

# Jsmea News

## JSMEA to set up Japan pavilion at OTC 2016

JSMEA has obtained permission from organizers of Offshore Technology Conference 2016 to set up the Japan Pavilion, its first in 47 years of the conference, which is being held for the 48th time. The Japan Pavilion will be set up in the On-site Priority Exhibit Space, the space allotted for a group of exhibitors with a second-highest priority rank. Pavilion members will include 15 JSMEA-affiliated companies and Nippon Kaiji Kyokai (ClassNK). From outside JSMEA, INPEX Corporation will be present at the Japan Pavilion.

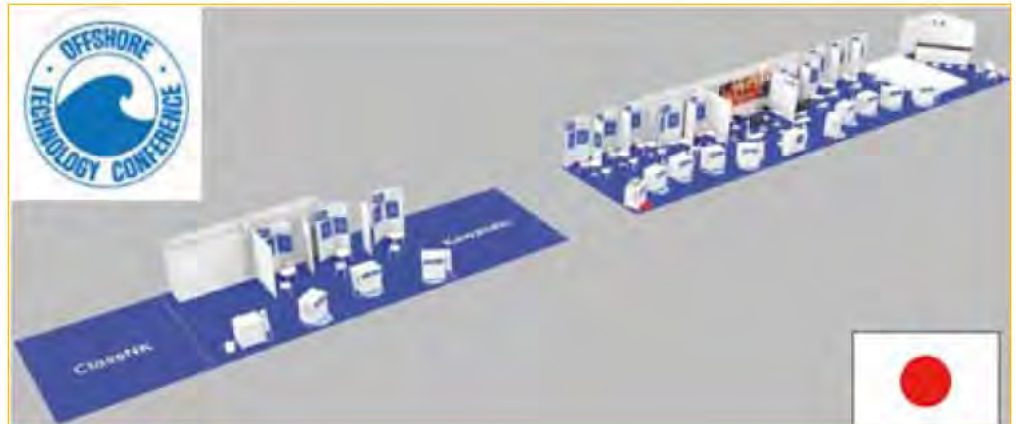


Image of Japan Pavilion



### EXHIBITORS

Chugoku Marine Paints, Ltd.
ClassNK
Fuji Trading Co., Ltd.
Fukui Seisakusho Co., Ltd.
INPEX CORPORATION
Kawasaki Heavy Industries, Ltd.
Kobe Steel, Ltd.
Miura Co., Ltd.
Nakashima Propeller Co., Ltd.
Nippon Paint Marine Coatings Co., Ltd.
Shinko Ind. Ltd.
Taiko Kikai Industries Co., Ltd.
Takashina Life Preserves Co., Ltd.
Takenaka Seisakusho Co., Ltd.
Ushio Reinetsu Co., Ltd.
Yamazaki Machinery Manufacturing Co.,Ltd.
Yanmar Co., Ltd.

JSMEA organized a networking reception for the first time during OTC 2015

### CONTENTS

JSMEA to set up Japan pavilion at OTC 2016	1
Kormarine 2015	2-3
Marintec China 2015	4-5
Seminars in Malaysia	6-7
Sea Japan 2016	8-10
Information on JSMEA members	11-18
DIESEL UNITED, LTD.	
FUKUI SEISAKUSHO CO., LTD.	
HIEN ELECTRIC INDUSTRIES, LTD.	
Japan Radio Co.,Ltd.	
KEMEL COMPANY a division of EAGLE INDUSTRY CO., LTD.	
Marine Engine Division	
NAKASHIMA PROPELLER CO., LTD.	
NANIWA PUMP MFG. CO., LTD.	
JSMEA Products and technology Offshore Technology Conference 2016	19
JSMEA updates brochure of members' offshore products	20



# JSMEA takes part in Kormarine 2015

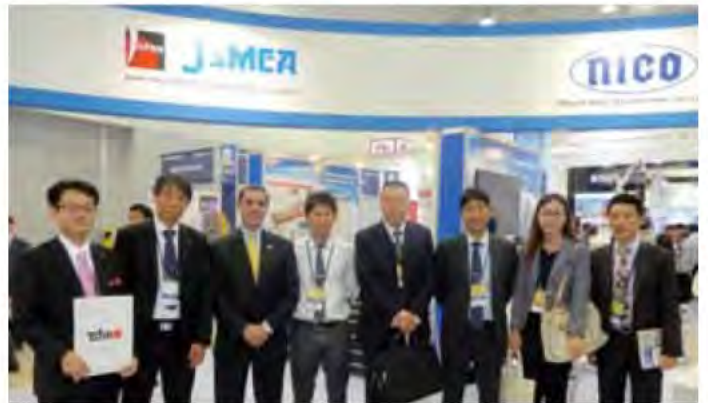


Japan Ship Machinery and Equipment Association (JSMEA) attended Kormarine 2015, bringing six member companies, with whom it set up a Japan pavilion to promote Japanese ship machinery and equipment products at the international exhibition on Oct. 20-23, 2015 in Busan, South Korea.

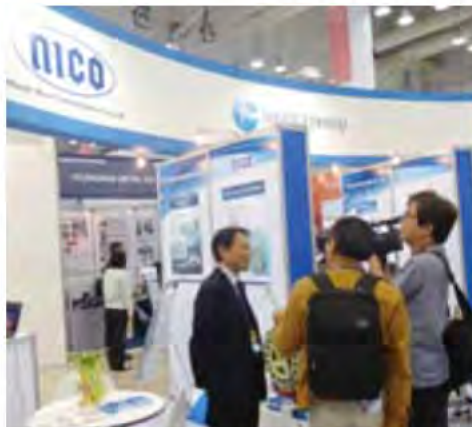
On day two of the exhibition, Mr. Gerardo Uria, acting vice-president and director of general membership and membership services of the American Petroleum Institute (API), stopped by the Japan pavilion to exchange views with members of the attending ship machinery and equipment manufacturers.

On the third day of the four-day affair, JSMEA's chairman, vice-chairmen and other executives met with the chairman and other leaders of the Korea Marine Equipment Association (KOMEA) for the 10th KOMEA-JSMEA Chairman Meeting to swap opinions.

## JSMEA runs Japan pavilion



API Acting Vice-President and Director of General Membership and Membership Services Gerardo Uria (third from left) comes to the Japan pavilion.





Members of the South Korean maritime cluster joined in organizing Kormarine 2015; for example, local shipbuilding companies provided shuttle bus services. Many South Korean shipyards as well as other relevant and interested parties visited the Japan pavilion, and took with them almost all

copies of booklets and other JSMEA publications.

A crew from TV Tokyo Corporation journeyed all the way from Japan to the pavilion to interview the member exhibitors.

### 10th KOMEA-JSMEA Chairman Meeting convened



From KOMEA: Mr. Park Yoon-so, chairman, NK Co., Ltd.; Mr. Si Myung-sun, chairman, Kangrim Heavy Industries Co., Ltd.; Mr. Kim Kang-hee, chairman, Donghwa Entec Co., Ltd.; Mr. Kang Jae-jong, executive managing director, KOMEA and Mr. Chung Chang-soo, managing director, KOMEA

From JSMEA: Mr. Motoyoshi Nakashima, chairman; Mr. Shinzo Yamada, vice-chairman; Mr. Yukio Furuno, vice-chairman; Mr. Masaharu Ono, vice-chairman; Mr. Kazuhiko Kinoshita, vice-chairman and Mr. Shoichi Kitamura, executive managing director



#### Details of Kormarine 2015

**Date:** Tuesday, Oct. 20 to Friday, Oct. 23, 2015  
**Venue:** Busan Exhibition and Convention Center (BEXCO) in Busan, South Korea  
**Total number of visitors:** 44,288

#### Details of the Japan pavilion

**Booth No.:** 5N17  
**Exhibitors from Japan:** Hisaka Works, Ltd.; Hitachi Nico Transmission Co., Ltd.; Naniwa Pump Mfg. Co., Ltd.; Niigata Power Systems Co., Ltd.; Sasakura Engineering Co., Ltd. and Taiko Kikai Industries Co., Ltd.

# JSMEA participates in Marintec China 2015

Japan Ship Machinery and Equipment Association (JSMEA) participated in Marintec China 2015 as a project supported by The Nippon Foundation. Together with 27 member companies and Nippon Kaiji Kyokai (ClassNK), it set up a Japan pavilion at the event, which was held at the Shanghai New International Expo Centre on Dec. 1-4, 2015.

Marintec China, one of the greatest maritime trade fairs in Asia, was held last year for the 18th time. Approximately 2,000 enterprises from 34 countries and regions attended the international exhibition, which welcomed some 60,000 visitors, according to the organizers.

On Nov. 30, a day before the start of Marintec China 2015, JSMEA executives paid a courtesy visit to Mr. Kazuyuki Katayama, Japanese consul general in Shanghai. Members of the JSMEA mission outlined the trade fair and briefed Mr. Katayama on the Japanese ship machinery and

equipment industry, and exchanged views with him on recent situations in China.

On Dec. 1, the first day of the event, a ceremony was held to commemorate the opening of the Japan pavilion. Mr. Motoyoshi Nakashima, chairman of JSMEA, joined Consul General Katayama and Mr. Noboru Ueda, chairman, president and representative director of ClassNK, in cutting the ribbon. At the presentation booth in the Japan pavilion, six Japanese ship machinery and equipment manufacturers introduced themselves and their respective products. Many visitors stopped by the booth to listen to their presentations, then asked about Japanese products and requested more information about them, which went to show that the booth was successful in drawing in visitors and providing them with information.

Later that afternoon, the JSMEA chairman and vice-chairmen met with the president and other executives of the China Association of the National

## JSMEA pays visit to Japanese Consul General in Shanghai



From left:  
JSMEA Executive Managing Director Shoichi Kitamura, Consul General Kazuyuki Katayama, JSMEA Chairman Motoyoshi Nakashima and Consul Masayuki Miyachi

## Opening ceremony held for Japan pavilion



From left: ClassNK Chairman, President and Representative Director Noboru Ueda; Japanese Consul General in Shanghai Kazuyuki Katayama and JSMEA Chairman Motoyoshi Nakashima

## Marintec China 2015



JSMEA mission runs a Japan pavilion.



A presentation booth is set up in the Japan pavilion.

Shipbuilding Industry (CANSI). The delegations exchanged opinions on a variety of subjects, including the development of human resources and international regulations.

After the meeting, JSMEA and ClassNK jointly held a reception at the Oriental Riverside Hotel Shanghai to promote interchanges between the Japanese shipbuilding and ship machinery and equipment industries and their Chinese counterparts. Inviting Mr. Katayama, parties from China concerned with maritime affairs and other guests, the Japan Pavilion Reception Marintec China 2015 encouraged around 250 attendees from Japan and China to deepen their friendships. During the reception, the two Tokyo-based organizations hosted prize drawings to help create a friendly atmosphere.

On Dec. 2, 20 people from JSMEA-affiliated ship machinery and equipment makers wanting to meet shipbuilders in Nantong visited the city to build business relationships. The 20 members introduced their respective companies and gave presentations on their respective products to six local shipbuilding companies. After the presentations, in return, the six Nantong shipyards explained ongoing market developments. The meeting provided both sides with an opportunity to exchange information.

### Details of the Japan pavilion

(1) Number of companies in the JSMEA mission: 27 (25 ran booths, while the other two displayed panels)

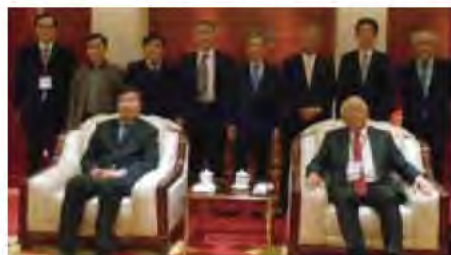
(2) Members of the JSMEA mission (the 25 companies that ran booth): Daihatsu Diesel Mfg. Co., Ltd.; Daikin MR Engineering Co, Ltd.; Fuji Trading Co., Ltd.; HSN-Kikai Kogyo Co., Ltd.; Ibuki Kogyo Co, Ltd.; Kamome Propeller Co., Ltd.; Kanagawa Kiki Kogyo Co., Ltd.; Kawasaki Heavy Industries, Ltd.; Manabe Zoki Co., Ltd.; Mitsubishi Heavy Industries Marine Machinery and Engineering Co., Ltd.; Mitsubishi Kakoki Kaisha, Ltd.; Musasino Co., Ltd.; Nakashima Propeller Co., Ltd.; Naniwa Pump Mfg. Co., Ltd.; Niigata Power Systems Co., Ltd.; Sasakura Engineering Co., Ltd.; Shinko Ind. Ltd.; Taiyo Electric Co., Ltd.; Tanabe Pneumatic Machinery Co., Ltd.; Ushio Reinetsu Co., Ltd.; Uzushio Electric Co., Ltd.; Yanmar Co., Ltd. and Yokogawa Denshikiki Co., Ltd. And

(the two companies that displayed panels): Kuraray Co., Ltd. and Riken Corporation

### JSMEA holds executive meeting with CANSI



CANSI Chairman Guo Dacheng (left) and JSMEA Chairman Motoyoshi Nakashima



Front row: CANSI Chairman Guo Dacheng (left) and JSMEA Chairman Motoyoshi Nakashima  
Back row: CANSI Deputy Director for Policy Research and International Cooperation Zhang Liwen (second from left), CANSI Vice Secretary General Liu Deqian (third from left), CANSI Secretary General Jin Peng (fourth from left), JSMEA Vice-Chairman Shirzo Yamada (fourth from right), JSMEA Vice-Chairman Masaharu Ono (third from right), JSMEA Vice-Chairman Shigenori Morimoto (second from right) and JSMEA Executive Managing Director Shoichi Kitamura (right)

### JSMEA, Class NK holds Japan Pavilion Reception Marintec China 2015



JSMEA Chairman Motoyoshi Nakashima gives the opening address.



Parties from Japan and China deepen their friendships.

### JSMEA mission meets with shipbuilders in Nantong



JSMEA Vice-chairman Masaharu Ono (left) shakes hands with Deputy Director Miao Jian of the Administration Committee of Nantong Gangzha Economic Development Zone, Jiangsu Province

# JSMEA presents seminars in Malaysia

Japan Ship Machinery and Equipment Association (JSMEA) held seminars on Japanese ship machinery and equipment in Malaysia, receiving funding support from The Nippon Foundation.

At the seminars, which were held on Wednesday, Feb. 24 in Kuala Lumpur and Thursday, Feb. 25 in Miri, JSMEA was joined by 23 member companies, 18 of which gave informative presentations on their respective products and services.

To pinpoint the needs of the visitors, the seminars were given in three different sessions, one strictly in general commercial vessel services, the second in offshore development projects and the third covering both general commercial vessel services and offshore development projects. The 23 attending members made themselves available at tables in respective areas at the halls for the seminars and post-seminar receptions so that they could hold detailed business negotiations anytime with local parties concerned with maritime affairs.

At the beginning of the seminar in Kuala Lumpur on Feb. 24, Mr. Motoyoshi Nakashima, chairman of JSMEA and Mr. Y. Bhg. Tan Sri Dato' Seri Ahmad Ramli Mohd Nor, president of the Association of Marine Industries of Malaysia (AMIM) gave opening addresses. Keynote speeches were made by Mr. Junzo Kaneko of Japan's Ministry of Land, Infrastructure, Transport and Tourism

(MLIT), who is director of the Boat Affairs Office at the MLIT Maritime Bureau's Shipbuilding and Ship Machinery Division, and Mr. Nazery Khalid, who is the honorary secretary of the AMIM. After these heavyweights, the 18 members gave presentations.

During the networking reception organized after the seminar, Mr. Ir. Nordin Mat Yusoff, chairman of the Malaysia Shipowners' Association (MASA) delivered a speech. The Kuala Lumpur seminar and reception welcomed some 80 individuals from Malaysia, who represented ship owners, shipyards, offshore developers and other local parties, while approximately 60 people were present at the event from Japan.

Meanwhile, the Miri seminar was kicked off with opening addresses by Mr. Masaaki Matsui, vice-chairman of JSMEA and Capt. Ting Hien Liong, secretary of the Miri Shipyard Association (MSA). Much like the Kuala Lumpur seminar, a keynote speech by Mr. Kaneko led to presentations by the 18 participants.

Mr. Yong Ing Hui, president of the Sarawak and Sabah Shipowners Association (SSSA), was invited to the reception to give an address. The Miri seminar and reception hosted around 40 from Malaysia and around 50 from Japan.

On the previous day of the seminars, the JSMEA

## JSMEA holds seminar in Kuala Lumpur



JSMEA Chairman Motoyoshi Nakashima (left) gives an opening address.



AMIM President Tan Sri Dato' Seri Ahmad Ramli Mohd Nor (right) gives an opening address.



AMIM Honorary Secretary Nazery Khalid (right) made a keynote speech.



JSMEA holds a seminar in Kuala Lumpur.



Boat Affairs Office Director Junzo Kaneko of the MLIT Maritime Bureau's Shipbuilding and Ship Machinery Division (left) makes a keynote speech.



JSMEA Vice-Chairman Kazuhiko Kinoshita delivers the closing remarks.



Business negotiations are held at JSMEA tables.



JSMEA Vice-Chairman Masaaki Matsui gives an address at the networking reception.

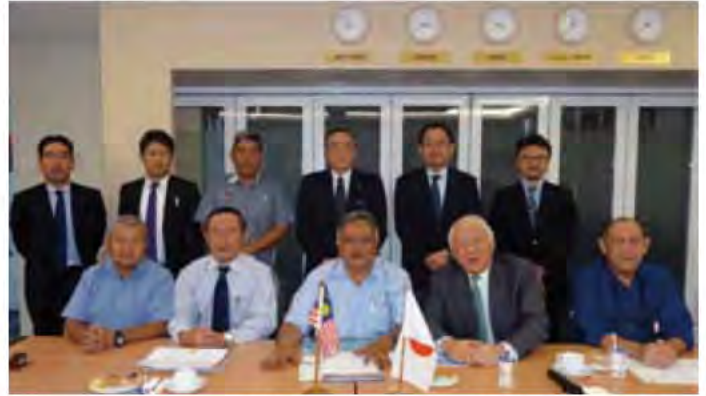
chairman and other members visited MASA, the AMIM and the offshore business unit of local shipping line MISC Bhd. to market Japanese ship machinery and equipment products and exchange views. Mr. Kaneko joined the JSMEA mission when it met with the AMIM.

As a new approach, JSMEA set up tables for business negotiations at the seminar and reception halls, where the member companies were seen having talks with potential customers, including those from the Malaysian Oil and Gas Service Council (MOGSC). From the tables, JSMEA, for its part, distributed copies of its brochures of products for general commercial vessels, of eco-friendly machinery and equipment and of those for offshore development facilities, such as floating, production, storage and offloading (FPSO) bases; drill ships; and offshore support vessels (OSVs), as well as other publications.

JSMEA will have its Global Strategic Plan Review Board, Overseas Market Development Committee, Overseas Market Development Working Group, Offshore Development Strategy Review Board and other in-house units make reports on the Malaysian seminars and hold discussions on their future steps and other relevant subjects.

**Members of the JSMEA mission:** Akasaka Diesels, Ltd.; Daihatsu Diesel Mfg. Co., Ltd.; KEMEL COMPANY a division of EAGLE INDUSTRY CO., LTD.; Fuji Trading Co., Ltd.; The Hanshin Diesel Works, Ltd.; Isoda Metal Corporation; Japan Radio Co., Ltd.; JRCS Mfg. Co., Ltd.; Kamome Propeller Co., Ltd.; Kanagawa Kiki Kogyo Co., Ltd.; Kawasaki Heavy Industries, Ltd.; Kongo Colmet Co., Ltd.; Manabe Zoki Co., Ltd.; Musashino Co., Ltd.; Nakashima Propeller Co., Ltd.; Niigata Power Systems Co., Ltd.; NYK Trading Corporation; SEMCO Ltd.; Shimada & Co., Ltd.; Taiyo Electric Co., Ltd.; Tokyo Keiki Inc.; Uzushio Electric Co., Ltd. and Yanmar Co., Ltd.

**JSMEA visits MASA**



Mr. Shahanuzzaman Bacharum, general manager, MASA (front row, left); Mr. Ir. Nordin Mat Yusoff, chairman, MASA (front row, center); Mr. Motoyoshi Nakashima, chairman, JSMEA (front row, second from right) and Capt. Johari Bin Mohd Noh (front row, right)

**JSMEA has meeting with MISC**



(From left) Mr. Hiromi Hashimoto, leader, Mobile Units Working Group, JSMEA; Mr. Motoyoshi Nakashima, chairman, JSMEA; Mr. Masaki Matsui, vice-chairman, JSMEA; Mr. Mohd Azhar Awang, venture team leader, project controls and interfacing offshore business, MISC; Mr. Shuaimi Saad, general manager, commercial offshore business, MISC and Mr. M. Khidzi A. Rahman, manager, business development, offshore business, MISC

**JSMEA exchanges views with AMIM**



MASA Chairman Ir. Nordin Mat Yusoff proposes a toast.

**JSMEA visits MISC**



Mr. Motoyoshi Nakashima, chairman, JSMEA (left) and Mr. Syed Hashim bin Syed Abdullah, vice-president, offshore business, MISC (right).



Capt. Ting Hien Liong, secretary, MSA, is invited to give a speech.



President Hiroshi Iizawa of Kamome Propeller gives the opening speech at the Miri networking reception.

**JSMEA holds seminar in Miri**



Leader Hajiro Urabe of JSMEA's Overseas Market Development Working Group gives the closing address.



Mr. Masaki Matsui, vice-chairman, JSMEA, kicks off the seminar.



Many attend the Miri Seminar.



SSSA President Yong Ing Hui delivers a speech.

# Sea Japan 2016

The Japan Ship Machinery and Equipment Association (JSMEA) will take part in this year's Sea Japan, the 12th edition of Japan's leading marine industry event. With financial support from The Nippon Foundation, the Ministry of Land, Infrastructure, Transport, Tourism (MLIT) and JSMEA will showcase its member companies' products and services at the Japan pavilion as part of the Japanese maritime cluster.

The Japan pavilion will occupy a space of some 3,000 square meters at the center of the exhibition. In the thematic zone of the pavilion, members of the Japanese maritime cluster will showcase Japan's cutting-edge technologies and developments to the world. Exhibits will include the Kaiko 7000II, an unmanned underwater probe capable of reaching depths of 7,000 meters; an underwater robot called "Hobarin", which is an autonomous underwater vehicle that can hover in place underwater much like a helicopter; and models of offshore floating drilling facilities.

In addition, there will be exhibits showing Japan's technologies for exploiting marine resources and for saving energy and protecting the natural environment.

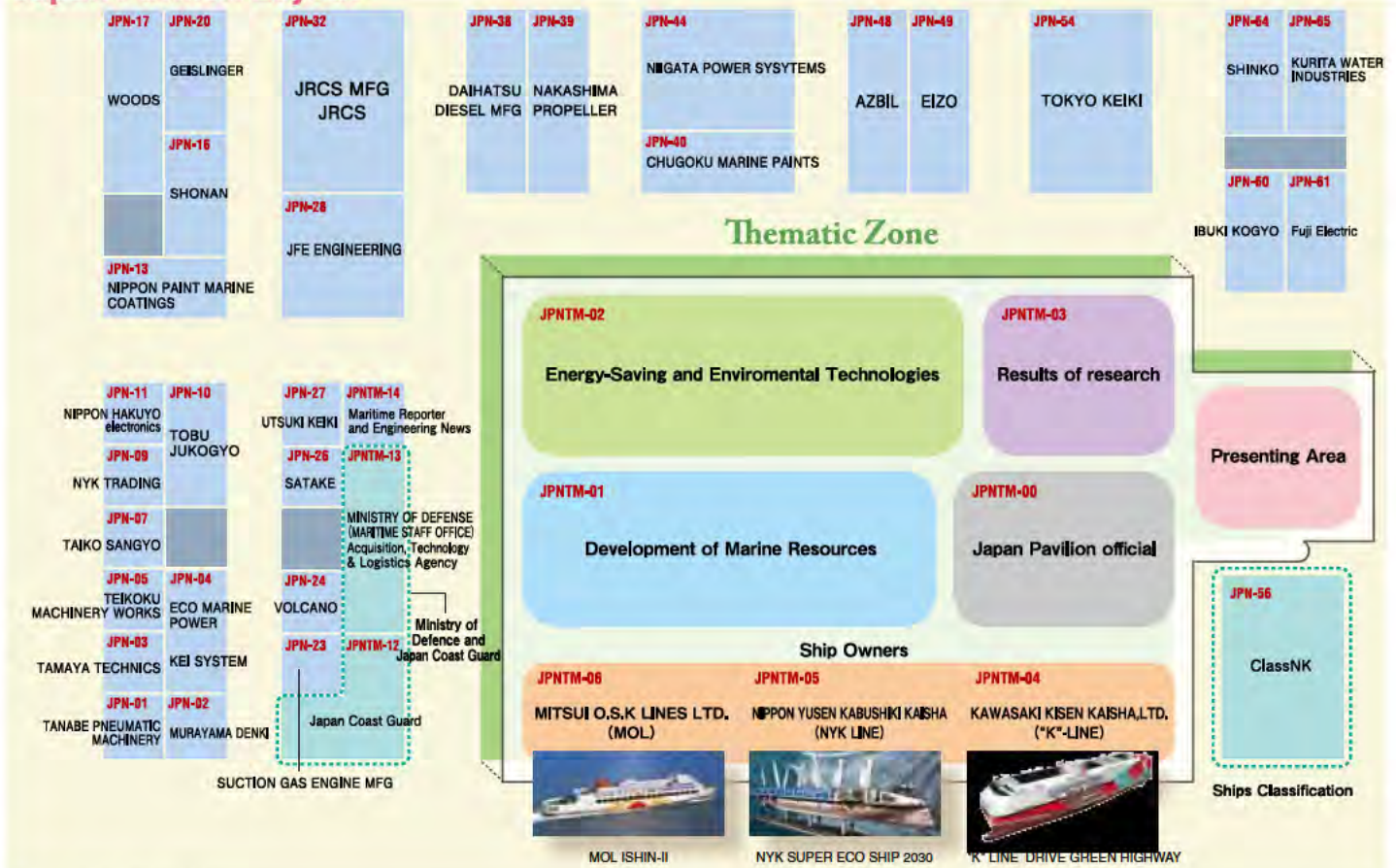
Also to be unveiled will be the results of industry-academia-government joint research projects, whose participants include universities and colleges as well as research institutes.

To help visitors better appreciate the unique characteristics and significance of various ships, the Ministry of Defense (MOD), the Japan Coast Guard (JCG) and leading shipping companies will display ship models and other materials.

A program of conferences and seminars will be held, with key figures from Japan and other nations giving presentations. They will focus on, among other subjects, MLIT's efforts on environmental protection in the field of maritime affairs; the marine policies promoted by Norway, which is an advanced nation in terms of maritime affairs as well as joint actions taken by the public and private sectors; and the approaches of the maritime sectors of Japan and Germany on big data and the Internet of Things (IoT).

JSMEA strongly hopes that visitors to Sea Japan 2016 will take the time to visit the Japan pavilion to learn more about the strength of Japan's maritime cluster and its production of state-of-the-art technologies.

## Japan Pavilion Layout





**I. The thematic zone will include the following areas of interest:**

- (1) Vessels of Japanese shipping companies in which latest technologies have been adopted;
- (2) Exploitation of marine sources;
- (3) Technologies for saving energy;
- (4) Technologies for protecting the natural environment and saving energy;
- (5) Results of research (e.g., industry-academia-government joint research projects); and
- (6) Exhibition of ships

**II. Members of the Japanese maritime cluster (tentative)**

Ministry of Land, Infrastructure, Transport and Tourism (MLIT); Ministry of Defense (MOD); Japan Coast Guard (JCG); National Maritime Research Institute (NMRI); Japan Railway Construction, Transport and Technology Agency (JRRTT); Japan Ship Technology Research Association (JSTRA); Nippon Kaiji Kyokai (ClassNK); Shipbuilding Research Centre of Japan (SRC); Nippon Yusen Kaisha (NYK); Mitsui O.S.K. Lines, Ltd. (MOL); Kawasaki Kisen Kaisha, Ltd. ("K" Line); The University of Tokyo; Tokyo University of Marine Science and Technology; Yokohama National University; The Shipbuilders' Association of Japan (SAJ); The Cooperative Association of Japan Shipbuilders (CAJS); Japan Ship Machinery and Equipment Association (JSMEA); shipbuilding companies; ship machinery and equipment manufacturers and others

**III. Seminar schedules (see the next page)**

Wednesday, April 13  
Friday, April 15



Sea Japan 2014

JPN-86 HITACHI NICO TRANSMISSION	JPN-87 Musasino	JPN-107 Japan Radio	JPN-127 FUJI TRADING	JPN-149 TAIKO KIKAI INDUSTRIES	JPN-150 MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE
JPN-82 YANMAR	JPN-103 NISHISHIBA ELECTRIC	JPN-104 NABTESCO	JPN-123 MANABE ZOKI	JPN-124 MATSUI	JPN-145 MIURA
JPN-80 TERASAKI ELECTRIC	JPN-100 AKASAKA DIESELS	JPN-121 YAMATO METAL	JPN-122 SEKIGAHARA SEISAKUSHO	JPN-141 MITSU ENGINEERING & SHIPBUILDING	JPN-144 MIZUNO MARINE
JPN-68 SASAKURA ENGINEERING	JPN-92 OKUMURA ENGINEERING	JPN-93 Yokogawa Denshikiki	JPN-116 Yamashina Seiki	JPN-142 KOKOSHA	JPN-140 HSN-KIKAI KOGYO
HISAKA WORKS	JPN-115 SHIMADA & CO	JPN-114 Naniwa Pump Manufacturing	JPN-113 CONHIRA	JPN-133 USHIO REINETSU	JPN-138 WAKEFIELD
MITSUBISHI KAKOKI KAISHA	JPN-113 CONHIRA	JPN-134 TECHNO KASHIWA		JPN-136 KANAGAWA KIKI KOGYO	JPN-134 TECHNO KASHIWA

**THE THEMATIC ZONE EXHIBITORS**

Stand No.	Theme	Company Name
JPNTM-00	Japanese policy of maritime affairs	Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
JPNTM-05	Ship Owners	Nippon Yusen Kabushiki Kaisha (NYK LINE)
JPNTM-06		Mitsui O.S.K. Lines, Ltd. (MOL)
JPNTM-04		Kawasaki Kisen Kaisha, Ltd. ("K" LINE)
JPNTM-02	Energy-Saving and Environmental Technologies	AKASAKA DIESELS LIMITED
		Alfa Laval
		ASAHI SHIPPING CO., LTD.
		CHUGOKU MARINE PAINTS,LTD.
		DAIHATSU DIESEL MFG. CO., LTD.
		Diesel United,Ltd.
		FUJI ELECTRIC CO., LTD.
		HITACHI NICO TRANSMISSION CO., LTD.
		Japan Marine United Corporation
		Kawasaki Heavy Industries, Ltd.
		Maritime Innovation Japan Corporation
		mitsubishi KAKOKI KAISHA, LTD.
		Mitsui Engineering & Shipbuilding Co., Ltd.
		Mitsui O.S.K. Lines, Ltd. (MOL)
		NABTESCO
		NAKASHIMA PROPELLER CO.,LTD.
		NANIWA PUMP MFG. CO., LTD.
		NGK INSULATORS LTD.
		NIIGATA POWER SYSTEMS CO., LTD.
		NIPPON PAINT MARINE COATINGS CO., LTD.
		Panasonic Environmental System Engineering Co.,Ltd
		SATAKE CORPORATION
		Shipbuilding Research Centre of Japan (SRC)
	TAIKO SANGYO CO., LTD.	
	TAIYO ELECTRIC CO., LTD.	
	The Hanshin Diesel Works, Ltd.	
	YANMAR CO.,LTD.	
JPNTM-01	Development of Marine Resources	CHUGOKU MARINE PAINTS,LTD.
		Inter Energy Co., Ltd.
		Japan Marine United Corporation
		Japan Radio Co., Ltd.
		Kawasaki Heavy Industries, Ltd.
		National Maritime Research Institute (NMRI)
		NIHON MARUKO Co.,LTD.
		NIPPON PAINT MARINE COATINGS CO., LTD.
		Sasakura Engineering Co.,Ltd.
		SHINKO IND. LTD.
	Shipbuilding Research Centre of Japan (SRC)	
	Uzushio Electric Co., Ltd.	
	Development of Marine Resources (Supporters)	Japan Oil, Gas and Metals National Corporation (JOGMEC)
		Japan Agency for Marine-Earth Science and Technology (JAMSTEC)
		INPEX CORPORATION (INPEX)
		Japan Drilling Co.,Ltd. (JDC)
JPNTM-03	Results of research	The University of Tokyo
		Yokohama National University (YNU)
		Tokyo University of Marine Science and Technology (Wind Challenger Project)
		Japan Railway Construction, Transport and Technology Agency (JRRTT)
		Japan Ship Technology Research Association (JSTRA)
		Marine Engine Service Association of Japan (MESA)
		AKASAKA DIESELS LIMITED
		Kamome Propeller Co., Ltd.
	KITA ENGINEERING	
	SMART SHIP APPLICATION PLATFORM PROJECT (SSAP PROJECT)	
JPNTM-13	Ministry of Defence and Japan Coast Guard	MINISTRY OF DEFENSE (MARITIME STAFF OFFICE)
		Acquisition, Technology & Logistics Agency (ATLA)
		Japan Coast Guard (JCG)
JPNTM-56	Ships Classification	Nippon Kaiji Kyokai (ClassNK)
JPNTM-00	Associations	The Shipbuilders Association of Japan (SAJ)
		The Cooperative Association of Japan Shipbuilders (CAJS)
		Japan Ship Machinery and Equipment Association (JSMEA)

# Sea Japan 2016

## International Maritime Seminar

Challenges for Maritime Innovation ~Green Technologies and IoT~

Date: April 13 (Wed), 2016 Time: 9:30~12:30

Place: Tokyo Big Site

Host: Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

9:30 ↓ 12:30		[Key Note Speech] <b>Norwegian Ministry of Trade, Industry and Fisheries</b> Speaker: Ms. Dilek Ayhan, State Secretary of Norwegian Ministry of Trade, Industry and Fisheries
		[Presentation 1] <b>Ministry of Land, Infrastructure, Transport and Tourism</b> "Green Frontier in Maritime Industry" Speaker: Hiroaki Sakashita, Director-General, Maritime Bureau,
		[Presentation 2] <b>Norwegian Ministry of Trade, Industry and Fisheries</b> "Blue Growth for a Green Future" Speaker: Ms Birgit Løyland, Director General of Maritime Department,
		[Presentation 3] <b>Class NK</b> "Maritime Big Data Solution by ClassNK" Speaker: Mr. Yasushi Nakamura, Executive Vice President, Representative Director
		[Presentation 4] <b>Monohakobi Technology Institute (MTI)</b> "Utilizing Big Data and the Internet of Things in Shipping" Speaker: Mr. Taizo Yoshida, Managing Director
		[Presentation 5] <b>BIBA - Bremen Institute for Production and Logistics</b> "Industry 4.0 in the Maritime Sector - Potentials and Challenges" Speaker: Dipl.-Inform. Mr. Karl Hribernik, Head of Department Intelligent ICT for Co-operative Production
		[Presentation 6] <b>NCE Maritime CleanTech (Norway)</b> "Developing clean maritime solutions by cluster cooperation" Speaker: Ms. Hege Økland, Chief Executive Officer

## Ships and Marine Technology Seminar

Date: April 15 (Fri), 2016 10:30~15:30

Place: Tokyo Big Site

Host: Nippon Kaiji Kyokai (ClassNK)

Ministry of Land, Infrastructure, Transport and Tourism  
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)  
Japan Ship Machinery and Equipment Association (JSMEA)

Time	Seminar
10:30-10:40	Opening Remark ClassNK
10:40-11:10	Visualization of friction resistance by 3D hull roughness analysis  Mr. Koji Yokota, Assistant Manager, Anti-Fouling Technical Division, Technical & Production Headquarter, Chugoku Marine Paints, Ltd.
11:20-11:50	Development of 2-stroke Low-Pressure Dual-Fuel Engine  Mr. Kouji Moriyama, Director, General Manager, Design and Engineering Department, Diesel United, Ltd.
12:00-12:30	Development of Ship Energy-saving System by Simultaneous Control of the Shaft Speed and the Blade Angle of CP Propeller  Mr. Junichi Suzuki, Manager, CPP Design Group, Engineering Dept., Kamome Propeller Co., Ltd.
13:00-13:30	Retrofitting BWMS with ClassNK-PEERLESS  Mr. Isamu Teranishi, President, Sanwa Dock Co., Ltd.
13:40-14:10	Safe and Environment Friendly Hull Structures with Newly Developed Highly Ductile Steel and Collision Analysis  Mr. Kenji Kamita, Hull Design Group Leader, Imabari Shipbuilding Co., Ltd.
14:20-14:50	Study on Carbon Composite Marine Propeller  Dr. Toshio Yamatogi, General Manager, Composite Business Department, Nakashima Propeller Co., Ltd.
15:00-15:30	Activities of Smart Ship Application Platform (SSAP) Project  Dr. Hideyuki Ando Senior General Manager, Maritime Technology Division, MTI Co., Ltd.



← Sea Japan 2014 International Maritime Seminar



Ships and Marine Technology Seminar →

株式会社 ディーゼル ユナイテッド  
**DIESEL UNITED, LTD.**

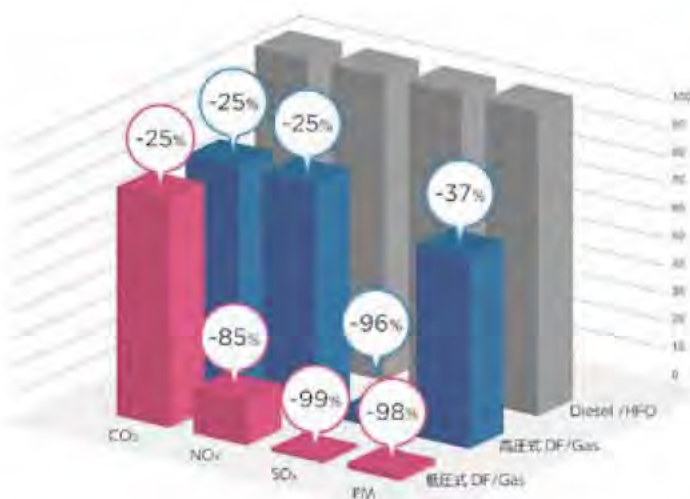
## DU-Wärtsilä Dual Fuel Engine "X-DF"

### Overview

Diesel United Ltd, has worked on the development of the dual fuel engine "Wärtsilä X-DF" with Winterthur Gas & Diesel (WinGD) and IHI.

X-DF is the Wärtsilä 2-stroke dual-fuel engine which is designed to inject gas at low pressure. This engine is applicable to large LNG carriers and also various type of merchant ships. Since January 2015, a full scale dual fuel engine "W6X72DF" has been installed at DU - Aioi works to enhance the development of X-DF engine scale-up.

In April 2015, DU held a successful demonstration of W6X72DF and has received positive feedback from customers who were impressed with X-DF. DU has already delivered the first commercial X-DF engine "5RT-flex50DF" in November 2015. As of the end of 2015, all WinGD licensees have received orders for over 33 sets of X-DF engines. DU is focusing on X-DF engine development to fulfill customer needs.



### Advantages of the X-DF Engine :

- ① Meet IMO Tier-3 NO<sub>x</sub> requirements without any after treatment by pre-mixed lean burn technology
- ② Lower CAPEX and OPEX due to no requirement of high pressure compressor.
- ③ Low-pressure gas injection provides benefit of safety for marine use (<16bar)
- ④ Smooth transfer from gas mode to Diesel mode
- ⑤ In case of accidental situation, switch to Diesel mode quickly.
- ⑥ Based on the conventional two-stroke Diesel engine which proven and trusted in marine use.



**DIESEL UNITED, LTD.**

2-8 Kanda Suda-cho, Chiyoda-ku, Tokyo, 101-0041, Japan

Tel.: +81-3-3257-8222 Fax: +81-3-3257-8220

<http://www.ihico.jp/du/>



# Type RPS / Pilot Operated Safety Valve for ME-GI Dual Fuel Gas Supply System

## Overview

Our new development to accommodate the growing trend of dual fuel diesel engine propulsion system in marine market. FUKUI RPS type meets the demanding service condition of ME-GI Dual Fuel Gas Supply System with several technical Advantages.

Our experience in a specialized cryogenic and high pressure field over the years supports your high efficient and safety operation.

## Advantages

### Advantages 1: Superior Seat Tightness at High Pressure Condition

The main valve piston is designed to have a larger area on the dome of the piston than on the seat area. Up to the set pressure, because of the larger area on the dome area, the net force holds the piston tightly against the main valve nozzle. As the operating pressure increases, the net seating force increases and tends to make the valve tighter. This feature allows the pilot-operated valve to be used where the maximum operating pressure up to 95% of the set pressure.



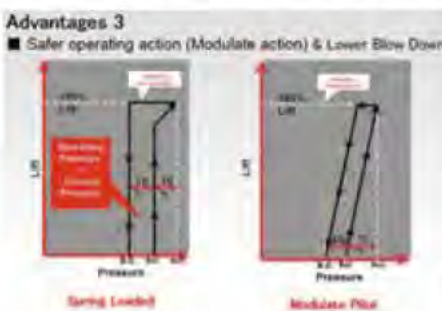
### Advantages 2: Less Damage & Less Effect against Vibration

The valve internal components are sealed tightly with O-rings. The elasticity of the O-rings protects the valve internals from the vibration given by the hardware in the Fuel Gas Supply System. Anti-vibration rubbers and bracket are also equipped to protect the pilot valve.



### Advantages 3: Safer operating action (Modulate action) & Lower Blow Down

The modulate action pilot operated valve limits the amount of relieving fluid to only the amount required to prevent the pressure from exceeding the allowable accumulation. It is enable to minimize the loss of fuel and less effect due to the less reaction force to the hardware compared to pop action spring loaded types. The lower rated blow down rate 5% (Valve will close up to 95% of set pressure) also plays the role of the safer operation and the minimum loss of fuel in case of emergency.



## Specifications

### Type RPS

- Non Flow Modulating Pilot
- Set Pressure: Up to 700 barG
- Inlet Connection: 2500LB ASME FLANGE or High Pressure Clamp Hub
- Temperature Range: -196 to 232 degC



RPS 700



## FUKUI SEISAKUSHO CO., LTD.

6.1-chome, Shodai Tajika, Hirakata, Osaka, Japan Zip 573-1003  
Tel.: +81-72-857-4527 E-MAIL: stm@fkis.co.jp  
[http://www.fkis.co.jp/eng/e\\_welcome.html](http://www.fkis.co.jp/eng/e_welcome.html)

# SHIPBOARD CABLE

## HIEN'S CABLE

The marine cables market requires high-performance specialty wire and cable for utmost safety, productivity and resistance to harsh environmental conditions.

The development of unique compounds is designed and tested to meet specific needs and

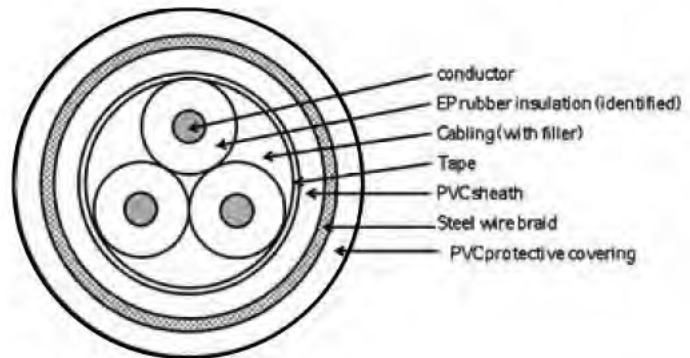
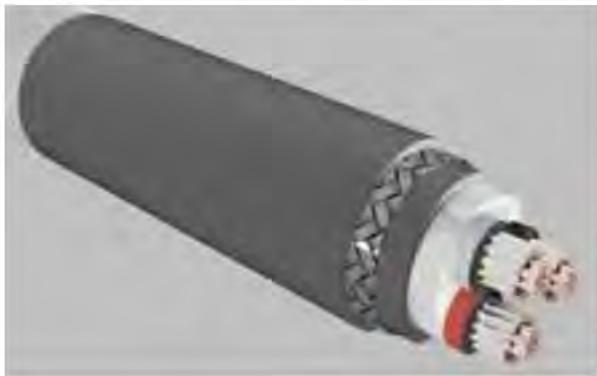
stringent specifications.

We can provide the range of shipboard cables, power, control, instrumentation, data transmission and communication.

You can attach high performance characteristics on cables. (Cold resistant, Fire resistant, Oil resistant and more)

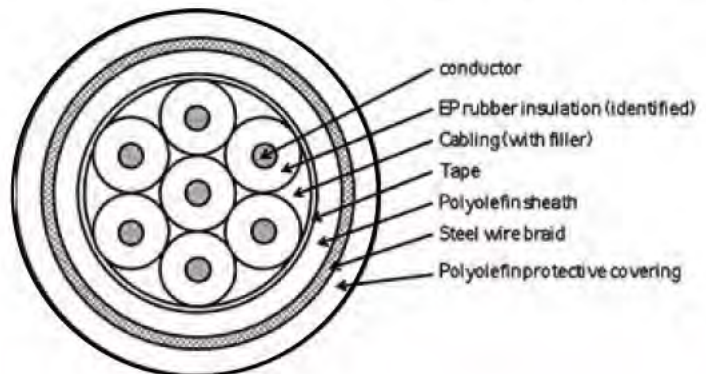
## JIS TYPE cables

- for Power & Lighting cable  
0.6/1kV FA-TPYCY-70  
(Three core, EP rubber insulated, PVC sheathed and steel wire braided cable with PVC protective covering)



## Halogen-free Flame-retardant cables

- for Control & Instrumental Multi core cable  
150/250V FA-MPOCO-7×1.0  
(Multi core, EP rubber insulated, Polyolefin sheathed and steel wire braided cable with Polyolefin protective covering)



**HIEN ELECTRIC INDUSTRIES, LTD.**

505, Shinshibakawa Bldg., 3-4-11, Doshomachi, Chuo-ku, Osaka, 541-0045, Japan  
Tel.: +81-6-6226-1501 Fax: +81-6-6226-1507  
<http://www.hien.co.jp>

# Marine Radar

## JMR-7200/9200 Series

### Overview

Japan Radio Co.,Ltd. has developed 19/26 inch new marine radar for safety vessel navigation as a part of MFD product family. This radar has been totally redefined its user interface as our new operation philosophy, "easy and intuitive". A powerful processing unit, LED back-lighted super fine display and ergonomically designed trackball / keyboard will support operator's decision for a safety vessel operation in all situations.



JMR-9200 Radar (26inch)

rotate speed and so on to fit the vessel.

### Sensor data sharing through bridge network

Sensor data can be shared with our new navigation product family through bridge LAN network. Each product does not need to be installed all hardware interfaces for sensor data and this will reduce wiring work for installation and maintenance complexity and difficulty.

### New 8ft S-Band solid state antenna – World's first MED type approved

Thanks for "Blizzard", JRC's super powerful custom processor, this Radar has certified as world's first MED type approved S-Band radar with our newly developed light weight 8ft solid state antenna. Of course, antenna can be select from wide variation of transceiver type(S-Band), frequency band(X/S), output power, wing length,

### Customize and up-grade

Many useful optional functions for radar and extra basic functions of MFD (ECDIS and Conning) are ready to up-grade this new radar. For example, chart display function will enable to show ENC chart on the radar image screen and AIS extra target function will expand the AIS target number to 1000. You can design your radar to fit all type of the vessel.



## KEMEL COMPANY

### OUTLINE

KEMEL is a global company with its manufacturing facilities located in Japan. With changing markets and environmental guidelines we have established ourselves as a world leader in innovation and compliance. Stern tube seal for ships are technically very complex components, and are required to be highly reliable. Utilizing its expertise and knowhow build up over many years, KEMEL contributes to the comfort and safety of navigation and to environmental conservation.

### GLOBAL SERVICE NETWORK

A global marketing and service network is essential in ensuring the safety of ships sailing around the world. KEMEL has inventories in Japan, the U.S., Singapore and U.K. to support our customers anywhere in the world. This extensive network is another area where we earn our reputation as the world's foremost marine seal brand.

### PRODUCTS

#### AIR SEAL

KEMEL AIR Seal use air supplied from an air source on the ship to form an air chamber within

each seal to completely separate the lubricant from seawater. As leading manufacture and supplier in this field, KEMEL tries all the best to comply with the market demand as well as the safety and environmental protection requirement and legislation.

#### Biodegradable Marine Lubricant KEMEL ST-83A

ST-83A meets the EAL (Environmentally Acceptable Lubricant) specification in 2013 VGP of US EPA.

#### Base Fluid

Polyethylene glycol, a type of polyalkylene glycol, is well known as non-toxic material. It is generally applied in cosmetics and medicines.

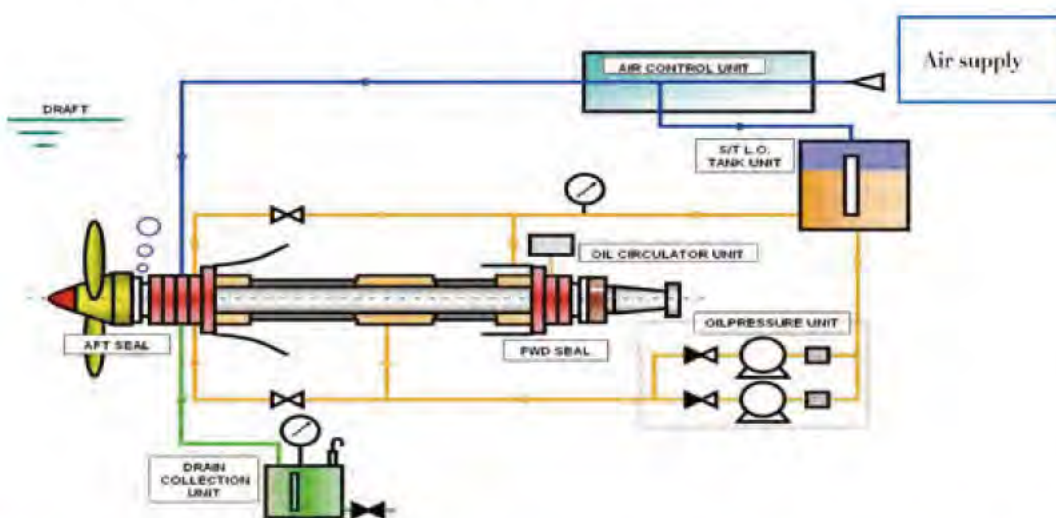
#### No Sheen / No Sludge

ST-83A is water soluble and forms no sheen or discoloration to the water.

Also produces no sludge or emulsion under water surface.

#### High Seawater Tolerance

ST-83A provides excellent lubrication and corrosion prevention even when the seawater content is 10%.


**KEMEL**
**KEMEL COMPANY a division of EAGLE INDUSTRY CO., LTD.**

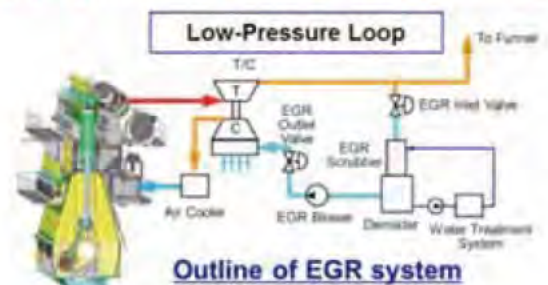
 Shiba-Daimon, Minato-ku, Tokyo 105-8587, Japan  
 Tel.: +81 (0)3-3436-4830 Fax: +81 (0)3-3436-4890  
<http://www.kemel.com>

# Mitsubishi Low Pressure EGR system

Mitsubishi Low Pressure EGR system is the best solution for complying with IMO's NOx TierIII regulations.

## Mitsubishi's unique Low Pressure EGR system

- The EGR gas line is branched after Turbocharger.
- The EGR Unit (consists of EGR scrubber, Demister, EGR Blower and EGR Outlet Valve) is installed on engine. (The EGR Unit can be separated from an engine for installation.)
- The EGR gas is introduced into the turbocharger inlet.



Overview of 6UEC45LSE-Eco-B2 with LP-EGR

## Features of the Low Pressure EGR system

### Simple System

- Low pressure and low temperature lead simple structure which requires less equipment and pipes.

### Simple Operation

- Operation is basically executed by on/off control of EGR valves.

### Low CAPEX, Low OPEX

- Simple system realizes low CAPEX.
- Low OPEX is feasible by low electric power consumption for EGR blower and no need of additional boiling for steam.

### Applicable to Variety Engines

- Mitsubishi Low Pressure EGR System fits well with various types of marine engines.



## Marine Engine Division



## Nakashima Propeller first worldwide to install CFRP propeller on main propulsion system of commercial vessel

Nakashima Propeller Co., Ltd. (president: Motoyoshi Nakashima) of Okayama prefecture has become the first in the world to install a carbon fiber reinforced plastic (CFRP) propeller on the main propulsion system of a general commercial vessel. The main propeller of Taiko Maru was replaced with the new technology, which measures 2.12 meters in diameters, in May 2014 at the Kagawa prefecture-based shipyard Koa Industry Co., Ltd. (president: Tetsuo Masago). The 499-gross-ton chemical tanker, owned by Sowa Kaiun Y.K. (president: Hiroo Ouchi), a shipping company that is also based in Okayama, was outfitted with a side thruster with a CFRP propeller in September 2012. The side thruster propeller had been rated highly enough to lead to the decision for the May replacement work of the main propeller. The design and manufacturing methods were both approved by Nippon Kaiji Kyokai (ClassNK).

Taiko Maru's main propulsion CFRP propeller was produced using a new design of an enlarged diameter and a reduction in overall blade surface area. The propeller blades can flex, just like the wings of Boeing 787 Dreamliner airplanes. Making the most of this feature, the propeller can provide the chemical tanker with higher efficiency. Nakashima Propeller had conducted tests in a towing tank to verify the performance of the new product. The CFRP propeller weighs approximately 60 percent less than conventional metal propellers,

while enjoying a larger diameter. The lighter body can be operated with a narrower propeller shaft, which can contribute to reducing the overall weight of the entire shafting system and curtailing operational costs.

Taiko Maru was operated in a sea trial on May 18, 2014. The results confirmed that the main CFRP propeller offers about a 9 percent reduction in required shaft power compared to the same ship equipped with conventional metal propellers and running at the same cruising speed. The lighter weight is also effective in reducing hull vibration. Nakashima Propeller will measure engine output, fuel consumption and other data to prove the higher performance of the new propeller.



Research and development of CFRP propellers was supported by The Nippon Foundation and the Japan Ship Machinery and Equipment Association (JSMEA) from fiscal 2007 to fiscal 2011. Since fiscal 2012, research support has been given under ClassNK's "Joint R&D with Industry" scheme. Nakashima Propeller is now working on the project jointly with the University of Tokyo's school of engineering, ClassNK, National Maritime Research Institute (NMRI), Nippon Yusen Kaisha (NYK), Monohakobi Technology Institute Co., Ltd. (MTI) and Imabari Shipbuilding Co., Ltd.

# NEO PROJECT: NANIWA ECOLOGICAL OPERATION

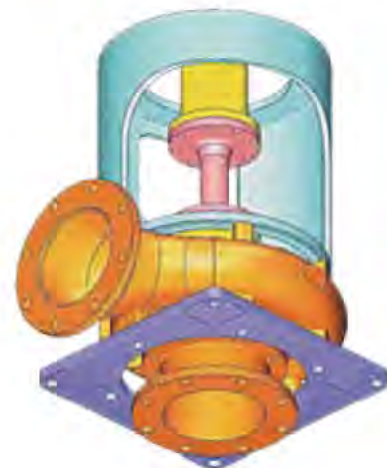
## Overview

In order to fulfill customers' demands for eco-friendliness, NANIWA PUMP have developed this new system and new products with emphasis on "Environmental protection," "Safety of Operation" and "Saving Energy." We call it the "NEO project."

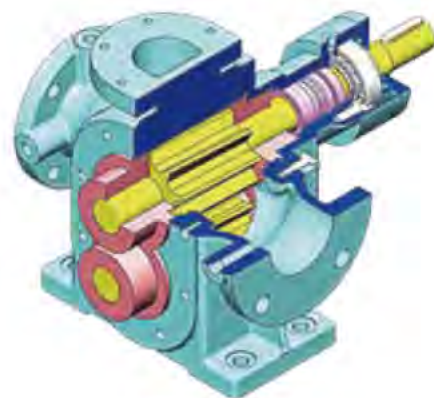
## Operations

Since 2014 we have newly released the following products under NEO Project:

- ① Energy Saving System for Main Cool. S.W. Pump  
Model...NEO-ME  
This system operates Main Cooling Sea Water Pumps with economy and safety.
- ② No cooler Boiler W. Circ. Pump  
Model...NEO-NCB  
No cooler and no cooling water are required for the mechanical seal of this new pump with its newly designed mechanical seal.
- ③ Vertical Under Suction Centrifugal Pump  
Model...NEO-USV
  - Enable to arrange discharge flange at angle of 90 degree each which leads to save space.
  - Having spacer coupling so the pump can be inspected or overhauled without disturbing piping and electric motor.
- ④ Water Circ. Pump for NOx & SOx Scrubber System  
Model...NEO-SCB
  - Matching NOx & SOx Scrubber system.
  - Stainless Steel is applied to all wetted parts enduring wide range of pH value (pH3 ~ 11).
  - New design diaphragm type mechanical seal
- ⑤ Gear Pump for Marine Gas Oil (M.G.O.)  
Model...NEO-LSG
  - Designed for both M.G.O. and H.F.O.
  - Gear surfaces treated for high wear resistance
  - Sleeve bearing suitable for low viscosity
  - Ball bearing to cope with thrust load



NEO-USV series



NEO-LSG series

# JSMEA to attend following international maritime exhibitions in FY2016

<b>Offshore Technology Conference 2016 (OTC 2016)</b>	Days: May 2-5, 2016 Place: Houston, Texas, United States
<b>IMPA Singapore 2016</b>	Days: May 17-18, 2016 Place: Singapore
<b>Posidonia 2016</b>	Days: June 6-10, 2016 Place: Athens, Greece
<b>SMM Hamburg 2016</b>	Days: Sept. 6-9, 2016 Place: Hamburg, Germany
<b>IMPA London 2016</b>	Days: Sept. 21-22, 2016 Place: London, United Kingdom
<b>Rio Oil &amp; Gas 2016</b>	Days: Oct. 24-27, 2016 Place: Rio de Janeiro, Brazil
<b>International Workboat Show 2016</b>	Days: Nov. 30 - Dec.2, 2016 Place: New Orleans, United States



Offshore Technology Conference 2015



IMPA Singapore 2015



SMM 2014

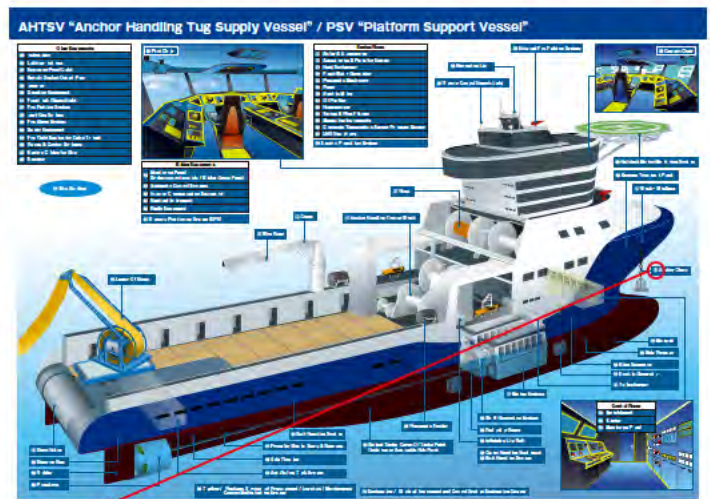
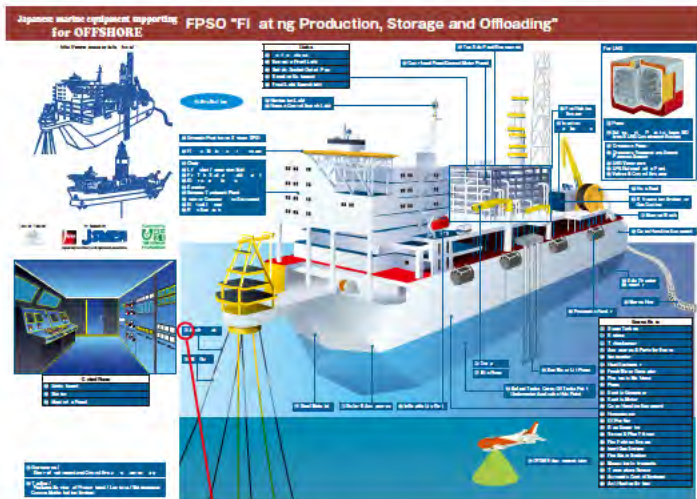


Posidonia 2014



IMPA London 2015

# JSMEA updates brochure of members' offshore products



Products A	Products B	Product No.	Products C	Company	AHTSV	PSV	FPSO	Off Ship	Offshore
Deck machinery	Anchor Handling Towing Winch & Other Winch	①	Anchor Handling / Towing Winch	FUKUSHIMA LTD	●	●	●	●	●
			Wireless Mooring Winch	MANABE ZOKI CO. LTD	●	●	●	●	●
			Tugger Winch Capstan etc	JAPAN MARINE UNITED CORPORATION	●	●	●	●	●
Mooring Equipment	Chain	④	Making Chain	HAMANAKA CHAIN MFG CO. LTD.	●	●	●	●	●
			Anchor Chain	HAMANAKA CHAIN MFG CO. LTD.	●	●	●	●	●
			Stem Roller	MANABE ZOKI CO. LTD.	●	●	●	●	●
Boilers	Boiler & Accessories	⑤	Crane	SEIOGAKARA SEISAKUSHO LTD.	●	●	●	●	●
			Lifting Beam	NTO CORPORATION	●	●	●	●	●
			Main Boiler	KAWASAKI HEAVY INDUSTRIES LTD.	●	●	●	●	●
			Auxiliary Boiler	MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE CO. LTD.	●	●	●	●	●
			Gas/Oil Burner for Boiler	MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE CO. LTD.	●	●	●	●	●
			Rotary Cup Burner for Aux. Boiler	MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE CO. LTD.	●	●	●	●	●
Marine Turbines	Steam Turbine	⑥	Turbine for Generator	KAWASAKI HEAVY INDUSTRIES LTD.	●	●	●	●	
			Turbine Generator Package	MITSUBISHI HEAVY INDUSTRIES MARINE MACHINERY & ENGINE CO. LTD.	●	●	●	●	
			Steam Turbine	SHINKO IND. LTD.	●	●	●	●	
Medium Speed Diesel Engines	Propulsion Diesel Engines	⑦	Propulsion Diesel Engines	ANISAKA DIESEL LIMITED	●	●	●	●	
			Auxiliary Diesel Engines	DAIHATSU DIESEL MFG. CO. LTD.	●	●	●	●	
				NISSAN DIESEL LTD.	●	●	●	●	
				YANMAR CO. LTD.	●	●	●	●	



Japan Ship Machinery and Equipment Association (JSMEA) has updated its brochure of offshore products manufactured and sold by its members. The brochure, which is renewed annually, introduces new products and up-to-date information on previous content.

JSMEA will distribute copies of the updated brochure during the Offshore Technology Conference 2016 (OTC 2016) and other international exhibitions that it will attend worldwide. You can also request to receive the brochure by mail by contacting JSMEA at [info@jsmea.or.jp](mailto:info@jsmea.or.jp).



### Head Office:

Toranomon Toyo Kyodo Building, 13-3, Toranomon 1-chome, Minato-ku, Tokyo 105-0001 Japan  
Tel.: +81-3-3502-2041 Fax: +81-3-3591-2206 E-mail: [info@jsmea.or.jp](mailto:info@jsmea.or.jp) URL: <http://www.jsmea.or.jp>

### Overseas Offices:

#### Japan Ship Center (JETRO), Ship Machinery Department

MidCity Place, 71 High Holborn, London, WC1V6AL, U.K.

Tel.: +44-20-7421-8346 Fax: +44-20-7421-0009

#### JETRO Hongkong, Ship Machinery Department

Room4001, 40/F., Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong, China

Tel.: +852-2501-7291 Fax: +852-2868-1455

#### JETRO Singapore, Ship Machinery Division

Hong Leong Building, #38-01 to 05 #37-02A 16 Eaffles Quay, Singapore 048581

Tel.: +65-6429-9522 Fax: +65-6224-1169