PROJECT On NEEE NEWS

2nd Issue August 2012

Mitsubishi Marine Energy & Environment Technical Solution-System



Hirofumi Tamehisa President & CEO, Marine Machinery & Engine Division

It will soon be a year and a half since the Marine Machinery & Engine Division (MMED) was established. The objectives of the launch were to efficiently promote important business challenges - the promotion of the solutions business, globalization, and expansion of our global services network - and to enable swift business decisions. Looking back over the past 18 months, we have been winning high praise from our customers, globally, that an ideal organization has been formed. Furthermore, we feel that the new organization is enabling us to unfold our business in a manner that makes it easier for us to provide comprehensive solutions and respond to the needs of our customers with collaboration between our sales, design and services teams.

In this second issue of the MHI MEET NEWS, we feature an interview with Mr. Yasuo Tanaka, Managing Corporate Officer of Nippon Yusen Kaisha (NYK Line), who graciously agreed to talk to us about the issues currently being faced by the shipping industry and NYK Line's vision for the future, as well as his expectations toward MHI.

I proactively create opportunities to visit our customers and partners, so that I can listen to their opinions firsthand. Each time, I am left with a renewed conviction that there is still much for us to do to satisfactorily meet their expectations—that we must continue our

MEET Products, Valued By Customers Contributing to the Improvement of Energy Efficiency

efforts and learning. We will listen sincerely to the voices of our customers, and consider their demands, expectations and even complaints as information which will serve to help us expand our business. Our aim is that the MMED and each individual comprising that division will continue to grow. We plan to talk with as many customers as we can and introduce their voices on the pages of the MEET NEWS.

Here, we will also report on the progress of the three basic strategies of MMED, which we introduced in our inaugural issue, and we look forward to your continued understanding of our business activities as well as receiving your advice and guidance.

The Promotion of "Project MEET"

Since the unification of departments into MMED, we have been seeing the results of the proposals being made – for various products in our solutions business under the new framework – starting to materialize. We have gained the strong interest of customers as well as received new inquiries regarding our products as a result of hosting seminars related to Project MEET as an energy-efficient and environmentally-friendly solution, unveiling new products, holding various exhibitions and seminars, and further, of proactively disseminating information on such events through the MHI MEET NEWS, press announcements, and so on.

The Promotion of Globalization

We believe that globalization is important in order for us to continue to coexist with our customers around the world in the shipping and shipbuilding industries, from whom we have received much assistance over the years, and what is more, to make an even greater contribution to them in a rapidly changing business environment. In February, we concluded an agreement with Jiangsu Masada Heavy Industries Co., Ltd. of China through which we granted license of deck machinery and steering gears. This was an addition to a license already granted to Jiangsu Masada for deck cranes, under which more than 200 such cranes are being manufactured each year. In June, we renewed an existing licensing agreement with Hyundai Heavy Industries Co., Ltd. to enable even more aggressive production of Mitsubishi-UE engines. Meanwhile, in July, we concluded a license agreement with Imabari Shipbuilding Co., Ltd. for deck machinery.

The Reinforcement of Global customer Services

At the same time as our globalization efforts, we are also stepping up the reinforcement of our after-sales services network so that we can ensure the sound operation of ocean-going vessels. In Japan, we opened an office in Imabari this April which are enhancing the quality of services provided to the neighboring area. Overseas, we already have employees stationed in Hamburg, Busan, Shanghai and Singapore, but we carried out a further fortification of personnel by increasing their number. Furthermore, we are working to increase the number of authorized repair agents (ARA) as well as to augment and expand our overseas parts depots so that we may reinforce our comprehensive after-sales services network.

The inaugural issue of MEET NEWS was received very favorably beyond our expectations. In this second issue, we tried to further enhance the content by adding new feature articles for an even more interesting read.

We are very happy to deliver MEET NEWS 2nd Issue to you, and we hope that we will be able to continue deepening our ties with you through this newsletter. We will do our utmost to keep on providing products and services that meet your expectations.







Mr. Yasuo Tanaka, Managing Corporate Officer of Nippon Yusen Kaisha (well known as "NYK Line")

-a Representative Shipping Company of Japan

Expectations held toward UE engine Japan's only originally developed low-speed engines, and MEET products with its many choices for energy-efficient/environmentally-friendly products

Relationship with MHI Products

—Mr. Tanaka, you have a long relationship with MHI products. Can you tell us some of your memories related to them?

Tanaka: A year after joining NYK Line, I spent three years, beginning in 1980's, at the Kobe Branch. During my first year there, I primarily visited shipyards in the Setouchi area. In the second year, I was assigned to MHI Kobe Shipyard. In fact, the first main engine plant that I ever toured through was the one at the MHI Kobe Shipyard. I still remember clearly how overwhelmed I felt when I looked up and saw the sheer size of the UE engine. That was my first encounter with an UE engine.

There's also a memorable story about deck cranes, too. It was when we were cooperating in the market launch of a 50t MHI deck crane, and I was studying a lot about them. I was enthusiastically doing things like comparing the crane control systems of MHI with those of overseas manufacturers. That is why I was very happy when the 50t crane was completed. Since then, more than 50 of the 50t cranes have been manufactured by MHI. I believe it to be an example of successful business. Before then, there weren't too many cases of NYK Line adopting the use of deck cranes manufactured by MHI. However, NYK Line and MHI's completion of a strategic deck crane not only increased our trust in MHI's technical capabilities but also our opportunities to adopt the use of an

MHI deck crane.

Tanaka: Yes, we have worked together on a large number of marine products. Also with MHI Shipbuilding & Ocean Development HQ, we have worked on reliquefaction systems for LNG carriers and, more recently, the Mitsubishi Air Lubrication System (MALS).

Emphasis on Investigating Causes

—There were many memorable experiences but also times when MHI caused difficulties as well.

Tanaka: NYK Line and MHI endured many difficulties together. Turbine generators are operated after preheating it by steam. However, there was a time when slight warping occurred during operation, and the turbine blade rubbed against the casing. At the time, MHI's Shipbuilding HQ, Power Systems HQ and R&D Centers worked together and carried out various experiments, even getting Lloyd's Register involved as the cause was investigated. There were many demands made by customers. MHI employed all of their experts from various divisions and drafted a detailed analysis report finding the root cause, and ultimately, the customers were satisfied, and we put countermeasures in place.

I've never seen this kind of attitude - to

thoroughly pursue a cause when a problem arises – at any other company. I think this is MHI's strength. Of course, it's best if no problems arise in the first place, but if and when a problem does occur, it's greatly reassuring to have a partner that will thoroughly investigate the cause and responsibly reach a conclusion. Seeing things through to the end is what MHI is about. If it were an ordinary company, I think they would have given a different response without seeing things through to arrive at a conclusion.

Environmental Efforts

—NYK Line has been reinforcing its efforts toward the environment for some time. Can you tell us about it?

Tanaka: In 2004, NYK Line launched the NYK Monohakobi Technology Institute (MTI) and began developing environmentallyfriendly products. This was prior to the Lehman shock and before society began taking today's great interest towards energy efficiency and environmental regulations. With MTI leading matters, we came out with the NYK Super Eco Ship 2030, a concept ship of the future that reduces CO2 emissions by 69%. Our efforts toward the environment at this early stage proved fruitful, and we are now seen as a pioneering shipping company in terms of measures taken toward today's escalating fuel prices, responses taken towards environmental regulations and contributions made

as part of our corporate social responsibility.

----NYK Line has adopted the use of many of MHI's energy-saving and environmentally-friendly products. Examples include VTI turbochargers and hybrid turbochargers.

Tanaka: MHI products are making significant contributions to NYK Line's environmental efforts. We have adopted the use of many environmentally-friendly MHI products, such as the VTI turbocharger and hybrid turbocharger. In particular, Project MEET is a an integration of the many environmental technologies possessed by MHI, and I see great value in them. Having many solutions enables wide-ranging technologies to be used in combination. I believe that because MHI provides many options, it would probably be possible to adopt at least one or two MEET technologies regardless of the type of ship.

Expectations toward UE as One of Three Major Main Engine Licensors

Tanaka: I also have great expectations toward Mitsubishi-UE engine. As one of three major licensors in the world, I would like to see MHI continue devoting efforts toward development. I think it is a great strength for Japanese shipping and shipbuilding companies to have a main engine licensor in Japan. Continuous development of technologies is important as a licensor, and I would like to see Mitsubishi-UE continue to do its best as a Japanese engine.

Globalization

—Globalization is progressing as a worldwide trend. MHI is also working to upgrade and expand its overseas bases. Can you give as your thoughts on this?

Tanaka: Globalization is also being promoted at NYK Line, including setting up ship management bases in Singapore and London. I think that it is very significant that MHI is not only in tune with such trends but also carrying out globalization. The upgrading and expansion of parts depot centers and supply sources are advantageous for shipping companies as well.

Future Outlook of the Shipping Industry

-There is now an increased need for operating vessels at slower speeds. What do you see in the future for slow steaming? Tanaka: There is super slow steaming in the world, which is operating ships at even slower speeds than at present. Today, there is an excess supply of ships, and this state is expected to continue for five or more years. Trying to reduce the speed even further might make it fall below the operational range of an engine. However, there is a need for this from the viewpoint of energy saving. I believe that engine manufacturers need to carry out various tests in order to gauge the possibilities in responses to the need to operate ships under low load. I hope that the MHI UE full-scale engine testing facility which was unveiled in July, will be utilized for such means.

Going forward, I think that making lowspeed operation possible will become necessary not only for ships that are to be newly built but also for the improvement of engines already installed in ships in operation. I would also like to see the proposal of new technologies, such as LNG-fueled engines. Modifying ships already in operation to LNG-fueled engines may also take place in the future.

—In other words, NYK Line would not only apply LNG-fueled engines on ships to be newly built because of the existence of regulations but also on existing ships in operation if the need is present.

Tanaka: I think there will be a larger demand for the retrofitting of ships already in operation.



— What are your thoughts regarding the future spread of the use of LNG-fueled ships?

Tanaka: I think its use will spread if a system for supplying the fuel is ready. The only thing is that there is a need for some-one to be the first to begin doing this.

—Thank you very much for your valuable time today.

Tanaka: I hold great expectations towards MHI's comprehensive strength. MHI is the only company in Japan that is involved in developing own low-speed engines as well as various marine machineries. Furthermore, MHI is the only company in the world that is also involved in shipbuilding. I would like to see MHI leverage its comprehensive strengths to become a company that can't be emulated by other companies around the world.

Tanaka: Yasuo Tanaka Managing Corporate Officer, Nippon Yusen Kaisha (NYK Line)

Interviewer: Tomoo Kuzu Director of Business Development Department, Marine Machinery & Engine Division Power Systems, Mitsubishi Heavy Industries, Ltd.



NYK Super Eco Ship 2030

MEETNEWS MHI Licensees

Kobe Diesel Co., Ltd.

Swift provision of high value-added products, technologies and services

Since its founding in 1910, Kobe Diesel Co., Ltd. has consistently pursued a path as a company dedicated to the manufacturing of marine engines while changing the type of engine depending on the needs of the marine market. It included the hot bulb engine, which was highly popular for many years and was known affectionately as "Kobe Red," moving on to diesel engines, four-stroke engines and further to two-stroke engines, and from small bore engines to large bore engines.

In 1957, a license agreement was concluded with Mitsubishi Heavy Industries, Ltd. for the Mitsubishi UE Diesel Engine, which was the only low-speed two-stroke diesel engine developed on the basis of Japanese technology. Kobe Diesel began manufacturing UE engines as a UE licensee.

Today, the company's engine manufacturing lineup covers broad-ranging models, from the small UEC33LSII to the large UEC68LSE engine. The company is also seeing growth in orders for the electronically controlled Eco-Engine.

To date, Kobe Diesel has manufactured a total of about 2,000 units of 16 million horsepower UE engines, establishing a top position for itself as a UE engine licensee. All engines currently in production are fuel-efficient, environmentally-friendly engines that comply with International Maritime Organization (IMO) Tier II NOx emission regulations.

As a group of professionals in the manufacture of engines, Kobe Diesel will continue to undertake its manufacturing activities on the basis of its philosophy to "Swiftly provide high value-added products, technologies and services that match the needs of customers."



Shigeru Yano President, Kobe Diesel Co., Ltd.



Kobe Diesel Co., Ltd. Head Office and Head Office Plant (Akashi City, Hyogo Prefecture)

Akasaka Diesels Limited

With the desire to "Never manufacture machinery that will bring trouble to ship owners and crew members"

Akasaka Diesels was established in 1910 by founder Otoshichi Akasaka, who was involved in the installation and repair of boat engines in a fishing village of Yaizu, Shizuoka. This year marks the 102nd anniversary of the company dedicated to the manufacture of diesel engines.

In 1933, Akasaka Diesels developed a low-speed four-stroke engine, and since then, according to the needs of the times, it has carried out the development of new engines or repeated minor upgrades to improve existing engines. The company fulfills its responsibility to supply engines to ships on coasting vessels and fishing vessels and has brought about 8,500 such engines into the world. In 1960, the company entered a technical tie-up with Mitsubishi Heavy Industries, commencing the manufacture and sale of two-stroke UE engines. To date, around 1,400 units with 9 million horsepower engines for ocean-going vessels, with a focus on UE engines, have been manufactured by Akasaka Diesels.

We manufacture lightweight, compact, fuel-efficient and low-lubricating oil consuming marine main engines, with a wide-ranging lineup of between 660kW and 15,000kW class engines. We have the production capacity of 70 engines per year totaling about 300,000kW.

We have adhered to the late founder's instructions, which were as follows: "Never manufacture machinery that will bring trouble to ship owners and crew members. Strive to build engines that will be appreciated by all." We believe that as a manufacturer, we will conform to this age by incorporating systems that take the earth's environment into consideration to our corporate management. We are actively engaged in the development of environmentresponsive devices, such as diesel particulate filters (DPF) and selective catalytic reduction (SCR) NOx removal systems. In particular, we are emphasizing joint development with MHI of SCR NOx removal systems for low-temperature exhaust gas.



Zenshichi Akasaka President, Akasaka Diesels Limited



Akasaka Diesels Limited Toyoda Factory (Yaizu City, Shizuoka Prefecture)

MEET NEWS MEET Product Lineup

Hybrid Turbocharger MET83MAG

Highly efficient conversion of the highbred turbocharger's excess rotational energy into electricity

One year has passed since the MV "Shin Koho", an 180000 dwt bulk carrier fitted with the world's first large-scale hybrid turbocharger (MET83MAG), went into service, and the high reliability and economic efficiency of the power generation system has been verified. The system is comprised of a hybrid turbocharger (for main engines) with built-in high speed generator and state-of-the-art power electronics that control the generated electricity. This enables the highly efficient conversion of the hybrid turbocharger's excess rotational energy into electricity, and MET83MAG is capable of supplying all electric power necessary during normal seagoing. In response to slow steaming, the MET83MAG system can be further enhanced to improve low-load performance by combining it with a VTI turbocharger or by utilizing the generator of Hybrid turbocharger as a motor.



180BC "SHIN KOHO" (NYK Line) with the first Hybrid Turbocharger



Engine with Hybrid Turbocharger (MET83MAG)

VTI Turbocharger

Reducing fuel consumption during slow steaming

The variable turbine inlet (VTI) for the MET turbocharger is attracting attention as a technological solution for reducing fuel consumption during slow steaming. The high reliability and fuel efficient performance of MHI's first VTI turbocharger (MET66MA-VTI) are receiving recognition, with six months having passed since it was fitted on the MV "Noble Salute", a 95000 dwt bulk carrier.

The development and design of the VTI system have already been completed in the following sizes: MET83, 71, 66, 60 and 53. Because the VTI turbocharger can be easily retrofitted on ships already in operation, its use going forward on a wide-range of ships will make it a viable solution for the reduction of operating costs and greenhouse gas emissions.

VTI Variable Turbine Inlet



VTI Turbocharger



Engine with VTI Turbocharger

ORC

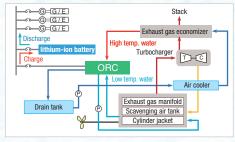
Recovering the wasted low thermal energy

MHI is currently developing an Organic Rankine Cycle (ORC) that utilizes a heating medium with a low boiling point as an effective method for recovering the wasted low thermal energy of a ship's main engine. The characteristic of MHI's ORC is that it recovers energy from both an exhaust gas economizer and the main engine's cylinder jacket and generates electrical power through a single mixedpressure turbine. The use of only one turbine generator enables the realization of a highly efficient, space-saving power generation system. Another characteristic is that MHI's ORC is a vertical unit that allows the efficient use of space within a ship.

Unlike steam turbines, ORC requires sealing technology to prevent the leakage of the low boiling point medium into the air. MHI achieves the complete containment of the medium through the application of originally-developed magnet coupling technology to the connection between the turbine and reducer.



Demonstration equipment of ORC



ORC generating system flow

ORC Organic Rankine Cycle



Development Starts on the Low-speed, Dual-fuel Marine Engine UEC-LSGi

An engine that uses both conventional heavy oil and natural gas as fuel

MHI began development of the UEC-LSGi, a low-speed, dual-fuel marine engine that uses both conventional heavy oil and natural gas as fuel. The project was initiated in order to respond to our customers' economical and environmental needs. The first engine will completed in fiscal year 2015.

After completing empirical tests in a full-scale dual-fuel testing system the first UEC-LSGi to appear on the market will have a 600 mm cylinder bore and 11,000–18,000 kW class power output.

The engine will use the diffusional combustion method, in which high-pressure gas (approx. 300 bar) is injected in the cylinder-compressed air and ignited by the pilot flame with a small amount of fuel oil. Compared to the pre-mixed combustion method, in which low-pressure gas is mixed with air and then compressed, this method is superior in responsiveness to changes in gas fuel composition and sudden changes in engine



4UE-X3, a full-scale or low-speed diesel test engine

load, therefore is highly stable.

The UEC-LSGi will run on many operational modes; for example, it will be able to function at full power on only heavy oil. The engine's nitrogen oxide (NOx) emissions will comply with IMO Tier III regulations due to the addition of MHI's Exhaust Gas Recirculation (EGR) technology.

Full-scale Low-speed Diesel Test Engine Completed

Kobe, July 9, 2012

A testing facility to ensure technologies comply with global environmental regulations

The 4UE-X3, a full-scale low-speed diesel test engine that has been in development in MHI's Kobe Shipyard and Machinery Works, is now completed. A commemoration ceremony was held on July 9, 2012. Many guests from the shipping, shipbuilding and marine industries attended, and the ceremony was a great success. Guests included members from the Ministry of Land, Infrastructure, Transport and Tourism, Nippon Yusen Kaisha, Mitsui O.S.K. Lines, Ltd., and Kawasaki Kisen Kaisha. Ltd.

The completed test engine is electronically controlled with four cylinders / 600 mm bore, and is based on UEC60LSE-Eco, MHI's low-speed diesel engine. The system will be used to test various technologies in order to comply with IMO Tier III regulations, which require 80% reduction of NOx emissions.

MHI has already achieved 80% reduction of NOx emissions in on-board testing using the Selective Catalytic Reduction (SCR) system, and has completed the necessary tests for commercialization. The 4UE-X3 will be used for further full-scale

Guests at the commemoration ceremony

verification of the Exhaust Gas Recirculation (EGR) technology.

The test engine has an adjoining engine operation and maintenance training facility and training room. We plan to offer a variety of training options to our customers and partners.

SCRSelective Catalytic ReductionEGRExhaust Gas Recirculation

Visit by Mr. Zhang, Mayor of Nantong City Steering Gear and Deck Machinery

Manufacturing / Selling License to Jiangsu Masada Heavy Industries

Mr. Zhang, mayor of Nantong City, China, visited MHI on February 23, 2012. MHI has licensed deck crane technology to Jiangsu Masada Heavy Industries Co., Ltd. of Nantong City since 2008, and the two companies signed a further license agreement for manufacturing and selling steering gears and deck machineries in the presence of Mayor Zhang.

Nantong City recognized MHI's contribution to the region's shipbuilding industry, and Mr. Wani, head of MHI's Power Systems, was invited on July 18 to receive an honorary citizenship. MHI invited 15 shipbuilding companies in Nantong and used this opportunity introduce Project MEET and it's products.



Signing ceremony with Mayor Zhang and Jiangsu Masada Heavy Industries Co., Ltd.



Stronger Alliance with Hyundai Heavy Industries, the World's Largest Engine Manufacturer

License renewal for manufacturing and selling Mitsubishi-UE low-speed marine engines

MHI renewed its technical licensing agreement for Mitsubishi-UE low-speed engines with Hyundai Heavy Industries Co., Ltd. (HHI), the world's largest shipbuilder and engine manufacturer based in Korea. HHI is the largest engine manufacturer in the world, with businesses in a wide range of fields including shipbuilding, marine machinery, power generation systems, industrial robots, heavy equipment, construction machinery, and special vehicles. Annual production capability of their low speed engine is 14 million horsepower.

MHI has a long history with HHI, and in the area of marine machinery has collaborated on diesel engines, main turbines, cargo oil pumps and turbines, and MET turbochargers. The licensing renewal aims to strengthen the two companies' collaborative relationship in marine industries. In other areas the two companies has collaborated on heat recovery systems, water feed pumps for boilers, circulating water pumps, and compressors.

MHI has licensed UE engine technologies to HHI since 1984. The renewed license was revised to expand the content and include more models. It authorizes manufacturing, selling, and servicing of UE engine "LSE (-Eco)" series with cylinder bores of 350–800 mm.

UE engine is both economical and environment-friendly, with a compact structure, low fuel consumption, and low cylinder oil feed rate, and getting high reputation in domestic and international markets.

HYUNDAI-MITSUBISHI UE DIESEL ENGINE LICENSE SIGNING CEREMONY



Licensing renewal and signing ceremony with Korea's Hyundai Heavy Industries Co., Ltd.



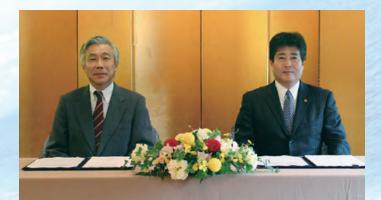
The low-speed Mitsubishi-UE 7UEC60LSII-Eco marine engine

Deck Machinery License for Imabari Shipbuilding

MHI and Imabari Shipbuilding Co., Ltd. signed a licensing agreement for manufacturing and selling MHI's deck machineries. Imabari Shipbuilding plans to start production in April 2013.

Imabari Shipbuilding is Japan's largest shipbuilder with highest building tonnage and ship sales. The company manufacture a large variety of ship models, and the configurations of the licensed deck machineries are capable to be used on all ships. MHI will provide hydraulic pumps and motors, which drive the machineries. Imabari Shipbuilding plans to manufacture at Dalian Imaoka Shipbuilding Co., Ltd., a block building facility that the company established in Dalian, China.

Deck machinery includes anchor windlasses for anchoring, and mooring winches for mooring to piers and berths. MHI created its first deck machinery in 1962 and has delivered over 2,300 sets so far. It has earned a high reputation from customers because of their reliability, durability, and good responsiveness.



Mr. Wani, head of MHI's Power Systems (left), and Mr. Higaki, President of Imabari Shipbuilding Co., Ltd. (right), at the signing ceremony



Deck machinery



MEET Seminar Korea 2012 Heightened Interest in Energy Saving and Environmental Responsiveness

Busan, April 27, 2012

MEET Seminar Korea 2012 was held in Busan, Korea, on April 27, 2012. The objective was to introduce Project MEET's efforts related to energy saving, the need for which will become increasingly strong, as well as the Project's activities towards the resolution of issues related to strengthened environmental regulations.

More than 80 customers from companies in a wide range of industries, including shipping, shipbuilding and trading, participated in the seminar in which we proposed MHI's MEET product lineup (UEC-Eco, MERS, ORC, MET Turbocharger, UST and Propellers). There was great interest shown with many questions asked by customers, indicating heightened interest in energy saving and environmental responsiveness. Many of those attending the seminar expressed a desire for the seminar to be held

News from MHI Offices Abroad



Many participants listened intently to the seminar presentations.

again next year. Going forward, MHI will continue to provide the latest information by holding MEET Seminars around the world as needed.

| MERS | Mitsubishi Energy Recovery System |
|------|-----------------------------------|
| ORC | Organic Rankine Cycle |
| UST | Ultra Steam. Turbine |



Mitsubishi Power Systems Europe, Ltd. Hamburg Branch

Toshiyuki Nasu, General Manager, Marine Machinery

Hamburg is a commercial city located in northern Germany. It is a port community situated about 100km up the Elbe River from the Baltic Sea and is known as Germany's "Gateway to the World."

The city is situated around Alster Lake, which is lush with greenery. Our Hamburg Office is located in the city center. This office was opened in April 1993 as base for Mitsubishi marine diesel engines in Europe. It serves customers in Europe and the Middle East and as an after-sales services center. We work to increase the visibility of Mitsubishi UE engines as well as provide customer support. Furthermore, the office acts as a European contact point for the provision of total solutions in marine machinery, including Project MEET. We participate in international conferences, exhibit at trade fairs and carry out our activities energetically.

I have been stationed at the Hamburg Office since October 2010, so it will soon be two years since my arrival. Recent work that I was involved in, which left a deep impression on me, was the replacement of a camshaft drive gear off the coast of Turkey. This was in response to an emergency request from a ship management company. I worked closely between the customer and our offices in Japan, going back and forth between the ship and the plant on land to carry out the release of the gear, machining of the bearing, cooling fit of the bush and reassembly of the camshaft drive gear. We were able to complete it in a very short time to the high praise of our customers.



Alster Lake, surrounded by lush greenery



(From left) Ms. Kashiwagi, Mr. Nasu and Ms. Thiele

Going forward, I would like the Hamburg Office to continue carrying out activities as an important MHI overseas base so that our customers will patronize our environmentallyfriendly marine machinery, as represented by Project MEET products

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