



Bulk carrier SOYO wins 23rd Ship of the Year Award Special technological award goes to resource research ship HAKUREI



The Japan Society of Naval Architects and Ocean Engineers (JASNAOE) on June 17 convened a meeting of its selection committee for the society's 23rd Ship of the Year Award for 2012 at Gakushi Kaikan in Tokyo, and selected the large dry bulk carrier SOYO for the grand prix award. The awardees in this and other categories are selected out of notable ships built in Japan in the past year according to its technological, artistic and social significance. For this year's commendation, out of eight candidates, the resource research ship HAKUREI has been chosen for the special technological category, the SHINSHIN MARU for

the small cargoship category, the AMANOKAWA for the small passenger ship category, the EMERALD ACE for the large cargoship category, and the KAGOSHIMA MARU for the fishing boat-work vessel category.

The awards were presented on July 25 at Kaiun Club in a joint commendation ceremony of three maritime academic institutions, of which the other two are The Japan Institute of Marine Engineering (JIME) and The Japan Institute of Navigation (JIN). JIME and JIN respectively gave the Marine Engineering of the Year 2012 Award and the Navigation Achievement Prize on that occasion.

50,872 GT Dry Bulk Carrier SOYO

This bulk carrier, constructed by Oshima Shipbuilding Co., Ltd. to the order of Collie Shipholding S.A., is the first vessel in active service in the world to be equipped with an air lubrication system utilizing the main engine's scavenging bypass, which has succeeded in reducing the frictional resistance of the hull and CO₂ emissions. This air lubrication technology, utilizing bubble flows along the hull bottom to reduce frictional resistance between the hull and seawater, has solved the technical problem of enormous energy which would be required to flow air along the hull

bottom by any prior system. It is also highly appreciated as a versatile CO₂ reducing technology applicable to deep-draft large oceangoing ships for hauling major cargo items. The new system is expected to find use in an expanding spectrum of ships in the coming years.

Special technological award

6,283 GT offshore resource research ship HAKUREI

This is an offshore resource research ship built by Mitsubishi Heavy Industries, Ltd. (MHI) for the Japan Oil, Gas and Metals National Corporation, an independent ad-

(Continued on Page 2)



For further information please contact:

Website: <http://www.jsea.or.jp>

JAPAN SHIP EXPORTERS' ASSOCIATION

15-12, Toranomon 1-chome, Minato-ku, Tokyo 105-0001 Tel: (03) 62061661 Fax: (03) 3597-7800 E-Mail: postmaster@jsea.or.jp

(Continued from Page 1)

ministrative agency.

It is a novel ship equipped with diverse research functions for use in exploration and development of undersea resources in the waters around Japan. The equipment includes large drilling apparatuses of two different types adaptable to a broad range of water depths from shallow to 6,000 m, physical exploration devices and seabed observation systems. Excellent propulsive performance, seaworthiness and maneuverability of the vessel enable the HAKUREI to engage in surveying of oceanic resources and basic research of the environment efficiently and safely. The vessel was



selected for the special technological award in recognition of the high technological standards that enabled these

functions to be integrated in an advanced way and thereby to make important social contributions.

Category Awards

Large cargoship award

60,154 GT PCTC EMERALD ACE

This MHI-built vessel is the world's first vehicles carrier equipped with a hybrid electric power system combining a photovoltaic power generation plant and lithium ion batteries as a new approach to cut CO₂ emissions. Photovoltaic power generated while at sea is stored into the batteries, whose output is used while at anchor to keep the diesel generator at halt and thereby to realize zero CO₂ emission.



Small passenger ship award

11 GT electrically propelled passenger ship AMANOKAWA

The AMANOKAWA, built by Tsuneishi Facilities & Craft Co., Ltd., is intended to realize the concept of "clean and pleasant sea travel" in river traffic and tourism. The plug-in type electrically propelled vessel having lithium ion batteries as its main power source has realized low noise, low vibration and zero exhaust gas, and is well accepted for the comfort it pro-



vides to passengers and its unique aesthetic design and lighting-up, unparalleled by other such vessels. The service speed is about four knots.

Small cargoship award

749 GT chemicals and oil tanker SHINSHIN MARU

Built by Fukushima Zosen Tekkosho (designed by Yugen Kaisha Fuji Sekkkei), the SHINSHIN MARU is the first twin-screw electrically propelled coasting vessel. Its building cost is saved by using controllable pitch propellers to dispense with inverters otherwise needed for controlling the ship's speed, and the use of a stern twin-skeg hull form, contributing to



higher propulsion efficiency, has resulted in about 10% energy saving over comparable conventional ships. The vessel can carry 1,793 tons of liquid cargo.

Fishing/work vessel award

935 GT fisheries training ships KAGOSHIMA MARU

Built by Niigata Shipbuilding & Repair, Inc. for Kagoshima University, this is the first large training ship powered by an electric propulsion system consisting of two 360-degree turn-



able propellers which, together with a joystick steering system, contributes to excellent maneuverability of the vessel at low speed. Further equipped with a latest observation/analysis system, a multipurpose fishing system and an inboard high-speed LAN among others, the KAGOSHIMA MARU is a revolutionary ship as an offshore educational platform of the next generation.

Imabari reveals new 33,000DWT bulker series "IS" TRI-STAR

Imabari Shipbuilding Co., Ltd. has developed a new bulk carrier series of 33,000DWT class named "IS" TRI-STAR to cope with diversified demand in the handy-size bulker market.

The company is renowned as a leading builder with a large market share for the handy bulk carrier worldwide. Imabari has achieved over 30 deliveries of "IS" BARI-STARs, the 38,000DWT type bulk carrier series, since 2010, and over 200 28,000DWT-type bulk carriers have been completed for customers worldwide since the first delivery in 1990. These vessels have developed a high reputation amongst the customers.

Recent diversification in demand for ships, however, has caused the company to develop the 33,000DWT class bulk carrier "IS" TRI-STAR. This newest series will have the following characteristics: A larger cargo hold capacity in this class is provided. Designed with reduced hull resistance

and fuel saving devices, the vessel will achieve the world's best class fuel consumption. Adequate deadweight will be provided despite the shallow draught designed to permit navigation in shallow waterways and ports without affecting the fuel efficiency. The fuel oil tanks will be constructed with double hull structures to prevent oil spills due to hull damage and attain environmentally friendly ship operation.

"IS" stands for Imabari Shipbuilding. "TRI" comes from the figures of 33,000 tons, and "STAR" means a star. This denomination is intended to signify "three-star class," and Imabari expects the "IS" TRI-STAR will be able



An image

to obtain the highest reputation amongst customers.

"IS" TRI-STAR is the fourth "IS" series vessels following the "IS" NEXTER, "IS" I-STAR and "IS" BARI-STAR series.

Principal particulars of "IS" TRI-STAR:

Length, o.a.:	179.5m
Beam:	28.4m
Depth:	14.25m
Deadweight:	33,000t

Sanoyas completes Panamax bulk carrier SEAGULL WIND

Sanoyas Shipbuilding Corporation delivered the Panamax bulk carrier, SEAGULL WIND, constructed at the Sanoyas Mizushima Shipyard to Sangria Pioneer Four S.A. on April 24, 2013.

The vessel has improved fuel consumption by 10% compared with the existing Sanoyas Panamax bulk carrier, while maintaining a loading capacity of 83,000t that is the largest in this category. This vessel is the third of a new series of the 83,000DWT-type Panamax, which will contribute seaborne trade with maximum fuel-saving efficiency.

For improvement of propulsion ef-

iciency, the vessel is equipped with a low-speed and long-stroke fuel-optimized main engine combined with a high-efficiency propeller and the Sanoyas developed energy-saving device called "STF" (Sanoyas-Tandem-Fin (patent); max. 6% energy saving) on the stern shell, which also contribute to the reduction of CO₂ emissions.

For protection of the environment, various countermeasures such as main engine compliance with the NO_x emission Tier II limit for the prevention of air pollution, fuel oil tank protection and independent holding tanks for accommodation discharges, dirty hold bilge and rain water on the upper deck, are incorporated.

In addition, dedicated fresh water tanks are provided for storing hold-washing water generated by a large capacity type fresh water generator. For improvement of vessel

maintenance, access trunks are arranged to allow access from the upper deck to the double bottom even under the laden condition.

Accommodation, applying the new Maritime Labor Convention in advance, makes officers and the crew comfortable in the vessel and safe maneuverability is achieved with the organized arrangement and rear visibility in the wheelhouse.

Principal particulars

Hull No.:	1330
L (o.a.) x L (b.p.) x B x D x d:	229.00m x 225.00m x 32.24m x 20.20m x 14.648m (ext.)
DWT/GT:	82,908t/43,656
Cargo hold capacity:	95,892m ³ (grain)
Main engine:	MAN B&W 6S60MC-C8.2 diesel x 1 unit
MCO:	9,750kW
Speed, service:	about 14.5kt
Complement:	25
Classification:	NK
Delivery:	April 24, 2013
Registry:	Panama



Mitsubishi delivers seismic vessel, RAMFORM TITAN

Mitsubishi Heavy Industries, Ltd. delivered the "RAMFORM TITAN" to Petroleum Geo-Services ASA (PGS) at the Nagasaki Shipyard & Machinery Works on May 10, 2013. The vessel has a distinctive triangular hull called 'Ramform,' measuring 104m long and 70m wide, which allows more efficient 3D seismic surveying.

This vessel will conduct seismic surveys using acoustic waves (also referred to as seismic waves). Air gun sources emit acoustic waves that strike the seabed and strata boundaries and bounce back as echoes. These echoes are detected by sensors inside multiple streamer cables several kilometers in length, which are towed from the vessel's stern.

When data from the cables are processed and analyzed by computer, it is possible to identify likely oil or natural gas deposits below the seabed.

Adding more cables allows the vessel to explore a wider area of the seabed, improving efficiency and safety. The vessel can be equipped with 24 cables with its 70m stern width, which was increased from the 40 meters of PGS's previous series.

Offshore seismic surveys are conducted around the clock, and if a sur-



vey field is extensive, it takes several months. For crew comfort, the vessel is fully equipped with recreational facilities including a lounge, a TV room, a sauna, an outdoor pool, and an indoor ball game court as well as facilities including a living room and a dining room.

The vessel is also equipped with a helicopter deck to transport members of the crew or replenish supplies without mooring and interrupting observations. Bunkering by a bunker ship is also possible while the vessel tows streamer cables.

Principal particulars
L (o.a.) x L (b.p.) x B (mld.) x D (mld.)

x d (mld.): 104.21m x 96.002m x 70.00m x 8.10m x 6.42m

Gross Tonnage: 20,637

Transit speed: abt. 16.5kt

Towing Speed: abt. 5.0kt

Main generator engines: 6 sets of Wartsila Model 8L32 (3,840kW x 720min⁻¹)

Propulsion: 3 sets of electric, CP propeller plants (with nozzle and propeller shaft 6,000 kW/each shaft)

Bow thruster: 2,200kW x 1 set

Streamer reels: Reel capacity 12 km x 24 sets

Complement: 80

Classification: DNV

Flag: Bahamas

Kawasaki completes 58,000DWT class bulker, KOUYOU

Kawasaki Heavy Industries, Ltd. delivered the 58,595DWT bulk carrier, KOUYOU (HN: 1699), built at the Sakaide Works to its owner, Venus Ocean Navigation S.A. The vessel is the 29th of the Kawasaki 58,000DWT-class bulk carrier series.

The KOUYOU is designed with a flush deck and a forecastle and has five cargo holds allowing efficient

transport of grain, coal, various ores, and steel products. Four 30t deck cranes installed between the hatch covers along the centerline facilitate cargo handling at ports with insufficient wharf cargo-handling facilities.

The vessel employs the latest technologies to achieve maximum fuel economy, which include a fuel-saving main diesel engine, highly efficient

propellers, the Kawasaki rudder bulb system with fins (RBS-F), as well as a bow capable of reducing wave resistance. All these features contribute to the

vessel's enhanced propulsion performance.

The main engine and generator engine comply with Tier II NO_x emission standards set by the International Convention for the Prevention of Pollution from Ships.

Principal particulars

L(o.a.) x B x D x d: 197.00m x 194.00m x 32.26m x 18.10m x 12.65m

DWT/GT: 58,595t/33,126

Cargo hold capacity: 73,614m³

Main engine Kawasaki-MAN B&W 6S50MC-C7 diesel x 1 unit

MCR: 8,630kW x 116rpm

Speed, service: about 14.45kt

Complement 25

Classification: NK

Registry: Panama

Delivery: June 7, 2013



Namura completes 251,019DWT ore carrier, INDIGO HOPE

Namura Shipbuilding Co., Ltd. delivered INDIGO HOPE, a 251,019DWT ore carrier, to Grand Crow Maritime S.A. at its Imari Shipyard & Works on May 9, 2013.

This is the tenth vessel of a series of 250,000DWT type ore carriers called "WOZMAX" and the principal dimensions of this type satisfy the restrictions of Port Hedland, Port Walcott, and Dampier, which are the three major ore exporting ports in Western Australia. The vessel complied with the requirements of the latest amendments of the international regulations at the construction stage.

The main engine of the vessel is the MAN B&W 7S80MC-C (Mark 7) type diesel engine, driving a single fixed pitch propeller. The Namura flow Control Fin (NCF), which was devel-

oped by Namura, and a high-efficiency propeller are equipped for improving propulsion performance and saving fuel oil. The machinery in the engine room is automated based on the NK M0 concept. The cooling system of the machinery adopts the central fresh water cooling system for easy maintenance.

The vessel has large capacity of water ballast pumps for quick operation during cargo loading. IMO PSPC-WBT is applied for corrosion protection of water ballast tanks to increase



safety of the vessel.

Principal particulars

L (o.a.) x B (mld.) x D (mld.) x d (mld.):
329.95m x 57.00m x 25.10m x 18.00m

DWT/GT: 251,019t/132,587

Main engine: MAN B&W 7S80MC-C (Mark 7) diesel x 1 unit

Speed, service: about 15.0kt

Complement: 25

Classification: NK

Registry: Panama

Japan's shipbuilding industry at NOR-SHIPPING 2013

NOR-SHIPPING 2013, the 24th international shipping exhibition and conference organized by Norway Trade Fairs (NORGES VAREMESSE), was held at the Lillestrom Exhibition Centre in Lillestrom, Norway, from June 4 through 7. 1,037 companies from 59 nations participated, and the exhibition was visited by an estimated 14,870 people.

On June 4, the Japanese stand was opened by Mr. A. Shirota, the Japanese Ambassador to Norway, Mr. K. Kama, president of JSEA, and Mr. M. Nakashima, chairman of JSMEA.

A cocktail party was held in the evening on June 5 at the Radisson Blu Scandinavia Hotel, Oslo, co-sponsored



Cocktail party on June 5

by Ambassador Shirota and Mrs. Shirota as well as the JSEA president Mr. and Mrs. Kama. About 671 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 10



From left are JSEA president Kama, Ambassador Shirota, and JSMEA chairman Nakashima

Japanese shipbuilders under a grant from The Nippon Foundation, to display the Japanese shipbuilding industry today, using photos, scale-model ships, and a liquid crystal display system.

New SAJ Chairman appointed



The 67th annual general meeting of the Shipbuilders' Association of Japan (SAJ) took place on June 18 and elected 19 new directors. Subsequently, the 642nd board of directors' meeting was held, and Mr. Kazuo Tsukuda was appointed as the 34th Chairman of SAJ. Mr. Tsukuda is concurrently Senior Executive Adviser of Mitsubishi Heavy Industries, Ltd.

TERASEA HAWK

Owner: TeraSea Pte Ltd
 Builder: Japan Marine United Corporation, Yokohama Shipyard, Tsurumi Works
 Hull No.: 0075
 Ship type: Ocean towing salvage tug
 L (o.a.) x B x D x d (ext.): 75.30m x 18.00m x 8.16m x 6.60m
 DWT/GT: 3,381t/3,513
 Main engine: Wartsila W12V32D diesel x 2 units
 Bollard pull: 200t
 Speed, Max.: 16.0kt
 Registry: Singapore
 Classification: ABS
 Completion: May 30, 2013

**NEW DIRECTION**

Owner: New Excel Maritime S.A.
 Builder: Mitsui Engineering & Shipbuilding Co., Ltd.
 Hull No.: 1844
 Ship type: Bulk carrier
 DWT/GT: 56,097t/31,768
 Main engine: Mitsui-MAN B&W 6S50MC-C7 diesel x 1 unit
 MCO: 9,070kW x 125.0rpm
 Speed, service: about 14.5kt
 Complement: 24
 Classification: NK
 Registry: Panama
 Delivery: June 12, 2013

**APL ANTWERP**

Owner: Southern Route Maritime S.A.
 Builder: Koyo Dockyard Co., Ltd.
 Hull No.: S-2387
 Ship type: Container carrier
 L x B x D x d: 320.37m x 46.0m x 24.9m x 14.524m
 DWT/GT: 90,647t/87,865
 Container carrying capacity: 81,000TEUs
 Main engine: Mitsui MAN B&W 11K98ME (Mark 7) diesel x 1 unit
 Speed, service: About 25.5kt
 Classification: NK
 Completion: May 17, 2013

**STOVE OCEAN**

Owner: Stove Rederi AS
 Builder: Oshima Shipbuilding Co., Ltd.
 Hull No.: 10641
 Ship type: Bulk carrier
 L (o.a.) x B x D x d (ext.): 189.99m x 32.26m x 17.87m x 12.568m
 DWT/GT: 55,861t/31,864
 Main engine: Kawasaki MAN B&W 6S50MC-C Mark7 diesel x 1 unit
 Speed, service: 14.50kt
 Registry: Panama
 Classification: NK
 Completion: May 21, 2013

**ORCHID**

Owner: Nordorchid Navigation Company Limited
 Builder: Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
 Hull No.: 1377
 Ship type: Tanker
 L (o.a.) x B x D: 228.60m x 42.00m x 21.50m
 DWT/GT: 105,000t/57,000
 Main engine: Mitsui MAN B&W 6S60MC-C diesel x 1 unit
 Speed, service: About 15.3kt
 Classification: LR
 Completion: June 28, 2013

**LOCH MELFORT**

Owner: Sun Fortune Shipping S.A.
 Builder: Shin Kurushima Dockyard Co., Ltd.
 Hull No.: S-5775
 Ship type: Log bulk carrier
 L (o.a.) x B x D x d (ext.): 176.83m x 28.80m x 14.20m x 9.826m
 DWT/GT: 33,300t/21,160
 Main engine: 6UEC45LSE-1 diesel x 1 unit
 Speed, service: 14.3kt
 Registry: Panama
 Classification: NK
 Completion: April 18, 2013

