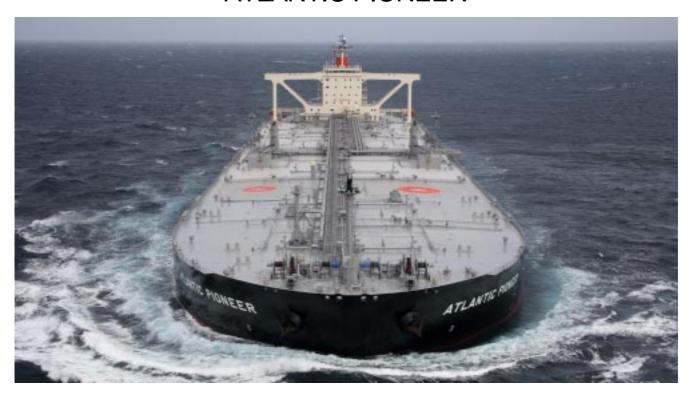


No. 338 Dec. - Jan. 2010





# Namura completes Malaccamax-type VLCC ATLANTIC PIONEER



Namura Shipbuilding Co., Ltd. delivered the ATLANTIC PIONEER, a 302,303 DWT double hull type VLCC, to Primo Shipping S.A. at its Imari Shipyard & Works on Oct. 1, 2009.

The ATLANTIC PIONEER is the first Malaccamax type VLCC built by Namura, which has the maximized deadweight at the assigned summer load draught to pass through the Strait of Malacca.

The vessel can navigate at a speed of over 15.5 knots at the assigned summer load draught due to adoption of the low-resistance hull form and the Namura flow Control Fin (NCF). These characteristics contribute to improved propulsion performance and lower fuel oil consumption. The superior cargo loading capacity can be maintained at the shallow draught condition in the Far East and the Persian Gulf trade.

The vessel has five center and five pairs of wing cargo oil tanks, one pair of slop tanks, and six pairs of water ballast tanks, all of which are arranged in double-hull and double-bottom structures. The vapor emission control system is installed as an environmentally friendly device.

The engine room machinery is automated based on the M0 concept, and the main engine is the MITSUI MAN-B&W 7S80MC-C (Mark 8) type. The electric generating plant consists of one turbo generator, two main diesel generators, and one emergency generator. The steam generating plant consists of one auxiliary boiler and one exhaust gas economizer.

Special attention is given to safety, environmental protection, and reduction of labor and operation costs, and compliance with the recent international regulations. E.g., an air type stern tube-sealing device is applied to prevent marine oil pollution, and the central fresh water cooling system is applied to the main engine and auxiliary machinery for easy maintenance.

Principal Particulars

 Length, o.a.:
 333.00m

 Length, b.p.:
 324.00m

 Breadth, mld.:
 60.00m

 Depth, mld.:
 29.00m

 Draught, mld.:
 20.60m

 DWT/GT:
 302,303t/159,943

 Main engine:
 MITSUI MAN-B&W

7S80MC-C (Mark 8) diesel x 1 unit MCR: 27,160kW x 74.0rpm Speed, service: 15.50kt (at assigned summer load draught)

Complement: 33 Classification: NK

#### To our readers

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## MHI develops new generation MOSS type LNG Carrier

Mitsubishi Heavy Industries, Ltd. (MHI) has developed a new generation MOSS type LNG carrier nicknamed SAYAENDO (literally means "peas in a pod") LNGC, which has obtained AIP (Approval in Principal) from DNV, LR, and NK.

In contrast to the conventional MOSS type LNGC, SAYAENDO LNGC has a continuous tank cover in place of the conventional indepen-

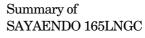
dent ones for the spherical aluminum alloy tanks. This innovative feature contributes to reducing the hull steel weight by about 10%, improved fuel consumption, higher terminal compatibility, and less maintenance.

The structural design is more effective than the conventional LNGC since the tank cover is utilized as the ship's longitudinal strength member. This structural optimization enables

the SAYAENDO LNGC to be more compact and use steel materials effectively.

SAYAENDO LNGC can also attain higher compatibility with LNG terminals in the world through its compact dimensions and better maintainability because the flying passage supporting structures can be eliminated.

Furthermore, SAYAENDO LNGC has realized reduction of fuel consumption by more than 20% in combination with the higher efficiency propulsion system called "MHI UST (Ultra Steam Turbine)" compared with the conventional steam turbine plant. Therefore, the SAYAENDO LNGC is a more environmentally friendly LNGC design.



 $L(o.a.) \times B \times D \times dd/ds:$  abt. 290m  $\times 50.4$ m  $\times 23.0$ m  $\times 11.5$ m/12.5 Cargo tanks capacity: abt. 165,000m<sup>3</sup> Main engine: Mitsubishi UST  $\times 1$  set Designed ship speed: abt. 19.5kt



## SSK completes CSR and PSPC applied Capesize bulker, ALEXANDRA P

Sasebo Heavy Industries Co., Ltd. (SSK) has completed the 181,255DWT Capesize bulk carrier, ALEXANDRA P, for Auckland Trading Co. of Liberia. The vessel is the first 180,000 DWT class bulk carrier developed by SSK, to which the Common Structural Rule (CSR) and Performance Standard for Protective Coatings (PSPC) were first applied in Japan.

The deadweight of the ALEXANDRA P is maximized as Capesize bulk carrier of this class, which meets the requirements of the Dunkerque port. For economical ship navigation, the vessel applies an energy-saving combination of the hull form, SS-Fin, low-speed engine, and low-revolution large-diameter propeller. Many windows are provided for all sides of the wheelhouse to give a wider field of vision to the crew.

| Principal particulars |         | DWT/GT:         | 181,255MT/93,385  |
|-----------------------|---------|-----------------|-------------------|
| Length, o.a.:         | 292.00m | Main engine:B&  | w 6S70MC-C diesel |
| Length, b.p.:         | 283.00m | x 1 unit        |                   |
| Breadth, mld.:        | 45.00m  | Speed, service: | 15.3kt            |
| Depth, mld.:          | 24.70m  | Complement:     | 25                |
| Draught, mld.:        | 16.50m  | Classification: | ABS               |



#### Imabari completes PCC BRASILIA HIGHWAY

Imabari Shipbuilding Co., Ltd. completed the pure car carrier, BRASILIA HIGHWAY (HN:1503) at its Marugame Headquarters for Kawasaki Kisen Kaisha, Ltd. The vessel is designed with the carrying capacity of 6,237 cars based on the standard passenger car (RT43), and can carry recreation vehicles, land cruisers, trucks, dump trucks, etc.

The general arrangement of the vessel consists of four cargo holds and 11 car decks, and a garage is provided on the upper accommodation deck aft part. Two of the 12 car decks (Nos. 6 and 8 car decks) provided for the carrier are liftable to accommodate tall vehicles or small vehicles efficiently.

These decks are operated upward and downward by a panel lift car (SWL 32t). The No. 5 deck is a roll-on/off deck (drive-through access) with two rampways, one of which is a flap type arranged center of the starboard side (SWL 20t), and the other is a folding type arranged aft part of the starboard side (SWL 150t).

The center ramp can move vertically between the Nos. 4 and 5 car decks according to tidal conditions. Actuating devises for opening and closing of the external ramps are the inverter system except cleating. Both

fixed and movable type ramps are installed and arranged suitably to lead the vehicles to designated loading deck. The movable ramps are driven by hydraulic cylinders.

The fire-fighting system uses high expandable foam fire extinguishers for cargo holds and the engine room. This is the environmentally friendly type without discharging CO<sub>2</sub> gas. Extinguishing foam uses freshwater. Therefore, it is harmless for the cars.

The main engine is the UE marine diesel engine, model 8UEC60LSII of the inflow scavenging exhaust turbocharged, two-stroke, and single acting crosshead type. For remote control, the vessel satisfies the notation M0 of the Class NK.

Onboard electricity demand is supplied by three diesel generators, which are controlled by an automatic starting and/or stopping apparatus, synchronizing apparatus and power/frequency control device. Safe ship operation is ensured with advanced



navigation systems including ECDIS and Course recorder.

Principal particulars

DWT/GT: 18,793t/59,440 Car carrying capacity: 6,237 units (RT43)

Main engine: Kobe Diesel-MITSUB-ISHI 8UEC60LSII diesel x 1 unit MCR: 13,260kW x 100rpm NCR: 11,270kW x 94.7rpm (85% MCR)

Speed, service: 20.0kt Classification:NK, NS\* (Vehicles Carrier) and MNS\*, M0

Complement: 31 Completion: Aug. 20, 2009

## MHI completes 78,500m³ type LPG Carrier YUYO SPIRITS

Mitsubishi Heavy Industries, Ltd. (MHI) completed construction of the YUYO SPIRITS (HN: 2240), an LPG carrier with a tank capacity of 78,903m³, and delivered the vessel to Gas Spirits Shipping S.A. at the Nagasaki Shipyard & Machinery Works

on Aug. 31, 2009. The vessel is the MHI's 36th 78,000m<sup>3</sup> class LPGC.

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 achieves high propulsive performance with less vibration.

Main dimensions and cargo equipment are designed considering compatibility with worldwide terminals. Considering various shore facilities, a booster cargo pump and cargo heater/vaporizer are equipped.

**Principal Particulars** 

 $\begin{array}{l} L~(o.a.)~x~L~(b.p.)~x~B~x~D~x~d~(sum-mer):~230.0m~x~219.0m~x~36.6m~x\\ 20.80m~x~10.795m \end{array}$ 

Gross tonnage: 45,966
Cargo tank capacity: 78,903m³
Main engine: Mitsubishi
7UEC60LSII diesel x 1 unit

Output: 12,360kW x 100rpm Speed, service: 16.7kt Classification: NK



#### MES completes NORD PROGRESS, 56,000DWT type bulk carrier

Mitsui Engineering & Shipbuilding Co., Ltd. (MES) completed and delivered a 56,000DWT type bulk carrier NORD PROGRESS (HN: 1782) at the Chiba Works on Sept. 16, 2009 to NORDEN Shipping (Singapore) Pte. Ltd., Singapore.

The vessel is a Handymax type bulk carrier of 56,000DWT with a huge cargo hold capacity of over 70,000m3. This series is widely called "Mitsui's 56" and is highly appreciated in the market. More than 150 vessels of this series have been ordered from MES. The vessel is designed in accordance with IACS Common Structural Rules. As a result, structural safety and operational flexibility are improved. The vessel is provided with good manageable size of 56,000DWT at the summer draft, accessible length and draft for main ports worldwide, and low fuel consumption boosted by good propulsive performance.

The vessel has five cargo holds and four deck cranes for handling cargo. To load various types of cargo, the vessel has adequate strength of the tank top of cargo holds that allows efficient

handling of cargoes. The size of hatch opening is the largest for this type in terms of both length and width. Each cargo hold has a sufficient clear length to load long pipes. The cargo holds are

well strengthened to load heavy cargoes such as hot coils, etc. Outfitting arrangement on the upper deck and the strength of hatch covers are well designed for packaged lumber cargoes.

The main engine is the MITSUI-MAN B&W 6S50MC-C diesel, which is a light, compact, and high output engine complying with MARPOL  $NO_x$  restrictions for exhaust gas. The power margin provides a high degree of flexibility (at normal service output = 75% maximum continuous output) and the lowest fuel oil consumption will be realized by optimum matching at normal service output.



Ballast water can be changed during navigation for protection of the marine environment, and generator engines comply with MARPOL  $NO_x$  restrictions for exhaust gas.

Principal particulars

L (o.a.) x L (b.p.) x B x D x d: 189.99m x 182.00m x 32.25m x 18.10m x 12.69m

DWT/GT: 56,119t/31,759 Main engine: Mitsui-MAN B&W 6S50MC-C diesel x 1 unit

 $\begin{array}{lll} \text{MCR:} & 9,070 \text{kW} \times 125.0 \text{rpm} \\ \text{Speed, service:} & \text{abt. } 14.5 \text{kt} \\ \text{Complement:} & 26 \\ \text{Classification:} & \text{NK} \\ \text{Delivery:} & \text{Sept. } 16,2009 \end{array}$ 

#### Universal completes 300,000 DWT Unimax ore carrier, COSCO ANSTEEL

The 300,000 DWT type ore carrier COSCO ANSTEEL was delivered to Sinobright Shipping Ltd. at the Ariake Shipyard of Universal Shipbuilding Corporation on Oct. 14, 2009. The COSCO ANSTEEL is the ninth vessel of the new design series of Unimax ore carrier, dedicated for transport of iron ore from Brazil to China.

Universal's Unimax Ore Carrier is

optimized to have the largest capacity of the 300,000 DWT class to enter major iron ore loading ports in Western Australia, while having 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.

The energy saving devices of Surf bulb, SSD and Ax-bow developed by Universal dramatically improve propulsive efficiency, decreasing fuel consumption compared with the conventional large ore carrier.

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

Principal particulars:

 Length, o.a.:
 327.0m

 Breadth, mld.:
 55.00m

 Depth, mld.:
 29.25m

 Draft, mld.:
 21.40m

 DWT/GT:
 297,719t/150,971

 Main engine:
 Hitachi MAN-B&W

 6S80MC-C diesel x 1 unit

Sea speed: 14.5 kt Classification: ABS



#### HONG KONG BRIDGE

Owner: Kawasaki Kisen Kaisha (K

Line)

Builder: IHI Marine United Inc.

Hull No.: 3233

Ship type: Container carrier

L (o.a.) x B x D: 336.0m x 45.8m x

24.4m

DWT/GT: abt. 87,000t/98,800 Loading capacity: 9,040TEU

Main engine: MAN B&W 12K98ME

 $diesel \times 1$  unit

MCR: 67,270kW x 93.4rpm Speed, service: 24.5kt Classification: NK

Completion: Sept. 24, 2009



#### QUEEN KOBE

Owner: San-E Maritime Corporation Builder: Kawasaki Shipbuilding Cor-

poration Hull No.: 1617

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 (Mk 7) diesel x 1 unit

MCR: 8,200kW x 110rpm

Classification: BV

Completion: Oct. 23, 2009



#### UNITED SERENITY

Owner: Ocean Promise Pte. Ltd. Builder: Oshima Shipbuilding Co.,

Ltd.

Hull No.: 10530

Ship type: Japanamax type bulk car-

rier

 $L\left(o.a.\right)x\,B\,x\,D\,x\,d;\,224.99m\,x\,32.26m$ 

x 20.05m x 14.526m DWT/GT: 82,533t/42,931

Main engine: KAWASAKI MAN

B&W 5S60MC-C diesel x 1 unit Output: 9,378kW x 88.0rpm

Speed, service: 14.5kt Classification: NK

Completion: July 31, 2009



#### PANTERA ROSA

Owner: Tateyama Naviera S.A. Builder: Sanoyas Hishino Meisho

Corp.

Hull No.: 1280

Ship type: Bulk carrier

L (o.a.) x L (b.p.) x B x D x d: 225.00m x 219.00m x 32.24m x 19.90m x

14.379m

DWT/GT: 78,844t/41,662

Cargo hold capacity: 91,188m<sup>3</sup> (Grain)

Main engine: MAN B&W 7S50MC-C

diesel x 1 unit MCR: 9,560kW Classification: NK Completion: Oct. 23, 2009



### CHEMROAD JOURNEY

Owner: Cobalt Blue Shipping S.A. Builder: Shin Kurushima Dockyard

Co., Ltd. Hull No.: 5536

Ship type: Chemical tanker

L(o.a.) x B x D x d: 174.39m x 167.00m x 27.70m x 16.00m x 10.00m/

11.00m

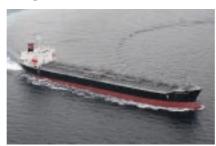
DWT/GT: 33,526t/20,108

Main engine: 6UEC52LS diesel x 1

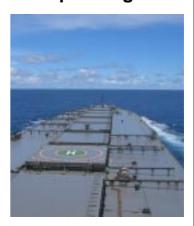
unit

Speed, service: 15.0kt Classification: NK

Completion: Oct. 20, 2009



#### **Tranquil Navigation**



A 230,000DWT type ore carrier built by Namura Shipbuilding Company navigating the waters near the Philippines with a full load of iron ore from Brazil.