

OFFSHORE MARINE

A newsletter of Keppel Offshore & Marine

10 YEARS OF
EXCELLENCE

January – February 2012

MICA (P) 137/12/2011



**ROCK SOLID
TEAMWORK**

CONTENTS

Gem of a start to 2012	3
Charting milestones in Qatar	4
On course for success	5
Harnessing collective strength	6
Floatel victory	10
Winning proprietary solutions	15
Catalysts of innovation	22
Insights from a global leader	24
Ushering in new beginnings	26
Building lives	29
Festive cheer to the needy	30

SPECIAL REPORT

Pulling in two decades of growth	8
----------------------------------	---

CENTRESPREAD

Rock solid teamwork	16
---------------------	----

TECHNOLOGY & INNOVATION

Innovative wind solutions	18
Ice-breaking Arctic rig	20



Special Report

8

Keppel Smit Towage (KST) celebrated its 20th anniversary with its customers and business partners on 23 December 2011.

From a small local company, it has established itself as a trusted name for marine towage services in the Asia-Pacific region over the last two decades.

EDITORIAL BOARD

EDITORIAL ADVISOR

Tong Chong Heong

EDITOR

Lai Ching Chuan

ASSISTANT EDITOR

Eva Ho

SUB EDITOR

Wong Chai Yueh

COMMITTEE MEMBERS

Chow Yew Yuen, Michael Chia, Nelson Yeo, Wong Kok Seng, Hoe Eng Hock, Dr Foo Kok Seng, Vett Ramos, Ching You Yi, Hoo Yao Lin, Chin Sze Kiun, Alan I. Claveria, Betty Mok, Lucienne de Jong, Linda Mercado, Roy Tan, Lee Wan Jun, Maria Magdalena

OffshoreMarine is a bi-monthly publication of Keppel Offshore & Marine Ltd
50 Gul Road, Singapore 629351
Tel: +65 6863 7200
Fax: +65 6261 7719 / 6265 1927

Company registration no. 199900642R

Gem of a start to 2012

Ushering in the new year on a positive note, Keppel AmFELS, a US wholly-owned subsidiary of Keppel O&M, secured a contract from Diamond Offshore to construct and upgrade a moored semisubmersible rig with delivery scheduled for 3Q 2013.

The rig, to be named Ocean Onyx, will be constructed from an existing hull of a Diamond Offshore cold stacked unit, which previously operated as the Ocean Voyager.

Keppel AmFELS' scope of work on the Ocean Onyx includes the reconstruction of the rig,

installation of advanced equipment such as a modern drilling package, and installation of sponsons to the pontoons to enhance the stability of the rig in deepwater.

The rig will be designed to operate in water depths of up to 6,000 feet and will have a variable deck load of 5,000 long tonnes, a five-ram blowout preventer, and accommodation for 140 personnel.

Mr Larry Dickerson, President and CEO of Diamond Offshore, said, "We have worked with Keppel for

more than a decade, and our rigs have consistently been delivered on time and within budget, whether in the US or Singapore. With Keppel's track record as a leading offshore yard, we are confident that this project will be a success."

Keppel O&M had previously upgraded four similar semisubmersible rigs for Diamond Offshore – Ocean Baroness, Ocean Rover, Ocean Endeavour and Ocean Monarch.

Mr Tan Geok Seng, President of Keppel AmFELS, said, "We are pleased to be able to embark on another major rig project for Diamond Offshore, which has worked with Keppel on more than 20 projects since 1996.

"Diamond's rigs are sent regularly to our yards around the world for maintenance, repair and upgrade, and Keppel AmFELS has proven to be their yard of choice in the US Gulf of Mexico. Having built a long-term partnership with Diamond, we understand the company's needs and are confident of delivering another high quality rig to their satisfaction."



Diamond Offshore's Ocean Endeavour was one of four semisubmersible drilling rigs previously upgraded by Keppel O&M. This rig is similar to Ocean Onyx which Keppel AmFELS will be upgrading

Charting milestones in Qatar

Nakilat-Keppel Offshore & Marine (N-KOM) continues to grow from strength to strength as the choice provider of marine and offshore services for ships and rigs in the Middle East.

Strong supply chain

With a strong supporting network in Qatar and overseas, N-KOM is able to consistently provide safe, prompt and high quality marine and offshore services, thereby enhancing its value proposition to its customers.

In January this year, N-KOM secured an agreement from Ras Laffan authorities for coolants to be supplied to LPG vessels undergoing repair at the yard. The coolant cools the vessels and prepares them for cargo loading. This arrangement thus adds to N-KOM's draw as a repair centre for LPG carrier vessels and the Port of Ras Laffan's competitiveness as a one-stop cargo hub.

Since starting operations in November 2010, the yard has undertaken more than 50 projects to date, including repair works on gas carriers, containers, tankers, offshore support vessels and jackups.

N-KOM recently completed repair works on its first Liquefied Petroleum Gas (LPG) carrier project as well as its first Very Large Crude Carrier (VLCC) project.

On 27 December 2011, the LPG carrier Yuhsho, a Very Large Gas Carrier, called at N-KOM for general repairs and drydocking works. Completing the project safely and on time, N-KOM received positive feedback from Wilhelmsen Shipmanagement and Yuyo Steamship, the manager and owner of Yuhsho respectively.

Mr Rajesh Giri, Vessel Manager, Wilhelmsen Shipmanagement, said, "The project team was very professional. We as well as the owners of the vessel, Yuyo Steamship, are very impressed with the facilities and service standards of N-KOM."

Mr Jiro Watanabe, GM, Technical Group, Marine and Ship Technical Division, Yuyo Steamship, said, "We are very satisfied with the quality of repair work. We hope to return to N-KOM in the future for docking and cooling services for our LPG carrier vessels."

In December 2011, N-KOM also marked the arrival of Samco Scandinavia, its first VLCC project. The vessel is managed by Goodwood Shipmanagement.

Mr Ivan Lim, Assistant GM of N-KOM, shared, "We are proud of our project teams' dedicated and professional services. With the successful completion of our first LPG carrier project and our first VLCC project, we look forward to further broadening our range of work as well as our customer base."

Presently, N-KOM's major projects include repair and conversion work on Gulf Drilling International's jackup, Zikreet, and the newbuilding of a barge for Nakilat Damen.

N-KOM recently added to its track record with its first LPG carrier project, Yuhsho (right), as well as its first VLCC project, Samco Scandinavia (left)



On course for success

From Singapore to the Netherlands, Keppel teams are making sure that they keep to their promise of on time, within budget deliveries.



Managements of Keppel FELS and Ensco celebrated the delivery of ENSCO 8505, a semisubmersible on 12 February 2012



Keppel Verolme is currently carrying out upgrading works for a Royal Dutch Navy's amphibious transport vessel, Hr. Ms. Johan de Witt

SATISFACTION GUARANTEED

Delivered on time, within budget and without incident, the sixth of seven ENSCO 8500 Series® semisubmersibles, ENSCO 8505 left Keppel FELS on 12 February 2012.

Keppel's commitment to execution excellence is also being carried out on B330, the second KFELS Super A

Class being built for Ensco. The rig marked its strike steel ceremony on 12 January 2012.

At their FY 2011 results announcement, Mr Dan Rabun, CEO of Ensco, said, "We have a distinct advantage from standardisation within our fleet, especially the ENSCO 8500 Series®

semisubmersibles and Keppel FELS premium jackups. Two ultra-deepwater semisubmersibles, ENSCO 8505 and ENSCO 8506, were contracted in the U.S. Gulf of Mexico with repeat customers, and our first ultra-premium harsh environment jackup, ENSCO 120, was contracted in the Central North Sea."

MAKEOVER FOR ROYAL NAVAL VESSEL

Keppel Verolme, Keppel O&M's comprehensive yard in the Netherlands, is currently undertaking maintenance and upgrading activities of an amphibious transport vessel, Hr. Ms. Johan de Witt, belonging to the Royal Dutch Navy.

This is the vessel's first maintenance programme since it was built in 2006. Work on the vessel includes repairs and inspections on the equipment, tanks, propulsion, electrical installation and cabling. In addition, Keppel Verolme is carrying out extensive underwater painting works as well as touching up the vessel hull.

Hr. Ms. Johan de Witt is capable of transporting a full battalion of marines, which includes 500 soldiers and their equipment. The project is scheduled for completion in March 2012.

Harnessing collective strength



Senior executives of Keppel O&M from across the world gathered to brainstorm and share perspectives on the way forward for the Group. They are (from top left) Mr Nelson Yeo, MD of Keppel Shipyard; Mr Choo Yew Yuen, COO of Keppel O&M; Mr Tong Chong Heong, CEO of Keppel O&M; Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M; Mr Tan Geok Seng, President & CEO of Keppel AmFELS; (from bottom left) Mr Mok Kim Whang, President of Keppel Philippines Marine and Keppel Subic Shipyard; Mr Abu Bakar Mohd Nor, CEO of Nakilat-Keppel O&M; Mr Harold Linsen, MD of Keppel Verolme; Mr Kwok Kai Choong, President & CEO of Keppel FELS Brasil; Mr Lee Tai Kwee, President of Keppel Nantong Shipyard

2011 was a good year for Keppel O&M, having secured a record \$10 billion worth of new orders. While the year turned out better-than-expected, there are uncertainties and challenges lurking on the horizon.

At the annual meeting held on 17 January 2012, CEOs of KOM business units from across the world gathered to brainstorm

and share perspectives on the way forward for the Group. The key focus was to seek ways to further harness the Group's collective strength to enhance competitiveness in the year 2012.

Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, kicked off the meeting with a sombre message. He shared that



Over the years, Keppel O&M has purposefully and thoughtfully expanded its network of yards in line with its "Near Market, Near Customer" strategy.

With more local content requirements by governments and/or national oil companies, Keppel O&M is well-positioned to harness the collective strength of its network to better meet customers' needs.

Mr Tong Chong Heong, CEO of Keppel O&M, commented, "Together, we are a force to be reckoned with. The key is how to make the team work better together. We need to continue with our cross-pollination programme, where expertise and experiences are proactively and meaningfully shared among our different yards.

"To make our strategy work, we also need to train and groom our workforce to take the Group to a higher level."

while the Group has done well so far, the global and industry outlook is becoming more difficult and will impact the Group's business.

He also reminded everyone at the meeting that they will need to push ahead with the Group's productivity drive, and to ensure that systems and processes continue to serve the company well

to deliver all projects on time and within budget.

Strengthening safety was another area which Mr Choo addressed extensively. "We must remember that we are responsible for everyone working in our yards, and we must stress that all accidents are preventable," emphasised Mr Choo.

Throughout the day, proposals and recommendations were aired amidst robust discussions. All agreed that while there are challenges ahead, as long as Keppel O&M is steadfastly focused on strengthening its competitive edge, the Group will emerge stronger.

Pulling in two decades of growth



Together with customers and business partners, the managements of Keppel, SMIT and Keppel Smit Towage celebrate Keppel Smit Towage's two decades of achievements

“There has been strong investment in new equipment and the quality of the services provided is guaranteed, not least because most of the tugs are built at Keppel's first-class yards.”

*Mr Loek Kullberg
MD of SMIT International's Harbour Towage
and Terminals division*

Keppel Smit Towage (KST), a joint venture between Keppel Shipyard and SMIT Singapore Pte Ltd, has grown in scale over the last two decades. From a small local company, it has established itself as a trusted name for marine towage services in the Asia-Pacific region.

Operating a fleet of 60 robust and versatile harbour tugs, KST's services span harbour towage, ocean towage, offshore support and salvage. The company currently has a 30% market share in Singapore, and is active in markets such as Indonesia, Malaysia, Australia, Diego Garcia, India and Brunei.

On 23 December 2011, the company celebrated its 20th anniversary with its customers and business partners.

Addressing the dinner guests, Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, noted, “On this special occasion, we not only commemorate Keppel Smit Towage's growth over the years, but also celebrate the many men and women behind its success.

“People make a company, and KST is backed by a united and passionate team led by Ben Chew and Jerry Wong.”

To ensure operational excellence, KST draws on Keppel's expertise in designing, engineering and building tugs, and SMIT's experience in managing and operating the towage vessels.

Elaborating on KST's business strategy, Mr Loek Kullberg, MD of SMIT International's Harbour Towage and Terminals division, said, "The strategy was based on that of Singapore Airlines: new equipment and service with a smile."

He added, "There has been strong investment in new

equipment and the quality of the services provided is guaranteed, not least because most of the tugs are built at Keppel's first-class yards."

During the celebratory dinner, Mr Kullberg also announced that KST Kejora Enam had been conferred the SMIT 2011 Corporate Fleet Survey Award, which is given to the best performing tug crew and organisation in SMIT Group. Kejora Enam is owned and managed by Kejora Resources Sdn Bhd, a KST joint venture in Malaysia.

In addition, it was shared at the dinner that KST, through a joint venture corporation, will operate in Dafeng, China. The company will also be stepping up activities in Nantong, China.

As KST enters its third decade of growth, it will hold fast to its commitment to provide its customers with safe, efficient and value-added services.



Keppel Smit Towage provides quality marine towage services through its fleet of 60 tugboats

Floatel Victory



Floatel Victory, Keppel FELS' third accommodation semi project with Floatel, has secured a charter with BP Exploration Operating Company Limited for work offshore UK

Floatel Victory, a semisubmersible accommodation and construction support vessel being built by Keppel FELS for Floatel International, has secured a charter with BP Exploration Operating Company Limited for work offshore UK.

The announcement was made by Floatel International on 16 February 2012. The charter will commence in June 2015 with a firm hire period of twelve months. BP has the option to extend the contract. The vessel will be for the Clair Ridge Development project located on the UK Continental Shelf, approximately 66 km west of Shetland Isles.

Mr Peter Jacobsson, CEO of Floatel International, said, "I am extremely pleased that Floatel International has been selected contractor for provision of accommodation support services for the Clair Ridge Project and I am also very pleased to announce the first contract for our new build Floatel Victory. We look forward to help bring on-stream the Clair Ridge development in a safe, efficient and timely manner."

Built to Keppel's SSAU4000NG design, Floatel Victory features the latest technology such as DP 3 and enhanced Station-Keeping, and is capable of operating alongside fixed platforms, floating platforms

and Floating Production Storage and Offloading Vessels, with a full complement of deck cranes and fire fighting capabilities.

Scheduled to be delivered in February 2014, Floatel Victory marks Keppel FELS' third accommodation semi project with Floatel, after the delivery of Floatel Reliance and Floatel Superior in 2010.

Developed by Keppel's Deepwater Technology Group, the vessel is designed to meet the latest UK HSE rules and regulations and will have an accommodation capacity of 500 persons in single and double bed cabins. It will also be equipped with a ten point chain mooring system.

The large payload and deck area, in combination with dual cranes able to support the host facility, makes the vessel ideal for construction support during new construction, maintenance activities or for decommissioning projects of offshore oil and gas installations.

Floatel International is an associated company of Keppel Corporation, which has a 47% stake in Floatel.

Strategic hub for maritime services



Mr Nelson Yeo, MD of Keppel Shipyard, shares on Keppel Shipyard's value proposition and strategies for success

Customers worldwide are drawn to Keppel Shipyard's strategic location, comprehensive facilities and efficient ship repair operations.

Given the current global economic uncertainty, ship owners will be watching their costs closely. Sharing a symbiotic relationship, shipowners and quality shipyards continue to work closely together to manage various market conditions.

Mr Nelson Yeo, MD of Keppel Shipyard, provides insights as to how Keppel Shipyard leverages its long-time partnerships with its customers and Singapore's strong maritime cluster to deliver value-added services.

Q. What does the growing maritime hub in Singapore mean for Keppel's ship repair business?

Singapore has one of the busiest ports in the world, and is connected to more than 600 ports in over 120 countries. Located in Singapore, Keppel Shipyard is a convenient yard for vessels plying trade routes to and from as well as near Singapore.

In addition, Keppel Shipyard has built up strong partnerships with the large and growing cluster of subcontractors and vendors based locally. This is further supported by its extensive overseas networks. These strong supply chains ensure that Keppel Shipyard has ready access to materials, equipment and skilled labour which are critical to ship repair operations. As such, the yard has consistently achieved safe, high quality and quick turnarounds.

Working closely with the industry, the Singapore government continues to grow the country's vibrant maritime hub. As the industry's preferred partner for ship repair solutions, Keppel Shipyard helps draw international customers and maritime-related service providers to Singapore, reinforcing the nation's maritime activities.

Q. How does Keppel Shipyard stay competitive in this uncertain economic climate?

Seeking to cultivate long-term relationships, Keppel Shipyard consistently provides safe, reliable and value-added services to

its customers. Indeed, the yard continues to refine its services and solutions to meet the needs of its customers promptly and cost-effectively.

With strong mutual trust and understanding, Keppel Shipyard and many of its customers have long-term fleet agreements, and support each other in all phases of the business cycle.

In addition, Keppel Shipyard undertakes a good mix of conversion, modification and repair projects. Carried out over longer timelines, conversion and modification projects ensure a steady stream of activities at the yard, ensuring that capabilities and resources for ship repair are retained. Keppel Shipyard undertakes about a dozen major conversion projects annually, many of which are FPSO/FSO conversions.

Keppel Shipyard also continues to manage market changes by refining its processes as well as upgrading the skills and competencies of its workforce.

Furthermore, with sister yards across the globe, including in Qatar and the Philippines, Keppel Shipyard is able to offer its customers the flexibility of ship repair services at multiple locations. Thus, Keppel Shipyard's customers enjoy reduced downtime as well as dock space priority.

Championing safety

To maintain a safe and healthy workplace, Keppel O&M spares no effort in promoting safe working behaviour through various avenues, be it through ongoing operational activities or support to industry-wide safety platforms.

COMMITTED TO BIZSAFE

For the fourth consecutive year, Keppel FELS, Keppel Shipyard, Keppel Singmarine and other business units sponsored the annual bizSAFE Convention 2012 organised by Workplace Safety and Health (WSH) Council. BG Tan Chuan Jin, Minister of State for Manpower and National Development, was the Guest-of-Honour for this event on 16 February 2012.

bizSAFE is a five-step systematic programme developed by the WSH Council to help companies build their WSH capabilities and strengthen their WSH management system. Companies can also tap on the WSH professionals and service providers present for WSH solutions and advice.

Mr John Birchall, Keppel Group Safety Coordinator, said, "As a bizSAFE Partner, we provide incentives to motivate our contractors and vendors to progress through the various levels in the bizSAFE programme. Over the years, we have benefited greatly from our participation in this initiative as we are now better able to assess the WSH performance of contractors and suppliers."



For the fourth consecutive year, Keppel FELS, Keppel Shipyard, Keppel Singmarine and other business units sponsored the annual bizSAFE Convention 2012 organised by the WSH Council

As bizSAFE Partners, Keppel O&M encourages all sub-contractor companies to have the resources to put safety as their top priority and be bizSAFE level 3 certified.

RECOGNISING SAFETY EXCELLENCE

At Keppel FELS, subcontractors who have displayed exemplary safety performance were awarded with commendation tokens. On 9 January 2012, the yard presented safety awards to subcontractors who are involved in B334, a KFELS B Class design jackup newbuild project for Vision Drilling, a wholly owned subsidiary of Dynamic Offshore Drilling.

Mr V. K. Nagpaul, Project Manager of Vision Drilling, commended all workers and subcontractors, who have worked hard in ensuring the project's success at the award ceremony. He shared, "We know that Keppel has always upheld

safety as their top priority and that is essential and commendable. As a team, we have periodic review sessions to continually improve our safety processes to eliminate any possible causes of workplace incidents."

Mr Chandru S. Rajwani, GM of HSE, Keppel O&M, added, "If you spotted something amiss where safety is concerned, please stop work immediately and highlight to your supervisors. Safety is everyone's business and we need to take ownership of the safety process."

In December 2011, Mr Ratan Chandra Dey, a safety supervisor of Keppel FELS' contractor Kiatseng Shipbuilding & Engrg Pte Ltd, was conferred the Best Performing Safety Leader. Another contractor Piping Tellus C won the Most Improved Contractor for last quarter of 2011.



Subcontractors, involved in B334 project for Vision Drilling, are presented with commendation tokens for their safety leadership

HIGH STANDARDS

Despite the high workload, Keppel FELS continues to ensure its projects remain incident-free and on track to achieve key safety milestones.

Standard Drilling's first three rigs, B324, B325 and B337 marked 1.8 million man-hours worked without lost time incident (LTI) on 7 February 2012. The project teams received safety awards from Standard Drilling's CEO, Mr Mark Jackson.

Mr Chow Yew Yuen, MD of Keppel O&M said, "Our achievement in reaching these milestones is a demonstration of the strong teamwork being built up between the project teams of

Keppel FELS and Standard Drilling. We are glad to have a committed partner like Standard Drilling in our safety first policy.

"It is also a result of the strong safety mindset and processes we have cultivated on all our projects. Vital to our success are the contributions of the many stakeholders involved in ensuring the safety, security and efficiency of the projects at Keppel."

Another Standard Drilling rig, B338, struck steel on the same morning signaling the start of its construction phase. Mr Chow assured Standard Drilling that Keppel was "committed to maintain our perfect track record on this as well as the next two

jackup rigs to be constructed for Standard Drilling."

Solid commitment to safety was also demonstrated on the Discovery Offshore projects, with their jackup, Discovery Triumph, celebrating one million safe manhours on 14 February 2012.

Mr Eric Veilleux, Project Manager from Discovery Offshore, said, "It is evident that safety is more than just a theory at Keppel FELS. Safety is a way of life. This achievement is an example to shipyards worldwide, that this industry can be a safe workplace, with strong leadership, proper planning, and with employees making safety a way of life."



Mr Eric Veilleux, Project Manager from Discovery Offshore (right), congratulating Keppel FELS Project Manager BG Chan on the safety milestone

learn and share best practices with each other so as to gain a better understanding of the diverse safety practices and challenges faced in the different industries.

From 5 to 7 December 2011, Keppel O&M hosted VP of Human Resources, Gilbert Elizondo, and two safety officers, Victor Alberto Bouchot and Juan Leija from Keppel AmFELS.

Juan Leija said, "The sharing experiences during this programme have been enriching. For instance, we have learnt about the S.T.E.P. and Hazard Reporting & Elimination Program adopted by the yards in Singapore and we plan to implement this in Brownsville. In turn, we have shared with the yards in Singapore about our Violation Notice Program. This program not only allows employees to be more aware of their surroundings, it also makes supervisors accountable in ensuring that all their employees work safely."



Standard Drilling and Keppel FELS celebrating their safety achievements and teamwork

Victor Alberto Bouchot shared, "Although I have been with Keppel AmFELS in Brownsville for 19 years, I am not aware that I am part of such a big family. Regardless of which yard we belong, it is good to know at Keppel, we share the same commitment of ensuring the safety and well being of our fellow workers as well as the protection of our environment."

SHARING ACROSS BORDERS

Keppel's "Cross Pollination Programme" continues to gather momentum with growing

participation. Under the programme, safety officers from Singapore and overseas across the business units in the Keppel Group

Winning proprietary solutions



Mr Andy Brown (fifth from left), Executive VP of Qatar Shell and Mr Johan Surewaard (third from right), VP of Wells (Middle East, North Africa and Russia regions), presenting an award to Mr Ibrahim J. Al-Othman (fourth from right), CEO of GDI, for the excellent performance of the Al Khor rig

Testament to Keppel FELS' proprietary design and engineering capabilities, two rigs have won awards for their excellent performance.

Keppel FELS' customer Gulf Drilling International Ltd (GDI) won a performance award from Shell for Al Khor, a KFELS B Class jackup rig operating offshore Qatar in the Arabian Gulf. Named after one of Qatar's historical cities which has contributed greatly to the development of Liquefied Natural Gas (LNG) in the country, Al Khor has been built to GDI's specifications for operations in water depths of up to 300 feet and drilling depth of down to 30,000 feet.

Mr Ibrahim J. Al-Othman, CEO of GDI, received the award at a ceremony in Doha on 27 November 2011 attended by dignitaries from Qatar Petroleum, GDI and Shell. He shared, "I am proud to receive this award from Shell. When we embarked on the project with



West Setia, a semisubmersible drilling tender built by Keppel FELS in 2005, was awarded 'Super Rig of the month' for the sixth time by Chevron

Shell, we were aware of their industry's leading standards and high expectations. Our excellent cooperation and partnerships have helped us to excel in our core business and to deliver Shell and GDI's aspirations."

SUPER SIXTH

West Setia, a semisubmersible drilling tender (SSDT) built by Keppel FELS in 2005, was recently awarded 'Super Rig of the month'

for the sixth time by Chevron for having the lowest downtime, zero spills and zero incidents.

The rig was developed by Keppel's Deepwater Technology Group (DTG) to its proprietary KFELS SSDT 3600 design. It has revolutionised the way in which drilling tenders work, allowing them to be deployed next to deepwater floating platforms such as Spars and Tension Leg Platforms.

Rock solid teamwork



 **Royal Boskalis Westminster nv**
International Dredging & Marine Contractors

DONATES TO **KEPPEL SINGMARINE PTE LTD** 

SG DOLLARS **TWENTY FIVE THOUSANDS ON**

**SAFETY PERFORMANCE BONUS FOR ACHIEVING 3,000,000
ZERO LOSS TIME INCIDENT (LT1) ONBOARD H-362 ROCKPIPER**

Keppel Singmarine has delivered ROCKPIPER, a new generation rock dumping fall pipe vessel safely, on time and within budget to Royal Boskalis Westminster N.V.; Mr D. Mr Fabian Vispoel, Project Manager of Royal Boskalis; Managements of Royal Boskalis Westminster N.V. and Keppel Singmarine celebrated the christening ceremony for

"We have a long standing relationship with Keppel and are familiar with its quality of work."

"Keppel Singmarine is well known for its strong expertise in handling sophisticated vessels, especially those equipped with diesel electric drives and dynamic positioning capabilities. The ROCKPIPER will be an important addition to our fleet as we expand our foothold in the dredging, maritime infrastructure and maritime services sectors."

*Mr Theo Baartmans
Member of the Board of Management,
Royal Boskalis Westminster N.V.*

It was a day of double revelry at Keppel Singmarine as it celebrated the Chinese Lunar New Year and the completion of its first new generation rock dumping fall pipe vessel, ROCKPIPER, for Dutch dredging and marine contractor, Royal Boskalis Westminster N.V. (Boskalis).

Keppel Singmarine was awarded a S\$25,000 bonus from Boskalis for achieving zero-incidents in the construction of the 159 metre-long double-hull vessel.

Mr Nelson Yeo, Chairman of Keppel Singmarine, said,

"The completion of ROCKPIPER is a good example of excellent teamwork and reflects a strong alignment of goals and priorities between Keppel Singmarine and Boskalis.

"With Keppel Singmarine's established track record of building specialised ships of different designs and functions, we look forward to support Boskalis as they grow their fleet of high specification products for different parts of the world."

Mr Theo Baartmans, Member of the Board of Management of Boskalis,



David Yeo, Project Manager of Keppel Singmarine (left) received the safety bonus cheque of SGD\$25,000 from the crew of ROCKPIPER on 28 January 2012

added, "We have a long standing relationship with Keppel and are familiar with its quality of work.

"Keppel Singmarine is well known for its strong expertise in handling sophisticated vessels, especially those equipped with diesel electric drives and dynamic positioning capabilities. The ROCKPIPER will be an important addition to our fleet as we expand our foothold in the dredging, maritime infrastructure and maritime services sectors."

Rock dumping fall pipe vessels are capable of depositing large amounts of rocks in deep waters

with great precision to protect and stabilise cables and oil and gas pipelines on the seabed.

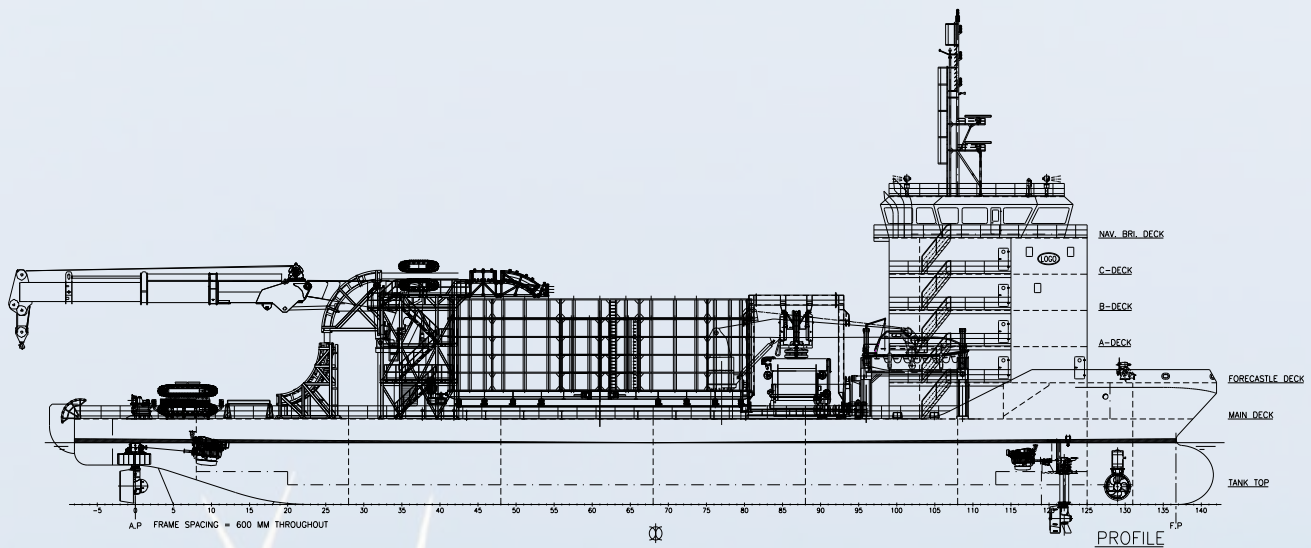
ROCKPIPER has a carrying capacity for 24,000 tonnes of rock and is equipped to carry out precise rock depositing works at water depths of more than 1,000 metres. Equipped with dynamic control, the vessel is able to navigate a specific path while lowering rocks through a fall pipe at a controlled rate.

A christening ceremony for ROCKPIPER was held on 28 January 2012 at

Keppel Singmarine and the vessel was named by Lady Sponsor, Mrs Else Buijs, Company Secretary of Boskalis.

Keppel's relationship with Boskalis dates back many years, with the successful deliveries of various shiprepair, jumboisation and upgrading projects. Keppel Shipyard is presently upgrading the dredger, Taurus II, for Boskalis.

Innovative wind solutions



Profile View Of KOMtech In-field Cable Laying Vessel

Offshore wind farms are fast gaining momentum in the global arena as a renewable source of energy, in terms of turbine sizes and capacities in recent years. As wind farms move into deeper waters, there is a demand for larger scale and more complex networks of subsea power cables to generate electricity for delivery to land-based sub-stations.

Currently, there are issues about existing cable laying vessels not being able to lay underwater communication cable networks properly and efficiently. This is because offshore power cable laying operation involves multi-functional tasks, which include route planning, cable laying, seabed trenching and post laid cable inspection. Therefore, it has not been possible for a single cable laying vessel to perform all of the above-mentioned tasks and

they are usually supported by other vessels to perform their intended cable laying jobs. These have in turn resulted in longer time taken and higher costs incurred for companies.

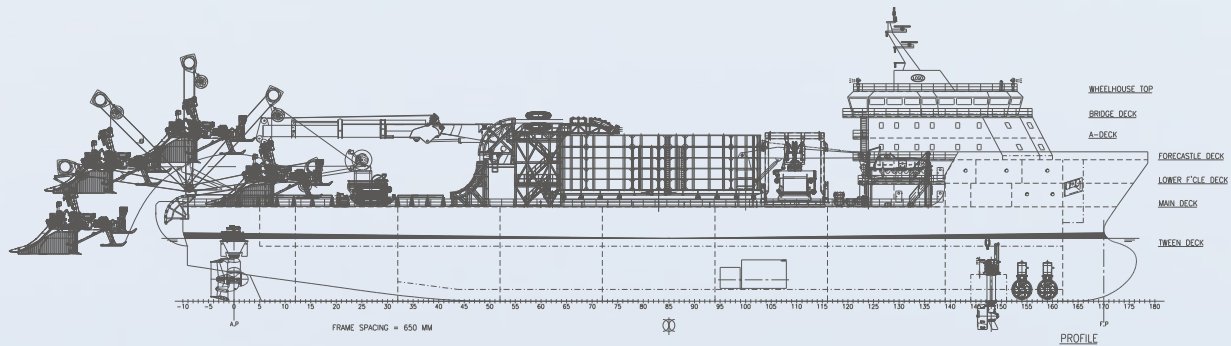
To address this issue, KOMtech, an R&D centre of Keppel O&M, is developing two types of dedicated cable laying vessel (CLV) designs – in-field CLV and export CLV for future offshore wind farm projects. These vessels have been designed based on the latest requirements by major wind farm developers as well as developments of cable laying equipment.

In-field cables and export cables are significantly different in their physical properties, such as stiffness, cable diameter, weight and length of the cable required for a wind farm. Because of these differences, they need different

equipment for their handling, storage and cable laying operation, which in turn, justifies the need for two different types of cable laying vessels.

An in-field CLV lays cables between the wind turbines and substations. Sizes of these cables vary as it depends on the power capacity of the inter-turbine connection arrangement. As for export CLV, it lays cables between the substations and shore facility. The length of export cable depends on the distance of these two locations and it is usually the longest cable with the largest diameter in a wind farm project.

The hull and marine equipment of KOMtech's CLVs are specially designed for cable laying capabilities. Their key features include better maneuverability and stability of the vessel to



Profile View Of KOMtech Export Cable Laying Vessel

work in specified environment conditions, having a bigger deck space to accommodate all the necessary cable laying equipment and larger cable carousel to carry subsea power cables required for a wind farm project. KOMtech's CLVs are also equipped with bollard pull capacity to tow a cable laying device as well as conveyor belts for smooth running of cable and to prevent cable damage. In addition, the unique arrangements of cable load-out of these two vessels also ensure the smooth operation of power cable in a simple and safe way.

Moving forward, there will be demand for such dedicated cable laying vessels as the upcoming wind farms are expected to move further offshore for development and into harsher environments. The current cable laying barges and vessels that are converted from offshore support vessels will not be considered suitable to support cable laying operations in such sea conditions.

Taking off on wind

Keppel O&M first entered the offshore wind energy sector in 2010 when its subsidiary Keppel Verolme in the Netherlands, won a contract to build an electrical transformer and maintenance platform for a German offshore wind farm. This was followed closely by the commercialisation of its proprietary KFELS MPSEP (multi-purpose self-elevating platform) in partnership with the Seafox Group. Known as Seafox 5, this is Keppel's first offshore wind installation vessel.

In November 2011, Keppel O&M's subsidiary, KV Enterprises BV, completed an equity partnership with BPP Cables, a specialist cable product design and engineering Company. Early this year, KV Ventus B.V., a wholly-owned subsidiary of Keppel Corporation Ltd. (Keppel) also entered into a share purchase and subscription agreement and shareholders' agreement to acquire a 49.9% stake in offshore wind turbine jacket foundation designer

OWEC Tower (AS) for about NOK 61 million.

OFFSHORE WIND ENERGY INDUSTRY POTENTIAL

The European Wind Energy Association (EWEA) has set a target to achieve 40 gigawatts (GW) of offshore wind in the European Union by 2020, and 150 GW by 2030.

Offshore winds tend to flow at greater speeds than onshore winds, thus allowing turbines to produce more electricity. Although a good majority of existing offshore wind farms are located in water depths less than 45 metres, those coming online are expected to move further offshore and into harsher environments such as the Central North Sea, where wind speeds are higher, constant and thereby require more robust solutions. There is also an increasing trend towards heavier wind turbines with larger capacities.

Ice-breaking Arctic rig

Joint project will yield breakthroughs in offshore Arctic drilling.

KOMtech, a design and engineering arm of Keppel O&M, and ConocoPhillips are jointly designing a first-of-its-kind ice-worthy jackup rig to operate in one of the harshest marine frontiers, the Arctic Seas.

This jackup rig will have dual cantilevers to optimise drilling operations within a limited time window. The rig is capable of operating in a self-sustained manner for 14 days and is equipped with a hull that is designed for towing in ice. It is also able to resist the impacts from multi-year ice floes and ridges as well as withstand certain level of ice thickness. This joint design project is expected to be completed by end 2013.

Dr Foo Kok Seng, Centre Director of KOMtech, said, "We are glad to partner with ConocoPhillips to jointly design this ice-worthy jackup rig for the Arctic Seas. The features of this jackup rig make it a cost-effective and promising drilling solution for the Arctic Offshore.

In leveraging the combined expertise, resources and research findings of Keppel O&M and ConocoPhillips, we believe that this joint project will achieve significant breakthroughs in offshore Arctic drilling."



The first-of-its-kind ice-worthy jackup rig, jointly designed by Keppel and ConocoPhillips, will operate in one of the harshest marine frontiers – the Arctic Seas

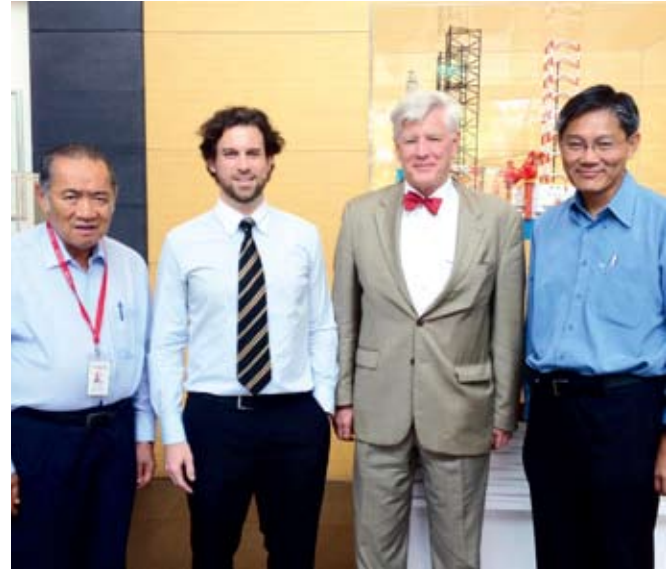
Keppel O&M has an established track record in designing and building rigs for harsh environments. It has delivered three KFELS N Class rigs for work in the North Sea, and these jackups can operate in harsh weather conditions in water depths ranging from 400-500 feet, which are 40% deeper than traditional units in benign waters.

In 2008, Keppel O&M's wholly-owned subsidiary, Keppel Singmarine broke into the Arctic market, successfully delivering the first pair of icebreakers built in the tropics of Asia to LUKOIL-Kaliningradmorneft.

Port of call



Mr Chow Yew Yuen, COO of Keppel O&M (right) welcomed Mr M.L.Chandchutha Chandratat, Chairman of Asia Offshore Drilling with a warm greeting



Professor Richard de Neufville(second from right) and Dr Michel Alexandre Cardin (second from left) shared their views with Mr Charles Foo (left), Director/Advisor of KOMtech and Dr Foo Kok Seng (right), Director of KOMtech on "Flexibility in Engineering Design"

With its global reputation and presence, Keppel O&M continues to be a regular 'port of call' for visiting delegations and groups, seeking to learn best practices in the offshore and marine industry.

WORTH THE WHILE

With three rigs under construction at Keppel FELS, Asia Offshore Drilling's Board of Directors were in the yard on 7 February 2012 to get an update on the progress of the KFELS B Class jackup rigs and catch up with the project teams.

Hosted by Keppel FELS' senior management, the delegates were taken on tour of the yard and got up close with the rigs, B320, B321 and B345. After the visit, they went away impressed with the yard's operations and confident of receiving the rigs on time, within budget and to the highest safety standards.

STRATEGIC INSIGHTS

Members of the Qatar Port Strategy Committee called at Keppel Shipyard and Keppel FELS on 21 February 2012. The delegation comprised Abdulaziz Al-Muftah, Director of Ras Laffan Industrial City; Captain Feisal Saad, Manager of Ras Laffan Port; Captain Abdulla Al-Khanji, Director of Doha Port; and Nasser Qadar, Acting Director of Transport Affairs, Ministry of Business & Trade.

Received by Keppel O&M management led by Mr Abu Bakar Mohd Nor, CEO of Nakilat-Keppel O&M, the Qatari delegation learnt about Keppel O&M's global operations as well as suite of offshore and marine solutions.

PLATFORM FOR KNOWLEDGE EXCHANGE

Keppel's commitment to advance knowledge and reap new ideas

saw a fruitful and lively sharing session with Professor Richard de Neufville of Massachusetts Institute of Technology Engineering Systems Division, and Dr Michel Alexandre Cardin of National University of Singapore Industrial and Systems Engineering Department on 2 February 2012.

About 40 Keppelites attended this workshop titled "Flexibility in Engineering Design" at Keppel Offshore & Marine Technology Centre (KOMtech). Participants benefitted from the workshop as valuable knowledge were shared and discussed. After the workshop, Professor Richard and Dr Michel went on a yard tour at Keppel O&M where they witnessed first hand execution of the projects.

Catalysts of innovation



The 26th Chua Chor Teck Memorial Lecture saw a stimulating discussion on the success factors behind Singapore's water and offshore and marine industry



Guest speaker Mr Tan Gee Paw, Chairman of PUB (left) and a member of the Keppel Technology Advisory Panel, as well as moderator Mr Teo Soon Hoe, Senior ED of Keppel Corporation, shared their experiences

That necessity is often the mother of invention is well illustrated by Singapore's water as well as offshore and marine industries. Mr Tan Gee Paw, Chairman of PUB and a member of the Keppel Technology Advisory Panel, elaborated on the success factors behind these industries at the 26th Chua Chor Teck Memorial Lecture.

Addressing the 200-strong audience, Mr Tan shared, "The need to survive gives birth to innovation, to new ideas. A society that is not endangered is one that will level off and be mediocre."

Despite land constraints and no natural aquifers, Singapore

has developed a diversified and sustainable water supply for its people. Indeed, Singapore has made substantial headway in technology and infrastructure for the collection, production, distribution and reclamation of water, building an extensive repository of knowledge and experience in water management solutions.

Similarly, despite being written off as a "sunset industry" in the 1980s, Singapore's offshore and marine sector has grown from strength to strength. Local companies such as Keppel have forged ahead, providing competitive, value-added offshore and marine

solutions to global customers through constant innovation.

Keppel has also thrived by seizing opportunities, especially those in adjacent sectors. For instance, Keppel is extending its expertise in jackup rig design and construction to offshore wind turbine and foundation installers.

While both Singapore's water and offshore and marine industries have attained much success, Mr Tan cautioned that they cannot rest on their laurels. Only by staying nimble and agile can they stay relevant and keep at bay the challenges to their industries.

Ong Chee Lam, Engineer (Production) of Keppel Singmarine, said, "This thought-provoking talk touched on many interesting points. I especially enjoyed Mr Tan's sharing on the type of leadership that would bring about evolution and growth in an organisation. I am sure that Mr Tan has inspired many in the audience to see the bigger picture – to anticipate the challenges ahead as well as think creatively about how to meet them."

Meeting of minds

About 40 members of the KOM Alumni caught up with each other and with Keppel's senior management over tea before attending the 26th Chua Chor Teck Memorial Lecture together.

The Lecture is now marked as an annual event in the Alumni calendar. Established in 1986, the event is a tribute to the pioneering late Mr Chua Chor Teck. The lecture focuses on offshore and marine topics.

The late Mr Chua Chor Teck was

the MD of Keppel Shipyard which was renamed Keppel Corporation in 1986. Mr Chua was awarded a scholarship to pursue Naval Architecture at the University of Newcastle-upon-Tyne in 1965. On his return to Singapore, he joined Keppel Shipyard as a Ship Repair Manager.

Those who know him found him unassuming, approachable, honest and sincere. His death was a loss to his family and all who know him.

Keppel O&M appoints new COO



Mr Chow Yew Yuen, COO of Keppel O&M

Mr Chow Yew Yuen has been appointed Chief Operating Officer (COO) of Keppel O&M with effect from 1 March 2012 and he will continue to report directly to the CEO of Keppel O&M, Mr Tong Chong Heong.

He will assist the CEO in all aspects of Keppel O&M and will continue in his role as the President of the Americas for Keppel O&M, in which he oversees the group's business covering the US, Mexico and Brazil.

With this new appointment, Mr Michael Chia, MD (Offshore) of Keppel O&M; Mr Nelson Yeo, MD (Marine) of Keppel O&M; and Mr Wong Kok Seng, MD of Keppel FELS, will report to Mr Chow.

Insights from a global leader



Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, shared invaluable insights and experiences from his long career at Keppel with EMBA students from Singapore Management University

In a fast-paced job market where many constantly seek the next better offer, Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, cuts an impressive and rare figure, having recently surpassed 40 solid years of service at Keppel.

It was therefore timely that Mr Choo was invited to share his insights in leading and growing Keppel, a conglomerate with global operations, with the Singapore Management University's pioneer Executive MBA (EMBA) class on 10 January 2012.

When Mr Choo joined Keppel in 1971 as a management trainee, he had not expected his job over the next 20 years to be so tough. Then, the offshore and marine industry underwent a severe downturn in the early 1980s and was branded a "sunset industry". The team had to find ways to survive.

Those early days of difficulty enabled Keppel to build up a strong team. Mr Choo shared, "We were willing to tighten our belts in bad times, while in good times, we shared the rewards and we treated everybody fairly."

Mr Choo added, "To keep alive, we adapted our yards and facilities to build different things apart from rigs. If you are adaptable and flexible, you will survive. However, one must always remember to focus on your revenue streams. You need to choose your battlefields."



The EMBA students were brought through the unique safety journey at the Keppel Safety Training Centre

Another golden rule which Mr Choo shared was that it is important to be trustworthy and reliable when it comes to customers. From the beginning, Keppel has focused on making timely deliveries to customers. "That's how we built up the trust by our customers," emphasised Mr Choo.

In addition to the opportunity to hear from Keppel's chief executive, the 30 EMBA students also visited the yards at Keppel O&M on 12 January 2012 as part of their 'Executing Global Strategy' module to study how world class companies sustain competitive

advantages to achieve market leadership position.

The group was warmly welcomed by Mr Wong Kok Seng, MD of Keppel FELS and engaged in a robust discussion on Keppel O&M's strategy and the competitive landscape.

During the tour of the yards' operations and innovative processes, the students were impressed by the sights of massive rigs and marine vessels.

Mr David Lim, COO of Sakari Resources Limited and a participant of the SMU EMBA

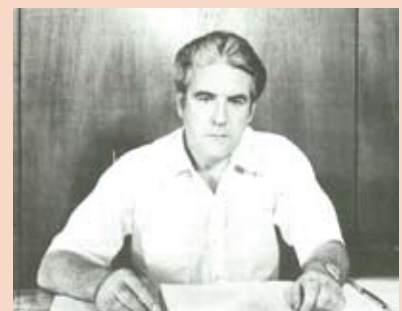
programme, summed up his experience thus, "It was an eye opener for us to see the world's foremost rig builder in action. Being a global leader in offshore rig design and construction, ship repair and conversion, and specialised shipbuilding, Keppel Offshore & Marine has good systems and processes in place and has continued to invest on technology and innovation as well as on staff training to stay ahead of the curve. It is definitely an exemplary company for the class to study."

Binding ties

Mr John H. Morris, former GM of Keppel FELS (then known as Far East Levingston Shipbuilding) who joined in 1971, paid a personal visit to Keppel O&M on 19 January 2012.

The 84-year-old ex-Keppelite

was warmly welcomed by Mr Tong Chong Heong, CEO of Keppel O&M, and a few fellow colleagues, who had worked closely with him in the 70s and 80s. The yard visit brought back much nostalgia and fond memories.



Mr John H. Morris in the 1980s



Warmly welcomed by Mr Tong Chong Heong (fifth from left), CEO of Keppel O&M, and a few fellow colleagues, Mr John H. Morris (fourth from left), former GM of Keppel FELS, visited Keppel O&M on 19 January 2012

Ushering in new beginnings



The New Year and Chinese New Year celebration parties at Keppel O&M were filled with entertaining performances and joy



To celebrate the achievements of 2011 and to usher in the new year, Keppelites across Keppel O&M welcomed 2012 with a series of celebrations on 30 December 2011.

At Keppel Shipyard, a party was held not just to herald the new year but also to congratulate 24 employees who were recognised as outstanding employees. Awards were given out for Best Worker, Best Supervisor and Best Support Staff.

The party was well-attended by thousands of employees from across Keppel Shipyard's three yards. Various departments also put up enthralling solo and group cultural performances.

Over at Keppel FELS, celebrations with an "international fiesta" theme was organised by the Engineering department. As management and staff tucked into a sumptuous buffet spread, they were entertained by various departments' performances, as well as lively acts by employees from Keppel FELS' overseas engineering offices in Shenzhen and Mumbai. The party concluded with prizes given out for the Best Dressed and Best Performance as well as a lucky draw.



Separately, Keppel FELS also held a Chinese New Year celebration party on 20 January 2011. The party was attended by more than a thousand guests, comprising Keppel O&M management, representatives from the union, subcontractors, overseas colleagues and employees of all levels.

Themed "Year of the Dragon", the committee put up a lion and dragon dance performance, much to the delight of the crowd. Coupled with fun-filled interactive games and a lucky draw sponsored by the management, the party ended with a 'Lo Hei' session to welcome a year of good fortune.

Keppel Singmarine too had a joyous year-end celebration over lunch and a singing competition. The celebration also recognised supervisors with good records in workplace health, safety and environment. Mr Hoe Eng Hock, ED of Keppel Singmarine, wrapped up the event with a sharing on the company's performance. He also unveiled new projects for 2012.

The event ended on a high note with several rounds of toasting, cheers and well wishes to new beginnings.

Distinguished leadership



Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, was awarded the honorary membership by SNAMES on 2 March 2012

Mr Choo Chiau Beng, CEO of Keppel Corporation and Chairman of Keppel O&M, was conferred an honorary membership by Society of Naval Architects & Marine Engineers, Singapore (SNAMES) on 2 March 2012.

Apart from the key role that he has played in establishing and supporting the growth of SNAMES, this award also aims to recognise his outstanding contributions to Singapore as well as his exemplary leadership in the international offshore and marine industry.

Mr Choo was one of the founding members and the pioneer

President of SNAMES. The society was formed in 1981 after the Society of Naval Architects (SONAS) reconstituted its constitution by co-opting the Marine Engineers, and formed the SNAMES. Mr Choo became its first Vice President before stepping up to assume the role of President in 1983. Since then, he has remained a strong supporter of SNAMES.

SNAMES was established to facilitate the exchange of ideas on the practical and scientific aspects of design, construction, operations, repairs and maintenance of marine machinery, structures, vessels and related fields.

Stalwart of HR excellence

Lauded for his ability to drive effective and innovative human resources practices in the organisation, Mr Tong Chong Heong, CEO of Keppel O&M, was conferred the 'Champion of HR' award at the HRM Awards 2012 presentation on 23 February 2012.

This award recognises a CEO who is most effective in leading their companies towards human resources efforts. The CEO should also illustrate personal leadership and integrity in driving diversity and flexibility in the organisation.

Now into its ninth year, the annual HRM Awards is widely regarded as

the gold standard of HR excellence and more than 90 finalists competed in 21 categories. The judges in this year's panel included the Workforce Development Agency, Tripartite Alliance for Fair Employment Practices and Towers Watson.

A key component of an organisation's success is its people factor. To lead the Group into future phases of growth, Keppel O&M adopts a holistic approach in hiring, developing and motivating its employees. It seeks to continually grow and enhance the capabilities of its worldwide manpower and talent pool.



Mr Tong Chong Heong, CEO of Keppel O&M, won the 'Champion of HR' award at the 2012 HRM Awards presentation on 23 February 2012

Building lives



Keppel-GK Eco Village – a housing project for the poor – is being developed in three phases, each comprising 20 homes

The next 20 families are set to join the growing, vibrant community in Keppel-GK Eco Village. The needy families will move into 20 newly-completed homes over February and March this year.

The Eco Village is a joint project between Keppel Group and the charity organisation Gawad Kalinga (GK). A 60-unit housing project for the poor, the Keppel-GK Eco Village is located in Bauan, in Batangas province, the Philippines. The estate is being developed in three phases, each comprising 20 homes. The first phase has already been completed. 20 families were officially handed homes in the Eco Village in November last year.

These families have not only been hard at work furnishing their new homes but also actively engaged in building common areas and the remaining units.

A future resident of the village, Jesus Lobrin, Jr., a labourer, shared, "My family is grateful to be future residents of the Eco Village. Presently, my wife and I live apart from our children; they stay with their grandparent. Every brick laid here takes us one step closer towards bringing our family together. This is our dream,"

On the sense of neighbourliness at the Eco Village, another resident Napoleon Gadon, shared, "Members of this community watch over each other; especially the children, when their parents are at work."

Engelbert Bonoan, an active volunteer at the Eco Village and a resident of another GK housing development in Batangas, said, "Contributing to the Keppel-GK Eco Village is my way of paying forward the kindness and good fortune that I have received. I feel

good about being able to help my fellow Filipinos. It fills me with joy to see their happy faces at being given the opportunity to own their own homes. "

Future residents of the Eco Village have also been encouraged to be part of the building process, strengthening their sense of belonging to the community. More than 24 families have put in 1,000 man-hours each at the Eco Village, while another 16 families have each contributed more than 500 man-hours.

Pio Malaluan, a father of two, mused, "We have been living in a slum for a long time. When my family found out about the collaboration between Keppel, GK and the Local Government of Bauan to develop a housing estate for the poor, we applied to be part of the community. We feel very fortunate to be selected as potential residents.

"My family has been working hard at the Eco Village. Together, we have contributed more than 1,300 man-hours to-date. We look forward to a home of our own."

Another future resident of the Eco Village, Marilyn Jimenez, enthused, "Putting in more than 500 man-hours is a big accomplishment for my family. We are proud of our efforts and look forward to share with the next generation our contributions to this wonderful community."

Festive cheer to the needy



Keppel Volunteers usher in the Lunar New Year with residents from Telok Blangah Moral Senior Activity Centre

Out with the old, in with the new! Ushering in the Chinese Lunar New Year would not have been complete without a serious spate of cleaning and mending at the homes of elderly residents under the care of the Telok Blangah branch of the Moral Senior Activity Centre.

On 14 January 2012, 29 Keppelites provided care and assistance to the elderly by giving a fresh clean glint to their homes in eight HDB units. Besides general cleaning, the volunteers also carried out basic home repairs. Damaged window handles were replaced while cracks in the ceiling and floor tiles were filled. Dim or damaged bulbs were also replaced with new ones.

In addition, Keppel Volunteers helped avert potential safety

and health dangers by removing hazards such as exposed electrical wires. Apart from making their physical environment more comfortable, they also brought the lunar festive atmosphere to the hearts of the elderly.

Teo Keng Siong, Assistant Project Manager from Keppel Shipyard, said, "The mandarin oranges that we gave to each elderly resident really helped to create a festive atmosphere at the Centre. They were pleasantly surprised by this gesture. Their happy smiles are our inspiration and motivation. Also, it was heartening to see everyone work together as a team to improve the living environments of the residents."

In December 2011, Keppel Volunteers also organised the

donation of new beds and mattresses to over 20 beneficiaries.

Madam Lim Ai Tee was all smiles when she received new beds sponsored by Keppel O&M. As the 68-year-old had not been able to afford mattresses for herself and her mentally disabled son, both mother and son had been sleeping on the floor in their one-room HDB rental apartment. With the new beds, the family can now look forward to more restful nights.

Enjoying both the time spent with the elderly and the satisfaction of spreading goodwill to those in need, many Keppel volunteers are keen to be involved in the meaningful activity again.

GLOBAL NETWORK

Keppel Offshore & Marine Ltd

(Head Office)
50 Gul Road Singapore 629351
Tel: 65 6863 7200
Fax: 65 6261 7719
www.keppelom.com

SINGAPORE

Keppel FELS Limited

(Pioneer Yard 1 – Head Office)
50 Gul Road Singapore 629351

(Pioneer Yard 2)
55 Gul Road Singapore 629353

(Shipyard Road)
31 Shipyard Road Singapore 628130

(Crescent Yard)
60 Shipyard Road Singapore 628131

Tel: 65 6863 7200
Fax: 65 6261 7719
www.keppelfels.com
Email: marketing@keppelfels.com
Contact Persons: Wong Kok Seng, Managing Director
Aziz Amirali Merchant, Executive Director
Keith Teo, General Manager (Marketing)

Keppel Shipyard Limited

(Tuas Yard – Head office)
51 Pioneer Sector 1 Singapore 628437
Tel: 65 6861 4141
Fax: 65 6861 7767

(Benoi Yard)
15 Benoi Road Singapore 629888
Tel: 65 6861 6622
Fax: 65 6861 4393

(Gul Yard)
55 Gul Road Singapore 629353
Tel: 65 6861 3007
Fax: 65 6862 3645/7

www.keppelshipyard.com
Email: ks@keppelshipyard.com
Contact Persons: Nelson Yeo, Managing Director
Louis Chow, Senior General Manager (Commercial)
Mah Chan Wah, General Manager (Commercial – Shiprepair)

Keppel Singmarine Pte Limited

15 Benoi Road Singapore 629888
Tel: 65 6861 6622
Fax: 65 6862 1792
www.keppelsingmarine.com
Email: singmarine@keppelsingmarine.com
Contact Persons: Hoe Eng Hock, Executive Director
Poon Tai Lum, General Manager (Commercial/Marketing)

Keppel Offshore & Marine Technology Centre (KOMtech)

31 Shipyard Road Singapore 628130
Tel: 65 6591 5450
Fax: 65 6265 9513
Email: KOMtech@keppelom.com
Contact: Dr Foo Kok Seng, Centre Director

Offshore Technology Development Pte Ltd

55 Gul Road Singapore 629353
Tel: 65 6863 7409
Fax: 65 6862 3465
Email: felsotd@pacific.net.sg
Contact Person: Dr Foo Kok Seng, Executive Director

Deepwater Technology Group Pte Ltd

50 Gul Road Singapore 629351
Tel: 65 6863 7163
Fax: 65 6863 1739
Email: anis.hussain@keppelfels.com
Contact Person: Anis Hussain, General Manager

Marine Technology Development Pte Ltd

15 Benoi Road Singapore 629888
Tel: 65 6860 2858
Fax: 65 6862 2562
Email: chenghui.tan@keppelsingmarine.com
Contact Person: Tan Cheng Hui, Senior General Manager

Asian Lift Pte Ltd

23 Gul Road Singapore 629356
Tel: 65 6668 4222
Fax: 65 6668 4333
Email: asianlift@asianlift.com.sg
Contact Person: John Chua, General Manager

Keppel Smit Towage Pte Ltd

23 Gul Road Singapore 629356
Tel: 65 6668 4222
Fax: 65 6897 8056
Email: kst@keppelsmit.com.sg
Contact Person: Ben Chew, General Manager (Regional)
Jerry Wong, General Manager (Singapore)

AUSTRALIA

Keppel Prince Engineering Pty Ltd

Level 7, 3 Bowen Crescent, Melbourne, Victoria 3004, Australia
Tel: 61 3 9820 9033
Fax: 61 3 9866 6110
Email: cchiam@ozemail.com.au
Contact Person: Charles Chiam, Director

AZERBAIJAN

Caspian Shipyard Company Ltd

South Bay, KMNF Basin, Baku AZ1023, Azerbaijan
Tel: 994 12 449 9930
Fax: 994 12 449 9931
Email: csc@csc.az
Contact Person: Chandru Sirumal Rajwani, President

BRAZIL

Keppel FELS Brasil SA

Rua da Assembleia, 10 – 2113
20011-000 Rio de Janeiro, RJ, Brazil
Tel: 55 21 2102 9400
Fax: 55 21 2102 9425
www.kfelsbrasil.com.br
Email: kaichoong.kwok@keppelfels.com
Contact Person: Kwok Kai Choong, President & CEO

Keppel Singmarine Brasil Ltda

Rua Prefeito Manoel Evaldo Muller, 3388,
Bairro Volta Grande, Navegantes, Santa Catarina,
Brasil. CEP88-375-000
Tel: 55 47 3342 6460
Fax: 55 47 3405 0170
Email: Chongkee.tan@keppelsingmarine.com
Contact Person: Tan Chong Kee, General Manager

BULGARIA

Keppel FELS Baltech Ltd

54 Debar Street, Varna 9000, Bulgaria
Tel: 359 52 684 250
Fax: 359 52 684 252 (Admin)
Email: office@fels.bg
Contact Person: Lyudmil Stoev, General Manager

CHINA/HONG KONG

Keppel Nantong Shipyard Ltd

No. 9 Yan Jiang Road, Nantong City, Jiangsu Province
P.R. China 226005
Tel: 86 513 8530 0000
Fax: 86 513 8530 0011
Email: taikwee.lee@keppelnantong.com
Contact Person: Lee Tai Kwee, President

Keppel FELS Engineering Shenzhen Co., Ltd.

3th Floor, Chiwan Petroleum Building
Chiwan Road No. 5, P.R. China 518068
Tel: 86 755 26851902, 86 755 26851959,
65 68637215 (Singapore Contact)
Fax: 86 755 26851670
Email(China): jongheng.ho@kfelsshenzhen.com
Email (Singapore): jongheng.ho@keppelfels.com
Contact Person: Ho Jong Heng, General Manager

INDIA

Keppel FELS Offshore and Engineering Services

Mumbai Pvt Ltd
Unit Number 3, 8th Floor, Prism Tower-A, Mindspace,
Link Road, Goregaon (West), Mumbai 400 062, India
Tel: 91 22 4001 8888
Fax: 91 22 4001 8898
E-mail: kabeer.syedahamed@keppelfels.com
Contact Person: Syed Ahamed Kabeer, General Manager

INDONESIA

Bintan Offshore

Kampung Budi Mulia, RT.02/RW.01, Desa Sei Walang
Kecamatan Bintan Timur, Kabupaten Bintan
Propinsi Kepulauan Riau, Indonesia
Tel: 62 771 462 800
Fax: 62 771 462 575
Email: boonheng.kok@keppelfels.com
Contact person: Kok Boon Heng, General Manager

JAPAN

Regency Steel Japan Ltd

46-59 Nakabaru, Tobata-ku
Kitakyushu, Fukuoka 804-8505 Japan
Tel: 81 93 861 3103
Fax: 81 93 861 3114
Email: ws.chong@r-sj.com
Contact Person: Wong Chun Yu, President

KAZAKHSTAN

Keppel Kazakhstan LLP

SEZ "Seaport Aktau", Aktau 130001, Mangystau Region
Republic of Kazakhstan
Tel: 7 7292 571 100
HP: 7 300 528 4885
Fax: 7 7292 571 110
Email: pw.yick@kkl.kz
Contact Person: Yick Ping Wong, General Director

THE NETHERLANDS

Keppel Verolme BV

Prof. Gerbrandynve 25, 3199 KK Rotterdam-Botlek
Harbour no. 4550, P O Box 1001, 3180 AA Rozenburg
The Netherlands
Tel: 31 181 234300
Fax: 31 181 234346
www.keppelverolme.nl
Email: mail@keppelverolme.nl
Contact Person: Harold W.M. Linssen, Managing Director

NORWAY

Keppel Norway AS

Strandgaten 147, P O Box 425, 4304 Sandnes, Norway
Tel: 47 5160 2500
Fax: 47 5160 2510
www.keppelnorway.com
Email: ros@keppelnorway.com
Contact person: Roy Sletten, Acting CEO

THE PHILIPPINES

Keppel Philippines Marine Inc

Unit 3-B Country Space 1 Building, Sen. Gil Puyat Avenue,
Salcedo Village, 1200 Makati City, Philippines
Tel: 63 2 892 1816
Fax: 63 2 815 2581
www.keppelphilippinesmarineinc.com
Email: mhq@keppelpm.com or commercial@keppelpm.com
Contact Person: Mok Kim Whang, President
Stefan Tong, Executive Vice-President

Keppel Batangas Shipyard

Keppel Philippines Marine – Special Economic Zone
BO. San Miguel, 4201 Bauan, Batangas, Philippines
Tel: 63 43 7271532 to 36
Fax: 63 43 72714885 or 63 43 7271453
Email: kbs@keppelpm.com
Contact Person: Poh Leong Kok, Senior Vice-President

Keppel Subic Shipyard

Cabanga Point, Cawag
2209 Subic, Zambales, Philippines
Tel: 63 47 232 2380
Fax: 63 47 232 3350, 63 47 232 3883 to 84
Email: all@subicship.com or commercial@subicship.com
Contact Person: Mok Kim Whang, President
Leong Kok Weng, Vice-President

QATAR

Nakilat-Keppel Offshore & Marine

Erhama Bin Jaber Al Jalahma Shipyard
Southern Break Water, Ras Laffan Industrial City (RLIC)
P.O. Box 28388, Qatar
Tel: 974 4419 7300
Fax: 974 4419 7301
Email: commercial@nkcom.com.qa
Contact Person: Abu Bakar Mohd Nor, CEO
Chin Sze Kiun, Senior Commercial Manager

UNITED ARAB EMIRATES

Arab Heavy Industries

P O Box 529, Ajman, UAE
Tel: 971 6 526 3232
Fax: 971 6 526 3233
www.ahi-uae.com
Email: ahiaeme@emirates.net.ae
Contact Person: Jimmy Loh, Managing Director

USA

Keppel Offshore & Marine USA Inc.

5177 Richmond Ave, Suite 1065, Houston, TX 77056, USA
Tel: 1 713 600 8380
Fax: 1 713 600 8384
Email: yewyuen.chow@keppelOM-usa.com
Contact Person: Chow Yew Yuen, President

Keppel AmFELS LLC

20000 State Highway 48
Brownsville, TX 78523, USA
Cell: 1 956 592 6149
Tel: 1 956 831 8220
Fax: 1 956 831 6220
Email: g.tan@keppelamfels.com
Contact Person: Tan Geok Seng, President & CEO

FloaTEC, LLC

14701 St. Mary's Lane, Suite 250, Houston, TX 77079
Main Tel: +1 281 870 5200
Main Fax: +1 281 870 5210
Email: businessdevelopment@floatec.com
www.FloaTEC.com
Direct Tel: +1 281 870 5556
Mobile: +1 281 381 2781
Email: ehnamtvdt@floatec.com
Contact Person: Eric H. Namtvdt, President

Keppel Marine Agencies International LLC

(Texas Office)
5177 Richmond Ave, Suite 1065, Houston, Tx 77056, USA
Tel: 1 713 600 8371
Fax: 1 713 600 8374
Email: mike.holcomb@kmaihouston.com /
Contact Person: Michael Holcomb, President/Director
Mobile 1 713 816 0438
Email: john.bajor@kmaihouston.com
Contact Person: John C Bajor, Marketing Manager
Mobile 1 713 922 3226

(New Jersey Office)
15 Huddy Avenue, PO Box 417, Highlands, New Jersey, USA
Tel: 1 713 872 8800
Fax: 1 713 872 8801
Email: keppelnj@comcast.net
Contact Person: John J. Bajor, Director

VIETNAM

Keppel FELS Limited

Petrovietnam Tower, Suite 150M
9 Hoang Dieu Street, Ward 1, Vung Tau City, S.R. Vietnam
Tel: 84 64 850098
Fax: 84 64 850089
Email: john.chin@keppelfels.com
Contact Person: John Chin, Country Manager

RUSSIA

Marine & Shelf Development Ltd

129090 Moscow, 12, B.Spasskaya str., office 101, Russia
Tel: 7 495 9378966
Fax: 7 495 9378978
Email: marketing@keppelfels.com

Setting foundations for offshore wind

Keppel Corporation, through its wholly-owned subsidiary KV Ventus B.V., has entered into agreements to acquire a 49.9% stake in offshore wind turbine foundation designer, OWEC Tower (AS) for about NOK 61 million.

With the aim of getting a slice of the offshore wind foundation business, Keppel O&M hopes to tap on OWEC Tower's expertise to further develop its business in the design and construction of offshore wind turbine foundations as well as installation and support vessels.

OWEC Tower, headquartered in Norway, is a leader in the design and engineering of offshore wind turbine foundations. The company has developed a proprietary jacket foundation design known as OWEC Quattropod®, which is currently the only proven jacket design in the market. The OWEC Quattropod® design separates and optimises the piling and jacket installation process, resulting in reduced installation costs and faster project delivery.

Mr Michael Chia, Keppel's Director of Group Strategy and Development and MD (Offshore) of Keppel O&M said, "We are seeing offshore wind energy rapidly gaining traction around the world and a large number of offshore wind farms are under construction and planning. This will result in a huge increase in demand for foundation structures. With OWEC Tower's leading design in this segment, our partnership

puts us in an ideal position to capture a share of this market.

"As offshore wind farms move into deeper waters with bigger capacity turbines, a large number of jacket foundations will be required. With our experience and expertise as a leading rig builder, we see good potential in supporting OWEC Tower to meet this demand in a cost-effective and reliable manner. Together with our proprietary designs for offshore wind turbine

and foundation installers, we are confident of further enhancing our suite of solutions for the offshore wind industry."

To-date, OWEC Tower is the only company with a track record of having its jacket foundation design installed for offshore wind farms. Projects include the Beatrice pilot test off the coast of Scotland, the German pilot project Alpha Ventus, Ormonde wind farm in the UK, and the Belgian Thornton Bank project.



The OWEC Quattropod® design separates and optimises the piling and jacket installation process, resulting in reduced installation costs and faster project delivery