WINTER 2010/ No.99

Jsmea News

Symbol Mark Adopted

[Concept]

A visualization of "wa" (harmony).
The circle represents the rising sun symbol of the national flag and "J", a Japanese sword as well as a force to cut a breakthrough into the constraints of the times or a reliable technical capability supported by traditions.

Since its first participation in NOR-SHIPPING in 1968, JSMEA has taken part in major maritime exhibitions held in Europe or Asia every year. Recently, they included NOR-SHIPPING (Oslo, Norway), POSIDONIA (Athens, Greece), SMM Hamburg (Hamburg, Germany)-all in Europe-Marintec China (Shanghai, China) and Sea Japan (Tokyo, Japan), where the technical excellence of Japanese ship machinery and equipment were highlighted.

However, we received from many interested quarters criticism or complaints that it was hard to locate the Japanese stand (i.e., JSMEA's stand) or that JSMEA's color (i.e., character or presence) was not adequately expressed.

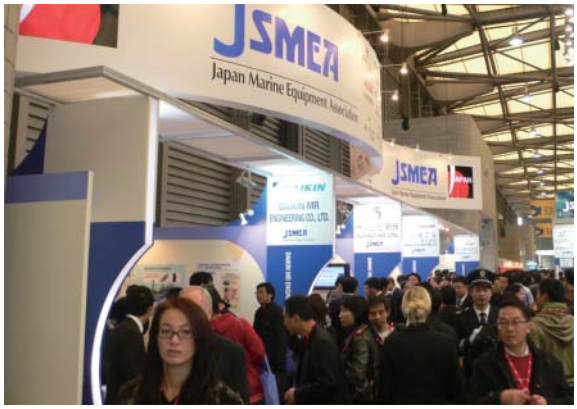
In response to these opinions, Global strategic plan review board (chaired by Yukinobu Fujimoto,Vice Chairman of JSMEA, Chairman of Fuji Trading Co., Ltd.) adopted the association's symbol mark.

From now on, JSMEA's display stand at every exhibition in which the association participates will bear this symbol mark.

The mark is intended for use not only in exhibitions but also on pamphlets and other appropriate media.

Symbol Mark Makes its Debut

JSMEA participated in (the 15th) Marintec China 2009, held mainly at New International Expo Centre (SNIEC) in Shanghai, China, on December 1-4, 2009, with 32 member companies exhibiting in JSMEA's space.



JSMEA shipboard LAN study group demonstrates results at Marintec China

SHIPBOARD LAN PROJECT

Key point of "Guideline for installation of shipboard machinery"

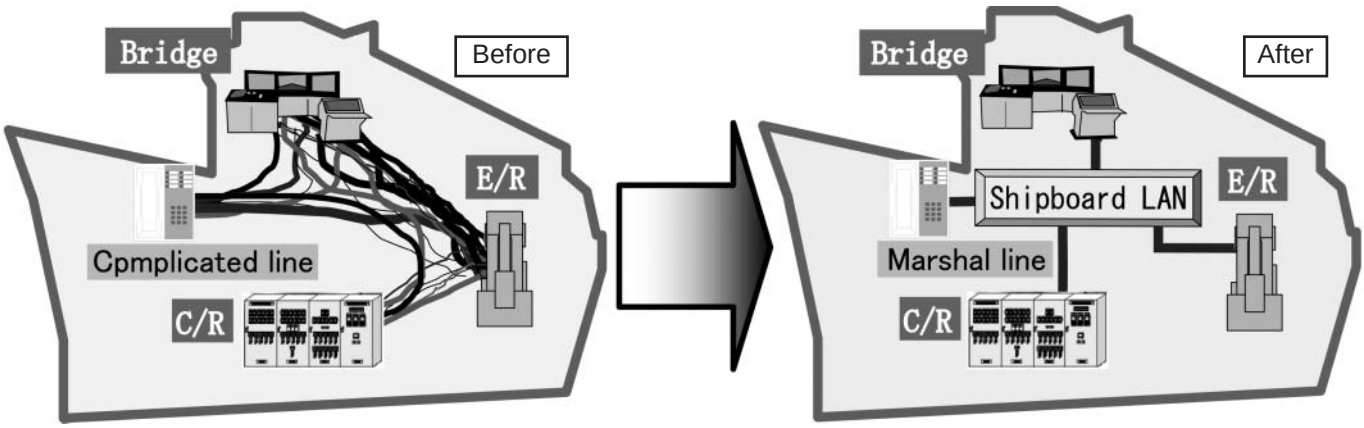
1. Current problems

Because more equipments have been installed and Information has been diversified, onboard wirings are increasing.

The protocols of each equipment are different and the communication efficiency is poor.

The protocols of FLEET BROADBAND and onboard equipment are different, and the communication efficiency is poor.

In order to increase the availability of each equipment, more cables are necessary.



2. Solution

IP Network : realizing the multiple transmission
Ethernet : a general network use
SNMP : strengthening the network monitoring
RSTP : increasing the availability
Server less : decentralize

3. Merit with onboard LAN ...

By using IP, multiple transmission will become possible and will help reducing the wiring.

It is possible to check the both of the navigation and the engine system conditions in real time, because it gathers the both types of information at the same time.

By using IP, the communication between onboard and onshore (broadband mobile communication) and the connection to the internet will become easier.

No network engineering will be necessary because of its simple network structure.

Higher speed and greater capacity data transmission, and stable long-distance communication will be realized.

Failure diagnosis will become easier.

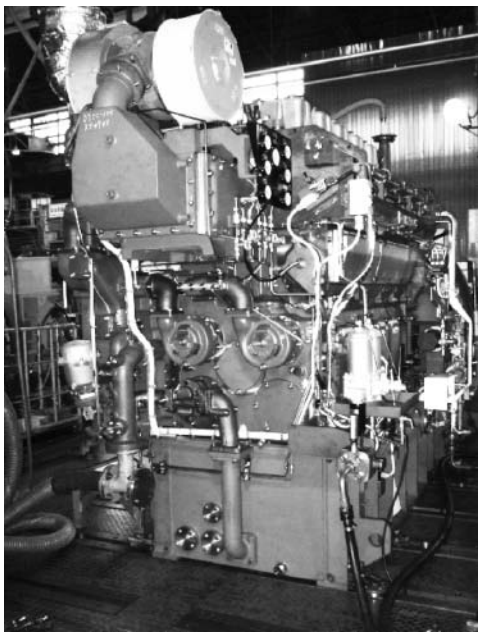
The cost of installing the equipments will be reduced because wiring for individual information cable is not necessary.

Reliability will be increased with the main line availability.

Renewal of DK-20 Type Engine

The DK-20 type engine, of which about 3,600 units have been shipped out as of last year since the start of its sales in 1994, still is a main product of Daihatsu.

When the model was introduced to the market, jackets were cooled with fresh water and coolers with seawater in most diesel engines, and DK-20 conformed to this system as the standard. Today, however, cooling of both jackets and coolers with fresh water is the dominant practice for marine auxiliaries. Furthermore, a single-line fresh water-cooling system is in use to simplify piping. It is also important to strengthen purification of lubricating oil and reduce the maintenance workload.



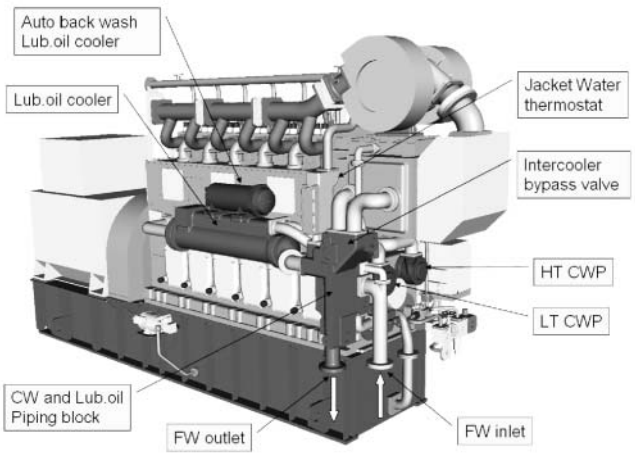


Figure Renewed DK-20 type engine

To adapt the product to these trends, the manufacturer has renewed the design of the DK-20 type engine to make it piping-free. Main features of the renewed design include the following.

①The DK-20 type engine has demonstrated its excellence through many records of successful operation.

②Cooling water lines simplified:
-Single-line fresh water-cooling system used as standard arrangement
-Engine room piping simplified

③Lubricating oil-purifying equipment strengthened:
-Automatically backwashed precision filter as standard equipment

④Piping work simplified:
-Jacket temperature control valve fitted on engine

⑤Disassembling and assembling efficiency improved:
-Piping block units utilized
-Castings for piping between equipment items used

⑥The same main components as in the earlier product used to ensure reliability and durability.

⑦Available in five-, six- and eight-cylinder versions

Daihatsu has already started accepting orders for and manufacturing the engines in this variety, and shipped out the first five-cylinder unit in the summer of 2009, to be followed by six- and eight-cylinder versions, successively.

Daihatsu's products fully meet users' requirements and are responsive to environmental issues. The company is looking forward to providing its engines to shipyards and shipowners to their full satisfaction.

Main Particulars

	Engine speed	min-1	720 / 750	900
5DK-20	Output	kWm	610	800
		kWe	560	750
6DK-20	Out put	kWm	800	1040
		kWe	740	960
8DK-20	Output	kWm	1065	1360
		kWe	980	1270

DAIHATSU

Daihatsu Diesel Mfg.Co.,Ltd.
Address:1-30, Oyodonaka 1-chome, Kita-ku, Osaka 531-0076, Japan
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URL: http://www.dhtd.co.jp

FUJI JET FILTER - maintenance-free continuous filtration system for ship fuel oil (Bunker C)

FUJI FILTER MANUFACTURING CO. LTD, established in 1966, is an integrated filtration engineering company that develops, manufactures and supplies a broad spectrum of filters for key performance roles in numerous and diverse industries.

FUJI FILTER manufactures various sintered metal filters, such as the woven wire-mesh type, the nonwoven fiber-cloth type and the wound type, of which materials are mainly stainless steel.

These products provide customers with the benefits of having many choices among filtration properties that they expect, such as superior mechanical strength, high corrosion resistance, and easy cleaning for repeated use.

FUJI FILTER manufactures types of filters that are suitable for a wide range of applications in industrial fields such as automobile, petrochemical, energy, aerospace, electric, IT and marine industries, to satisfy our customers.

In recent years, in particular, the distribution of the continuous filtration system, called FUJI JET FILTER, for ship fuel oil (Bunker C: Heavy Fuel Oil) has focused on the marine industry, and orders for them are growing.

FUJI JET FILTER was developed on the concept of long-term, maintenance-free operation from one dock to the next (for up to three years); consequently, the number of sales had reached 1,050 units as of March 2010.

This filtration system features a direct cleaning mechanism with a high-pressure jet spray cleaner, which gives it its outstanding innovative performance. This allows for a much higher efficiency due to a lack of clogged filters. This cleaning method is adapted with a cleaning timer (every 2 hours). In addition, manual cleaning and differential pressure cleaning are also provided as a backup. The sintered multilayer metal filter applied in this system has high mechanical strength that is suitable for repetitive cleaning operation over a long time, while providing high filtration efficiency. The system also results in a greater reduction of maintenance costs, as the ship's crew is not required to perform maintenance for a long period of time, barring an overhaul.

FUJI FILTER acts as a "Total Filtration Engineering Company," by developing and designing optimal systems for whatever might be the customers' filtration requirements.

FUJI JET FILTER (FM Type)

FUJI FILTER MFG.CO.,LTD.
Address: 2-3-4,Nihonbashi,Chuo-ku,Tokyo103-8308,Japan Sales Div. Section1 Separator & Marine Team
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URL: http://www.fujifilter.co.jp

FURUNO's FleetBroadband terminals FELCOM500 and FELCOM250 will shortly be coming onto the market

FURUNO ELECTRIC CO., LTD. is pleased to announce that its Fleet Broadband terminals FELCOM250 and FELCOM500 are now ready for shipment, both fully type-approved by Inmarsat.

FELCOM500 (launch scheduled in August 2009) and FELCOM250 (launch scheduled in December 2009) will deliver a faster, more cost-effective solution for maritime broadband data (shared service up to 432 kbps: FB500) and voice communication on a global basis. Once installed, it will turn a ship into a mobile, broadband floating office where constant, simultaneous access to voice and multiple high-speed data communication is available, a necessary infrastructure for increasing level of both operational and social applications onboard.

There have been growing interest and demand in the maritime industry for faster and more reliable broadband communication at sea, as the network infrastructure onshore has become more and more broadband-oriented. FURUNO's FELCOM500 and FELCOM250 will serve such needs. Navigators can obtain real-time, necessary information from the Internet in order to optimize route planning and monitoring tasks, while all personnel onboard can enjoy the benefits of the Internet, e-mailing and VoIP calls to head offices or their friends and family back home.

FELCOM500 and FELCOM250 will alter the way seafarers and vessels communicate, just as broadband data communication onshore paved the way for the broadband IP era.

Features of FELCOM500 and FELCOM250

*** Router/terminal adaptor functions incorporated**

i. Additional network router is NOT required to construct the network.
ii. An existing ISDN device onboard can be interfaced through a RS-232C port, with no terminal adaptor required.

*** Quick replacement from FURUNO's Inmarsat Fleet products**

Pitch of the fixing holes and antenna cables of FELCOM500 are identical to those employed by FELCOM70 (Inmarsat Fleet 77 terminal), thus the system upgrade can be done easily.

*** Straightforward user interface for IP handset FB-8000**

i. Operation setting similar to ordinary mobile phones
ii. Dedicated short-cut keys to access frequently used functions
iii. Individual address book can be stored in the memory of each IP handset.

*** PC-based network management tools**

i. Ordinary web browser can be utilized
ii. Real-time, on-screen monitoring of the connectivity, i.e., satellite status, network status, error information, equipment thermal report, etc.
iii. Network usage management by monitoring communication log*
*Communication log can be saved (in CSV format).

FURUNO

FURUNO Electric Co., Ltd. International Marketing Department
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URL: http://www.furuno.co.jp

NAUTILIGHT
MARINE LED LIGHT SERIES

Since its start as a manufacturer of steam whistles and alarms for marine use, Ibuki Kogyo Co., Ltd. has been devoted to the pursuit of more reliable machinery and equipment and development of new technologies. Noticing the excellent characteristics of light-emitting diodes (LEDs) for use in alarms about 10 years ago, the company began a concerted effort in R&D to improve the use of LEDs. As high-efficiency LEDs began to be manufactured in recent years - suggesting their usefulness for illumination equipment - Ibuki also started research on LED illumination and developed marine illumination lights using LEDs as light sources, ahead of all others in the industry. The new product is now available in the market as "NAUTILIGHT" series.

These lights, developed to replace conventional incandescent bulb-based pendant lights and wall lights for marine use, have many notable features including full waterproofness, high energy efficiency, compactness, light weight and long durability.

An LED light, achieving a power consumption savings of as much as 12% over a 100-Watt incandescent bulb, contributes to cuts in CO2 emissions from ships.

Though having such advantages in marine use as long life together with high resistance to vibration and impact, LEDs require keeping the element temperature at or below a certain level. Therefore, they were seen as needing a metal casing to radiate heat outside while maintaining a high waterproof structure to be usable in the exposed parts of ships. However, Ibuki has succeeded in the use of a resin casing using its own heat radiation technology (patent pending) and thereby realized a substantial cost reduction.

The company has also worked out a dedicated high-efficiency compact power supply unit compatible with the voltage range of AC 100 V to AC 200 V, and integrated it into the casing of a novel design suitable for the next generation of illumination equipment.

The LED lights were actually mounted on external passages of a ship and put to illuminance measurement, and their substitution for conventional bulbs was confirmed to pose no problem. The manufacturer is proud of the new product as pioneering the marine use of LED illumination.

The company will take advantage of the technologies it has built up in expanding the "NAUTILIGHT" series, which it expects to find favorable acceptance in the market.

Specifications		
Type	Pendant Light PL100-WT	Wall Light WL100-WT
Total Flux	600 lm	
Power Source	AC100V～AC220V ±10%	
Current	AC100V:75mA AC220V:45mA	
Protection	IP56	
Dimensions	Ø100 H160 D90	Ø100 H195 D175
Weight	0.6kg	0.7kg

IBUKI KOGYO CO.,LTD.
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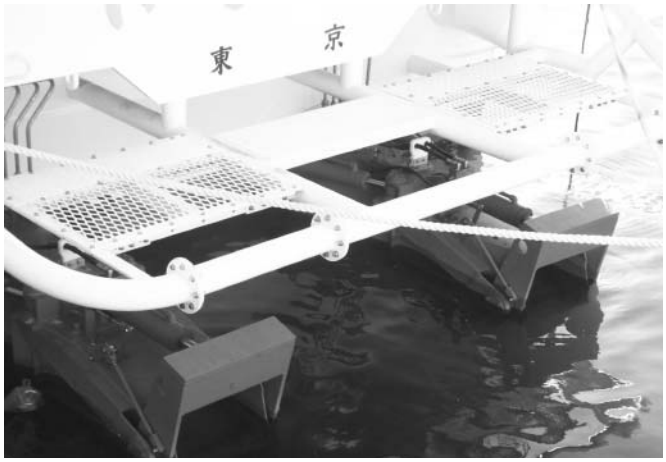
Water-jet propeller has impeller with high pumping capability and anti-cavitation performance



Ishigaki Co. Ltd., a leading Japanese manufacturer of water jet propellers, delivered them in December 2008 for installation in a high-speed patrol craft of the Japanese Coast Guard. The vessel, delivered to the JCG in March 2008, is now in operation.

The water jet propellers are designed to be connected to shipyard-built intake ducts integrated with the hull.

Notable features of the water jet propellers are outlined below.

1) Impeller

In developing this type of water jet propeller, the impeller was newly designed.

The new design embodies the following concepts.

- Restraining the number of impeller vanes to five to avoid choking with filth
- High pumping efficiency
- High anti-cavitation performance
- Good matching with guide vanes in the range of use

Various performance aspects were checked using a reduced-scale model, and the impeller with performance features was completed exactly as intended.

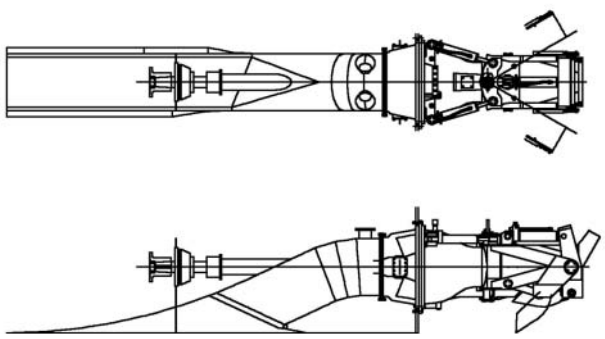


Fig.1 External view of IWJ-A071J

Trial run results of the patrol craft also endorsed the high pumping capability and anti-cavitation performance of the newly designed impeller.

The impellers cut out with a five-axial machine hardly fluctuated in performance from unit to unit and had a good hydrodynamic balance.

2) Intake duct

The thrust was assessed from the data obtained by hydrodynamic analyses and wind tunnel tests conducted earlier. These were also used in the assessment for the intake ducts of this patrol craft.

3) Thrust data

The trial run results agreed well with the thrust data from the planning stage. This finding endorsed the high reliability of Ishigaki's thrust data.

4) Steering/reversing device

The newly designed steering/reversing device was optimized through hydrodynamic analyses and structural analyses based on a three-dimensional model. A test boat mounted with a reduced-scale model was put to trial runs, the results of which demonstrated excellent steering/reversing performance.

<Principal particulars>

Item	Particulars
Model	IWJ-A071J
Classification	JG
No. of units installed	2
Mode of installation	Installation inboard
Direction of revolution	Clockwise as viewed from stern
Rated shaft output	2399 kW at 2035 rpm
Reduction ratio	1.947
Impeller input bore	About 730 mm
No. of impeller blades	5

<Structure>

Item	Particulars
Thrust bearing	Thrust self-aligning roller bearing
Radial bearing	Self-aligning roller bearing
Shaft sealing device (pump unit)	Mechanical sealing
Shaft sealing device (intake duct)	Stern tube sealing device

ISHIGAKI COMPANY, LTD.

ISHIGAKI COMPANY,LTD.
Address: 1-1-1, Kyobashi, Chio-ku, Tokyo, 104-0031, Japan
Tel: +81-3-3274-3511 Fax: +81-3-3281-1577
E-mail: URL: http://www.ishigaki.co.jp

Selling LED illuminations, "eco films," contributing to saving energy, protecting natural environment

Kokosha Co. Ltd. was established in 1915 and incorporated in 1935. During its 74-year history, it has solidified a foundation worthy of its reputation as "a world leader" specializing in the manufacture of marine equipment such as gas-proof apparatuses, illumination appliances, wiring devices, power supply units for reefer containers, windows and outfits. Keeping in constant contact with shipowners and shipbuilders, not only in Japan but also many other countries of the world, the company is striving to develop new products that meet the needs of the market, and actively trying to export these products to customers abroad.

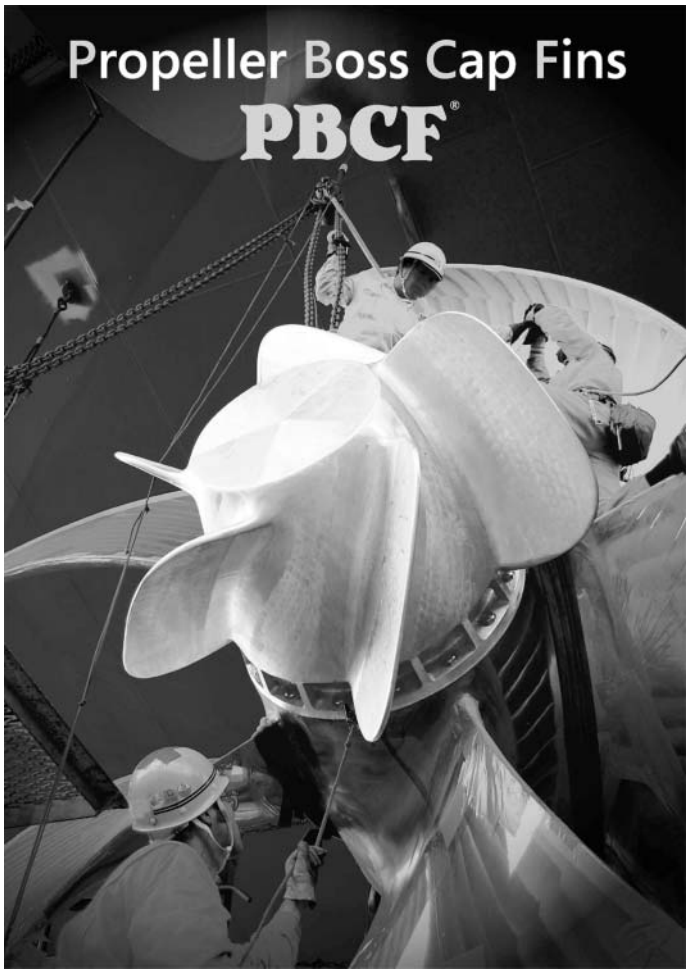
Today, global environmental problems have raised awareness of the need to cut CO_2 and other greenhouse gas emissions, and Kokosha is joining in developing products that can contribute to energy efficiency and ecosystem conservation. The company's efforts in this area have resulted in the development of LED illumination apparatuses (the fluorescent tube type, projector type and incandescent lamp type) and the marketing of "Ecofilms" that can prevent solar heat from penetrating windowpanes.

Kokosha is committed to the modernization of its facilities and embracing new technologies, and at the same time, continuing to provide the world with products leading others in the assurance of quality.

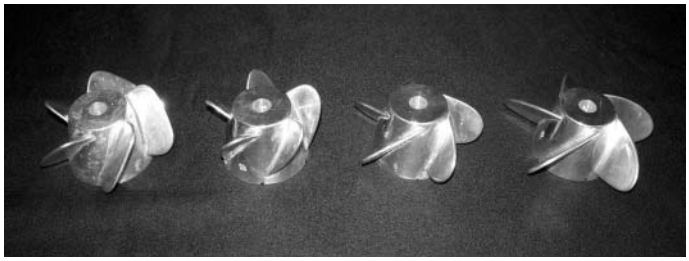
The company hopes to see its ceaseless efforts for improvements win the continuing and growing support of its customers.

KOKOSHA CO.,LTD.
Address: Block 28E Penjiru Rood Hex 01-07 Singapore 609133
Tel: 62646771 Fax: 62651477 URL: http://www.os-kokosha.co.jp

MOTech Develops PBCF Mark II -Applies for Additional Patent-



Mitsui O.S.K. Techno-Trade, Ltd. (MOTech, President: Hidehiro Harada) announced the application for an additional patent on the Propeller Boss Cap Fins (PBCF) system, jointly developed by MOTech, Akishima Laboratories (Mitsui Zosen) Inc., and Mitsui O.S.K. Lines, Ltd. on April 8, 2009. The new patent covers innovations that make the PBCF even more effective in saving fuel and protecting the environment.



What is the PBCF?

The PBCF is the most reliable energy-saving system for propeller-driven ships, adopted on 1,700 vessels around the world. It is installed at the rear of the propeller, breaking up the hub vortex that forms behind the rotating prop. It reduces the torque of the propeller, and increases propulsion at the same time, boosting fuel efficiency by 3% to 5%.

PBCF bolster the propeller's propulsion efficiency

Details of patent application

The PBCF efficiency stem is improved from the redesigned length and shape of the device. Compared to the previous model, these changes allow more reliable control of the hub vortex, boost propeller thrust, and reduce torque. The new design features are covered in the patent application. The original PBCF patent application was filed in Japan in July 1987. Since then, the PBCF has been patented in Japan and 11 other countries.

The future

MOTech plans to install the new PBCF system on an MOL-operated vessel that will be completed in the middle of 2010 and conduct performance tests. At the same time, the company will conduct research on final design and manufacturing, aiming to bring the enhanced PBCF to market in the end of 2010 to boost efficiency another 1% to 2%.

MOTech

Mitsui O.S.K. Techno-Trade, Ltd. PBCF & Ship's Machinery Dept.
Address: Kokusai Kogyo Kanda Bldg. 3.4F, 2-3-4, Uchikanda, Chiyoda-ku, Tokyo 101-0047, Japan
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E-mail: pbcf@motech.co.jp URL:http://www.motech.co.jp/

Sanshin's Anti-piracy Searchlight

With a Powerful Beam

Using a metal halide lamp as its light source, the RBM-16VB quickly lights up after hitting the switch. And despite having a rating of only 150 watts, its peak output is 1 million candelas, which is powerful enough to brightly illuminate the sea surface as far as 500 meters out.

With the know-how gained over the years in the production of searchlights, the manufacturer has succeeded in keeping the weight of this product at only 12.6 kg, even though a stabilizer, most suitable for marine use, is integrated with the body of the searchlight.

In only a few seconds after turning the power on, the metal halide lamp reaches its peak luminous intensity and emits a pale light.

In addition to lighting up the object, the searchlight also has the effect of warning the crew of approaching pirates, who are now posing a serious threat to mercantile shipping.

Features

- New development for the anti-piracy purpose
- Effective to keep guard in the night and to give bedazzlement to suspect vessels or pirates by powerful beam of over 1,000,000cd.
- Xenon lamp or Metal halide lamp 150W.
- Suitable for the on deck use " Water Tight IP56"
- Various type of installation and operation "Fixed mounting", "Temporary clamp mounting" and "Hand held operation".

Temporary Clamp Mounting and Removable Hand Held Type

RBX-16VB/RBM-16VB

Easy operation to connect the plug to the scoket-outlet of power source because the ballast is combined with search light. Available to light up around the ship by temporary clamp installation to balustrade on deck. Possible to use as portable search light by connection of the optional extension cable.

Available different size of installation clamp on request.

Hand Held Type With Shoulder Strap

RBX-16PS/RBM-16PS

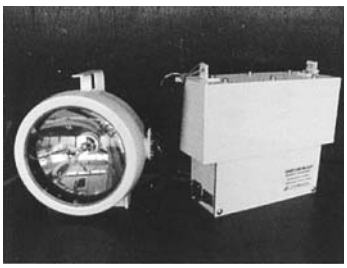
Possible to operate in long duration because of the light weight and shoulder strap.

Easy watching and lighting up from any place.

Any installation space is not necessary.

Usually storage and use as the need arises.

On/Off switch is placed on the ballast box.



Specifications

Type	RBM-16VB / RBX-16VB
Kind of Lamps	Metal Halide / Xenon
Lamp Capacity	150W
Peak Beam Candle Power	1,000,000cd / 2,500,000cd
Beam Divergence	Approx. 6 deg. / 2 deg.
Elevation Angle	Up 30 deg. Down 45 deg.
Turning Angle	Right / Left Each 180 deg.
Input Voltage	DC24V, AC110V and AC220V
Weight	Approx. 12.6 kgs
Material	Aluminium Alloy Die Casting
Protection Grade	IP 56
Color	Munsell N-9.5(White)

SANSHIN

SANSHIN ELECTRIC CORPORATION
Address: 16-8, Uchi-Knabda 1-chome, Chiyodaku, Tokyo 101-0047
Tel: + 81-3-3295-1831 Fax: +81-3-5259-8043
E-mail:takagi@sanshin-electric.co.jp URL: http://www.sanshin-electric.co.jp

Holds Seminar on Japanese Ship Machinery Industry in Mumbai

JSMEA held the Seminar on Japanese Ship Machinery Industry for India, a project under a grant from The Nippon Foundation for fiscal 2008, at Trident Hotel in Mumbai, India, on Wednesday, September 9, 2009. The seminar was initially to be held at Taj Mahal Hotel on November 26, 2008, until the terrorist attack on the city forced its postponement.

JSMEA's series of such seminars began with the overseas Seminar on Japanese Ship Machinery Industry held in the Philippines in 1981, and followed by a similar event once a year until 1997, finding its venue in Singapore, Taiwan, China, Hong Kong, Indonesia, Australia and Greece. In India, the previous seminar was held in 1987 in Mumbai, which was then called Bombay.

The JSMEA seminars were resumed in 2003 in Bangkok, and held biannually, in Vietnam (FY 2004), Turkey (FY 2006) and India (FY 2008).

Particulars of the last Seminar on Japanese Ship Machinery Industry held in Mumbai are stated below.

Title of event: Seminar on Japanese Ship Machinery Industry in India under a grant from The Nippon Foundation for fiscal 2008

Day and hours: Wednesday, September 9, 2009; 09:30 - 19:00

Place: "The Regal Room", Trident Nariman Point, Mumbai

Representing India:

Mr. Jit Nanjia, President, The Shipyards Association of India (SAI),Mr. P.R. Govil, Advisor, The Shipyards Association of India (SAI),Mr. V. Kumar, Secretary, The Shipyards Association of India (SAI),
along with about 70 others

presenting Japan:

Hiroshi Itazawa, Vice Chairman, Japan Marine Equipment Association (JSMEA),Shoichi Kitamura, Executive Managing Director, Japan Marine Equipment Association (JSMEA),Koichi Kato, Director, International Affairs Office, Shipbuilding and Ship Machinery Division, Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourist (MLIT),
along with about 50 others

Program:

(1) Opening Ceremony

(2) Lecture on the Indian position: Mr. P.R. Govil, Advisor, The Shipyards Association of India (SAI)

(3) Keynote address: Koichi Kato, Director, International Affairs Office, Shipbuilding and Ship Machinery Division, Maritime Bureau, MLIT

Title: "Shipbuilding, Ship Machinery Policy and International Cooperation"

(4) Lectures by experts from 11 JSMEA member companies

Lectures respond to questions during Q&A session

Participates in Nor-Shipping 2009

JSMEA participated in Nor-Shipping 2009 at Norway Trade Fair Congress and Exhibition Centre in Lillestrom, Norway on June 9-12, 2009.

To participate in VIETSHIP 2010

JSMEA will take part in VIETSHIP 2010 to be held in Hanoi, Vietnam, on March 17-19, 2010 with the following 13 member companies.

- AKASAKA DIESELS LIMITED
- DAIHATSU DIESEL MFG. CO., LTD.
- ISHII MACHINERY WORKS CO., LTD.
- KAWASAKI HEAVY INDUSTRIES, LTD.
- MANABE ZOKI CO., LTD.
- MITSUBISHI KAKOKIKAISHA, LTD.
- MITSUBISHI HEAVY INDUSTRIES, LTD.
- NAKASHIMA PROPELLER CO., LTD.
- NANIWA PUMP MFG. CO., LTD.
- NIIGATA POWER SYSTEMS CO., LTD.
- NIPPON HAKUYO ELECTRONICS, LTD.
- TAIKO KIKAI INDUSTRIES CO., LTD.
- YANMAR CO., LTD.

!! The next issue, No. 100, will be coming soon. Hope you look forward to it !!

JSMEA Japan Marine Equipment Association

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