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## Brazil Offshore Oil and Gas Exploitation Seminar 2012

Currently there are many projects around the world to develop undersea oil and gas fields, as energy demand is growing worldwide. Brazil plans to make a major investment to develop offshore oil fields, and Japanese shipping and shipbuilding companies intend to make inroads to Brazil. Expectations are growing for Brazil as a new and promising market for the Japanese maritime affairs cluster. On March 14, 2012, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) held a Brazil Offshore Oil and Gas Exploitation Seminar 2012 to give briefings on present and future offshore development and other relevant subjects, inviting parties concerned with undersea development in Brazil. More than 200 guests from around Japan attended the seminar, paying earnest attention to the presentations.

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Mr. Ricardo Cunha da Costa BNDES



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## Report on Brazil Offshore Oil and Gas Exploitation Seminar 2012



manufacturing facilities of Shinko Ind. Ltd. and Nakashima Propeller Co. Ltd., both members of the Japan Ship Machinery and Equipment Association (JSMEA), to exchange views.

#### Nakashima Propeller Co. Ltd.,



#### Shinko Ind. Ltd.





#### **■ Kawasaki**

## KHI to join drillship construction, other relevant projects in Brazil,

Kawasaki Heavy Industries Ltd. (KHI) signed a contract on May 4, 2012 (local time in Brazil) to enter a joint venture in Brazil to construct drillships and participate in other projects.

KHI will take a 30 percent stake in and share technology with Estaleiro Enseada do Paraguacu S.A. (EEP), a shipbuilding company in Estado da Bahia, Brazil. EEP was established jointly by Odebecht S.A., Construtora OAS Ltd. and UTC Projetos e Consultori S.A., all of which are major general contractors, to build and sell various marine structures and commercial vessels. KHI will participate in the development of a new shipyard of EEP, which has begun in Estado de Bahia, and transfer technologies to the shipyard for constructing drillships.

In Brazil, many oil deposits have been discovered in the Pre-Salt layer, which is a geographical formation in the continental shelf off the coast of the South American nation. As such, demand is growing for drillships; floating production, storage and offloading (FPSO) units; and many other commercial ships and offshore facilities. EEP is active in winning business contracts. EEP was recently informed unofficially by Sete

Brasil Participacoes S.A. that the local investment company in the petroleum and gas business will order from the joint venture six drillships to be chartered-out to Petroleo Brasileiro S.A. (Petrobras), a semi-public oil company in Brazil.

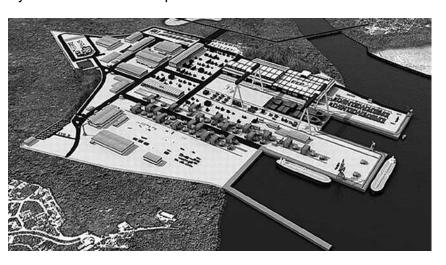
Previously, KHI had launched joint ventures with two Chinese shipyards, which are Nantong COSCO KHI Ship Engineering Co. Ltd. (NACKS) and Dalian COSCO Shipbuilding Industry Co. Ltd. (DACOS). EEP and its three

parent companies decided to do business with the Tokyo- and Kobe-based heavy industries company based on KHI's highly rated achievements.

KHI hopes to make EEP a third foothold of its overseas business development—after NACS and DACOS. It will focus on helping EEP construct a variety of commercial ships in order to grow itself and strengthen earnings in the future.

#### **About EEP**

- (1) Name: Estaleiro Enseada do Paraguacu S.A.
- (2) Foundation: June 11, 2011
- (3) Location: Maragogipe, Estado Da Bahia, Brazil
- (4) Capital: BRL2.53 million (when increases in capital are completed)
- (5) Investment ratio: KHI (30 percent) and Odebecht, Construtora and UTC Projetos e Consultori (70 percent)
- (6) Business lineup: Construct and sell various marine structures and commercial vessels
- (7) Shipyard details: Covers a total area of some 1.6 million square meters and has a capacity for processing approximately 36,000 tons of steel products



#### **■** Kawasaki

#### KAWASAKI HEAVY INDUSTRIES LTD.

World Trade Center Bldg., 4-1, Hamamatsu-cho 2-chome, Minato-ku, Tokyo 105-6116, Japan Tel: +81-3-3435-2031 Fax: +81-3-3435-2022 http://www.khi.co.jp

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**NAKASHIMA** 

### **New foundry completed** We Go Beyond at Nakashima Propeller's Tamashima Works; space for casting enlarged 60 percent

New foundry completed at Nakashima Propeller's Tamashima Works; space for casting enlarged 60 percent

Nakashima Propeller Co. Ltd. (head office: Okayama City, Okayama prefecture; president: Motoyoshi Nakashima) completed a new foundry at the Tamashima Works (Tamashima, Kurashiki City, Okayama prefecture) on May 11, 2011. The new annex (factory area: approximately 3,400 square meters) was constructed adjacent to the existing foundry (factory area: approximately 5,500 square meters). The addition increases the total area of the pita space for sand casting-by some 60 percent. The Tamashima Works, one of Nakashima Propeller's main manufacturing facilities, produces propellers that are six meters or larger in diameter. Taking advantage of the recent capital investment, the works hopes to provide customers with products much more stably and better meet delivery deadlines.

#### Nakashima Propeller to use carbon fiber for propellers, with plans for testing in two years

Nakashima Propeller is working on a businessacademia-government project to develop technology for producing propellers from composite materials. With the steady advancement of the project, a new type of propellers is scheduled to be tested on commercial ships deployed in domestic services hopefully in two years. More specifically, testing will be made on side thruster blades made from carbon-fiber-reinforced plastic (CFRP). Following side thruster blades, Nakashima Propeller intends to begin researching and developing main propulsion propellers made of carbon in the more distant future.



The use of composite materials is attracting attention, with innovative impact expected not only on making propellers, but also on designing ships in the future. The alloys containing iron and copper as well as other raw materials that are used today for building vessels are faced with various problems, such as the exhaustion of natural resources and rise in prices. Therefore, the hope is that new types of products will be developed from composite fiber materials to eradicate such problems. It is also hoped that the lighter weight, higher intensity and greater corrosion-resistant properties of composite materials will be effective. In the aviation industry, The Boeing Co. of the United States has already succeeded in putting composite materials to practical use for the bodies and wings of the Boeing 787 Dreamliner, the company's new midsize jet airliner product.

#### Nakashima Propeller opens new office, Nakashima Asia Pacific

An opening ceremony was held in Singapore on June 20, 2012 for Nakashima Asia Pacific Pte. Ltd. The grand ceremony was attended by a total of 150 guests, including representatives of Japanese shipowners, local shipowners, inspectors, agents, ship machinery and equipment manufacturers and engine makers.

Having a business foothold in Singapore, Nakashima Propeller, the owner of Nakashima Asia Pacific, will be able to deal more quickly with global customer demands. If you have questions and requests, feel free to contact

Contact person: Takayoshi Nakayama, managing

Mailing address: GST/Co. Reg. No. 201135382K, 8 Temasek Blvd. #32-01B, Suntec Tower Three, Singapore 038988





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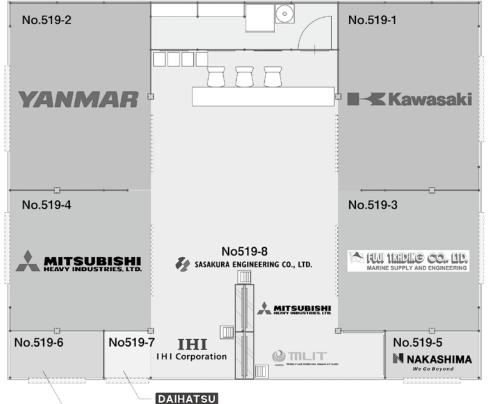
## INAVALSHORE JSMEA, MLIT, shipbuilders to join in attending **Navalshore 2012 exhibition**

The Japan Ship Machinery and Equipment Association (JSMEA) will attend Navalshore 2012, making it the third straight year for the organization to participate in the exhibition. This

year, however, will be first time that the Ministry of Land, Infrastructure, Transport and Tourism (MLIT); shipbuilding companies; and ship machinery and equipment makers will join forces at the exhibition.







**❸** TANABE COMPRESSORS

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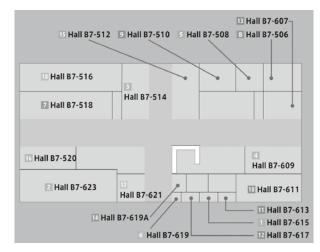
## **JSMEA** to lead delegation at SMM Hamburg 2012



The Japan Ship Machinery and Equipment Association (JSMEA) will lead 17 member companies to the SMM Hamburg exhibition, which will be held on Sept. 4-7, 2012. This year the JSMEA delegation will boast an exhibition area

of 458 square meters, which will include a public relations zone for exhibitors to give presentations. The JSMEA hopes to attract visitors to the Japanese pavilion to inform them of the high quality of Japanese-made ship machinery and equipment.

1 AZUMA KAKO CO., LTD.	Hall B7-615
2 DAIHATSU DIESEL MFG. CO., LTD.	Hall B7-623
3 FUJI TRADING CO., LTD	Hall B7-514
4 HISAKA WORKS, LTD.	Hall B7-609
5 Hitachi Zosen Corporation	Hall B7-508
6 ISHI MACHINERY WORKS CO., LTD.	Hall B7-619
7 KAWASAKI HEAVY INDUSTRIES, LTD.	Hall B7-518
8 Mitsubishi Kakoki Kaisha, Ltd.	Hall B7-506
9 Nabtesco Corporation	Hall B7-510
10 NANIWA PUMP MFG. CO., LTD.	Hall B7-611
11 NEOSEAL PLASEAL NITTO CHEMICAL INDUSTRY CO., LTD.	Hall B7-613
12 NISHISHIBA ELECTRIC CO., LTD.	Hall B7-617
13 SASAKURA ENGINEERING Co., Ltd.	Hall B7-607
14 SHINKO IND. LTD.	Hall B7-619A
15 SUNFLAME CO., LTD	Hall B7-512
16 TAIYO ELECTRIC CO., LTD	Hall B7-520
17 TANABE PNEUMATIC MACHINERY CO., LTD.	Hall B7-621
18 YANMAR CO., LTD.	Hall B7-516





## **FIRE-TIGHT SEALING FOR CABLE TRANSIT 2010 FTP CODE** FIRE CLASS A-0 / A-15 / A-30 / A-60

#### **Outline of Company**

Nitto Chemical Industry Co. Ltd. is a specialized sealing compound maker which has been producing the best quality for about a half century.

We always value "hospitality" and continually develop our products to meet the expectation of every user, so they have been widely used in various fields such as on land, offshore and under the around.

We firmly believe that newly developed sealing products, which comply with 2010 FTP Code, will satisfy customer demand so well and will be accepted as global standard.



#### **PLASEAL NF-23 FEATURES**

#### PLASEAL NF-23 is the highest level of fire-tight compound for ships.

PLASEAL NF-23 passed IMO Resolution MSC. 307(88)-2010 FTP Code for A-class cable transits.

#### It is very easy to construct with PLASEAL NF-23.

PLASEAL NF-23 is an one component type of sealing compound.

You need ONLY itself to construct, so this product makes construction easy.

#### PLASEAL NF-23 has comparatively low specific gravity.

Specific gravity of PLASEAL NF-23 is approx. 0.8, so with this product you can reduce shipbody weight and save the cost of energy.

#### PLASEAL NF-23 will shorten working hours.

One cable can contact with other cables when you construct with PLASEAL NF-23, Which means that every cable can be arranged freely, so PLASEAL NF-23 makes working hours shorter.



nitto Cheinical Industry Co.ltd.

#### NITTO CHEMICAL INDUSTRY CO. LTD.

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### SHONAIN

## New product: Electric display system for ships



#### **Product descriptions**

Full-color display system for ships that use ultrabright wide-angle LEDs

- (1) Messages can be displayed in many of the world's languages.
- (2) Users can edit and save messages on personal computers.
- (3) Users can see messages shown on main displays on controller displays as well.
- (4) Using controllers, users can easily choose the messages they produced on personal computers. They can also select languages with controllers. They can even make all necessary display operations with personal computers—without using controllers.
- (5) Users can have messages either displayed continuously, scrolled or blinked.
- (6) Speed and brightness can be adjusted at many different levels.

Name: Electric display system for ships Light source: Ultra-bright wide-angle LEDs Number of dots: 32 dots by 32 dots per letter Protection code: IPX6

Power source: AC 100 volts  $1\phi$  50/60 hertz Dimension: 5.12 meters by 64 centimeters (can have eight letters)

Weight: Approximately 92 kilograms (apiece)

#### Shonan Co. Ltd.

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Mito factory

Address: 19 Sumiyoshi-cho, Mito, Ibaraki 310-0844 Tel:+81-29-247-8026 Fax:+81-29-248-1064



## JSMEA participates in Posidonia 2012 exhibition

The Japan Ship Machinery and Equipment Association (JSMEA) participated in an international shipping exhibition that was held on June 4-8, 2012 at an exhibition center in Athens, Greece. The association took 12 member companies to Posidonia 2012, all of which were financially supported by The Nippon Foundation. The JSMEA ran a Japanese pavilion near the main entrance of the center. In doing so, it again partnered the Japan Ship Exporters' Association (JSEA).

On June 3, the JSMEA formed a soccer team with Nakashima Propeller Co. Ltd., Volcano Co. Ltd., Maran Tankers Management Inc. and Maran Gas Maritime Inc. Maran Tankers Management and Maran Gas Maritime are both Greek shipoweners. In a local tournament, which was held by the Posidonia organizer, the mixed team played a friendly game against a local team. The JSMEA

also visited companies affiliated with the Union of Greek Shipowners to exchange information.

During Posidonia 2012, the JSMEA held an outdoor party on the terrace next to the main entrance of the exhibition center, which was enjoyed by approximately 250 guests, including those from shipowner companies and others concerned with maritime affairs.

Posidonia 2012 was highly successful, with attendance at an all-time high of 1,870 enterprises represented. The JSMEA was active in doing public relations activities. Not only did it introduce members' products, but it also emphasized the excellence and reliability of the Japanese ship machinery and equipment industry. The exhibition ended successfully.





Union of Greek Shipowners

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## **Reconstruction from Great East Japan** Earthquake (1)

A devastating earthquake struck the Pacific Ocean side of Japan's Tohoku region at around 2:46 p.m. on March 11, 2011. It was the most powerful earthquake on record in Japan, registering a magnitude of 9.0 on the Richter Scale. The Great East Japan Earthquake also measured an intensity of 7, the highest in Japan's 10-degree seismic intensity scale. It induced massive tsunami. Municipalities close to the seismic center were hit by tsunami that were more than 10 meters in height. Many business footholds of shipbuilders, ship engine repairers and makers of electric and other machinery and equipment for vessels situated in Aomori, Iwate, Miyagi and Fukushima prefectures were severely damaged.

Earthquakes with an intensity of 6, the third highest degree, were recorded throughout Miyagi, Fukushima and other prefectures. Even facilities of ship machinery and equipment makers situated in landlocked areas that were not hit by tsunami suffered damage to their buildings and machines. Immediately after the earthquake, there was a blackout across most of the Tohoku region. Water, gas and other lifeline services were also heavily damaged. In addition, expressways and railway services were disconnected, while port and harbor facilities, airport and other transport infrastructure were forced out of service. For these reasons, parts and components could no longer be procured,

and products could no longer be transported. The stricken areas were urged to stop all of their daily

However, inland ship machinery and equipment manufacturers resumed production activities in step with the restoration of basic infrastructure. In a month or so, they had almost returned to what they were before March 11.

In many municipalities on the Pacific Ocean side of the Tohoku region, fishery is a leading industry. Around fishing ports, fish markets as well as marine product processors, refrigeration service providers and other distributors handling fishery products gather to do business, forming fishing business complexes. Many shipbuilding companies and related business operators are also located near ports, playing important roles in underpinning Japan's fishery business.

The industries that organize these fishing business complexes were devastated by the tsunami generated in the aftermath of the Great East Japan Earthquake. Port facilities are still under the adverse influence of subsequent land subsidence.

At shipyards in the stricken areas, shipbuilding berth rails and other facilities were either fully or partly destroyed, and machinery and equipment were washed away. In addition, many vessels under construction, docked for maintenance work and moored for other reasons were also swept away, drifting in ports and ending up sinking and going aground. In water in front of shipyards, a huge amount of debris had been deposited, hindering business operations.

The total number of fishing vessels damaged in the March 11 earthquake was approximately 28,000 across Japan. Most of them were ships of less than 5 G/T for coastal fishing and aquaculture activities. but some 100 large steel vessels for offshore and far seas fisheries were also destroyed.

In recent years, the number of companies in Japan that construct large steel fishing vessels has been on the decline. Prior to the earthquake, there were only 10 in Japan, one-third of which were located in Tohoku. As they were all catastrophically damaged, it was feared that a major impact would be made on building new ships to replace those destroyed and repairing the damaged vessels.

Shipbuilding companies and other relevant business operators in the devastated municipalities began working hard to resume business soon after the Great East Japan Earthquake. In fact, operations were restarted from areas where damage had been relatively milder. Restoration efforts were accelerated by various support programs provided by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) as well as organizations concerned with shipbuilding

and manufacturing ship machinery and equipment. In September 2011, two shipbuilders in Kesennuma City, Miyagi prefecture, both of which had been severely damaged, began constructing newbuildings, in only six months since the earthquake. By the end of 2011, most of the devastated shipyards had resumed business operations.

Currently, shipbuilding and shipbuildingrelated business operators in the Tohoku region are enjoying a reconstruction-triggered special business boom, due to growth in demand for replacing fishing vessels and fixing damaged ships.



Construction of newbuilding begins Yoshida Zosen Tekkojo K.K. (Kesennuma, Miyagi) Photo taken on Jan. 18, 2012 by staff member of MLIT's Tohoku District Transport Bureau



Yamanishi Corp. (Ishinomaki, Miyagi) Photo taken on March 20, 2011 (from Wikimedia) Shown in the middle is a bulk carrier newbuilding. Other vessels swept away from the shipyard are sunken and aground.



Yamanishi (Ishinomaki, Miyagi) Photo taken on April 12, 2011 by staff member of MLIT's Tohoku District Transport Bureau The dock gate is destroyed by the tsunami, and a ship at the dock is

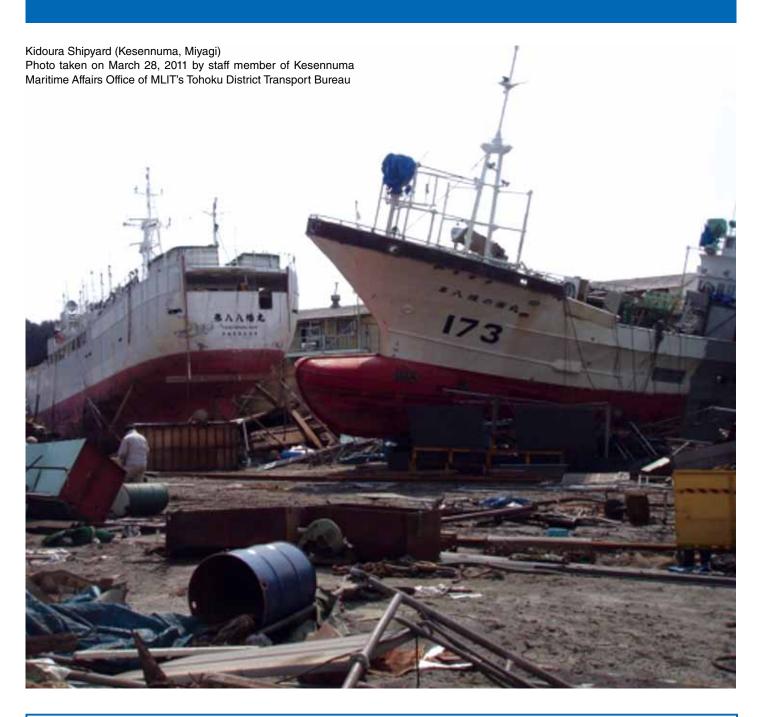


Kidoura Shipyard Co. Ltd. from a distance (Kesennuma, Miyagi) Photo taken on March 21, 2011 by staff member of Kesennuma Maritime Affairs Office of MLIT's Tohoku District Transport Bureau



Construction restarted for second newbuilding since earthquake Kidoura Shipyard (Kesennuma, Miyagi) Photo taken on April 25, 2012 by staff member of MLIT's Tohoku District Transport Bureau

## Thank you for the condolences and assistance from all around the world in the period following the Great East Japan Earthquake 2011





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