

KIM HENG MARINE & OILFIELD PTE LTD

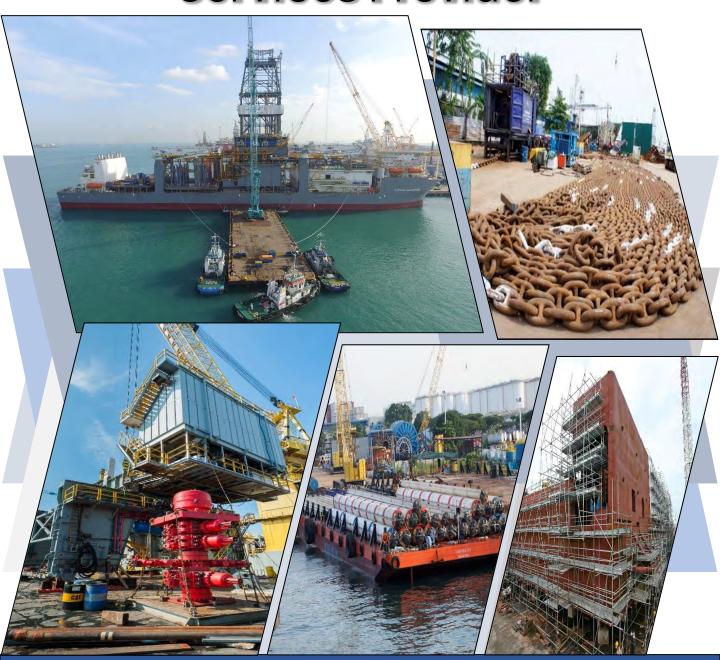
(A subsidiary of Kim Heng Limited)

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An Established Integrated Offshore and Marine Value Chain Services Provider



PROJECT PROFILE

EXECUTIVE SUMMARY

With over 50 years of experience, Kim Heng Ltd. ("Kim Heng") and its subsidiaries (collectively, the "Group") is an established integrated offshore and marine value chain services provider. Strategically based in Singapore, the Group offers a one-stop comprehensive range of products and services that caters to different stages of marine infrastructure projects and offshore oil & gas projects from oil exploration to field development and oil production. In keeping with the changing global energy scene towards cleaner energy forms, the Group has successfully ventured into the offshore wind renewable market. The Group will continue to broaden its service offerings to the clean energy and marine construction markets as part of its diversification away from the traditional oil and gas markets.

The Group's operations are primarily located in Singapore, with two shipyards strategically located at 9 Pandan Crescent and 48 Penjuru Road. The shipyards, with a combined waterfront of 205 metres, enable Kim Heng to carry out a multitude of services, including offshore rig repair, maintenance and refurbishment, fabrication, vessel newbuilding and afloat repairs as well as support new businesses in the renewable and marine construction markets.

As a one-stop solutions provider in offshore logistics, the Group has a fleet of quality anchor handling tugs, barges and cranes for both sale and rent. The Group also provides other services such as maintenance, trading and sale of heavy equipment.

Kim Heng has built its brand over the years and has established relationships with world renowned customers from over 25 countries in the regions of Asia, USA, Latin America, Australasia, Middle East and Europe.

OUR BUSINESS

OFFSHORE RIG SERVICES



- Construction and fabrication works of sections or components of drilling rigs & drill ships;
- Installation of offshore production modules and systems;
- Afloat repairs, maintenance and refurbishment of offshore rigs, platforms & vessels;
- Supply of offshore drilling and production equipment

SUPPLY CHAIN MANAGEMENT



- Provision of offshore supply vessels and heavy-lift equipment
- Provision of logistics, general shipping and crew management
 - Ship stores and provision supply
- Frozen, chilled, dry and licensed bonded facilities

VESSEL SALES AND NEWBUILD



- Purchase & refurbishment of vessels for on-selling
- Newbuilding of vessels and offshore construction vessel i.e. pipelay barge

HEAVY EQUIPMENT SALES AND RENTAL



- Leasing, sale, maintenance, import and export of products
- Wide range of equipment and machineries including crawler, lorry and mobile cranes

OUR WATERFRONT & YARD FACILITIES

With a combined waterfront of 205 metres, our shipyards at 9 Pandan Crescent and 48 Penjuru Road enable us to carry out afloat repairs, fabrication, newbuild, painting and blasting works. Our Pandan Crescent yard facility is capable of producing approximately 10,000 tonnes of steel fabrication per year.

We also offer dry dock facilities for afloat repairs, modifications, conversions and re-fit jobs with uninterrupted power supply and fresh water supply. The facility includes a well equipped workshop for carrying out repair activities.

Pandan Shipyard



Waterfront: 137m

Land Area: 34,125m²

Yard Facilities

- Combined 205m water front
- 10 x 280T crawler crane
- 550T floating crane
- Fleet of 40+ tugs and barges
- Slipway
- NC cutting machine
- NC bending machine

Penjuru Shipyard

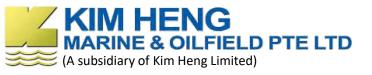


Land Area: 19,512m² Waterfront: 68m

Max Length: 120m (LOA)

Max Breadth: 20m

Max Draft: 7.0m at zero tide



OUR VESSEL & EQUIPMENT







Fleet of barges including flat top deck cargo barges, flat top ballastable deck cargo barges and crane barges fitted with side walls or stanchions.

y AHTS l osv II Tugs

20

Barges







Our shipyards are well-equipped with 200 - 550tons crawler cranes, gantry and overhead travelling cranes, forklifts, prime movers, CNC cutting, welding and drilling machines

17

2

4

8

Crawler Crane Lorry Crane Prime Mover Trailers

OFFSHORE SUPPORT SERVICES

With over 40 years of experience in this industry, Kim Heng has developed operational and technical efficiency together with a highly trained work force that is able to meet International standards in all fronts of our yard operations. All our services are handled according to our Standards of Operations and tailor to Client's needs.

Our comprehensive range of offshore support services includes but not limited to:

- Afloat Maintenance & Repairs
- Chain Removal and Inspection
- De-Slopping & Waste Disposal
- Emergency Response Evacuation
- Engineering and Fabrication Works
- Heavy Lifting Operations
- Marine Warranty Surveys
- Riser Maintenance
- Thruster Removal and Installation
- Underwater Surveys, Hull, Propeller & Tank Cleaning
- Vessel Flag Registry Certification Verification



MARINE TRANSPORTATION & VESSEL CHARTERING

As an experienced rig support and oilfield service provider, Kim Heng precisely understand the needs and priorities of Drilling Contractors and stood to the test of time on several occasions.

Our fleet comprises of Crane Barges for heavy lift operations, Offshore Ballastable Barges, Tugboats and Offshore Support Vessel (OSVs). We are equipped with the expertise and equipment, both owned and chartered, for safe and reliable heavy lift marine transportation and logistics services for project cargo, offshore construction and offshore modules.

We also provide vessel charters on time or voyage basis, including fuel, cargo and materials transport globally.



OFFSHORE MARINE REPAIR / CONVERSION

Kim Heng's water front yards are fully equipped and operated by a quality workforce to undertake ship repairs and conversion works, afloat or up-slip related to hull structure, piping, electrical and machinery equipment, hydro-blasting and painting. With good project planning and cost control, our diligent and specialized project management team will ensure a smooth project execution within budget and on time re-delivery.

Experience & Noticeable Past Projects:

- Thrusters for Offshore Rigs Dismantling Afloat, Overhauling and Re-installation afloat
- Blasting and Painting Afloat for Offshore Rigs
- Refurbishment of Accommodation Barge
- Power Barge Conversion
- Harbor Mooring Station
- Up-slip and Docking Survey For Ships



SHIPBUILDING & FABRICATION

Kim Heng's new construction capability for specialized vessels is supported by our strong project management team, high quality welders and shipbuilding facilities which includes NC cutting machines, protected fabrication line, block fabrication areas, wide inventory of lifting gears and a slipway.

We specialize in constructing offshore support vessels, tugs, barges and boats. Our facilities and knowledge also enables us to fabricate modules for offshore facilities.

Experience & Noticeable Past Projects:

- Pipe Laying Accommodation Barges
- Tugs
- Barges
- Aluminum Boats
- Burner Boom



OFFSHORE & MARINE ACCOMMODATION

Kim Heng also offers turn-key engineering and design for the entire accommodation and interior furnishings / carpentry for ships and offshore living quarters in accordance with classifications and client's requirements.

Our services includes but not limited to:

- Marine Vessel Accommodation Repair, Conversion and New Built including Carpentry and Upholstery Works
- Supply Of Wall & Ceiling Panelling System, Marine Doors And Floating Floor
- Other Services such as Insulation, Piping, Plumbing, Electrical Equipment and HVAC



MARINE SALVAGE & OIL SPILL RESPONSE

Kim Heng can mobilize and deploy resources on short notification, for any emergency responses or salvage operations on a 24/7 basis. Kim Heng has been awarded a 3 years contract in June 2015 by National Environmental Agency Singapore to conduct oil spill response, if any in Singapore.

Kim Heng provides the following services:

- Cargo Recovery
- Emergency Salvage Response
- · Oil Spill Response & Pollution Control
- Oil Spill Management (IMO Tier 1 to IMO Tier 3 Certified)



MARINE CIVIL CONSTRUCTION

Kim Heng owns and operate a fleet of over 40 vessels (tugs, ballastable barges, crane barges, support vessels) to cater to all our client requirements, including but not limited to,

- reclamation works,
- marine civil works,
- jetty construction and,
- marine transportation of building materials & equipment.

Throughout the years, we have been involved with numerous projects by providing comprehensive marine logistics support to other marine civil contractors, notably,

- Jan De Nul (Aggregate Rock Transfer Vessel Charter)
- ii. Gammon (Sentosa Broadwalk SINGAPORE Crane & Vessel Charter)
- iii. Hyundai (Tuas Finger Pier SINGAPORE Crane & Vessel Sale/Charter)
- iv. Daelim (Temburong Bridge BRUNEI Crane & Vessel Sale/Charter)
- v. Boskalis (Marine Support for Dredging Works)
- vi. Van Oord (Marine Support for Dredging Works)
- vii. TOA Harbour (Marine Support for Dredging Works)





MARINE AND PORT AGENCY SERVICES

With a proven track record, Kim Heng has been a trusted partner to many Owners, Charterers and Operators in the region. Our team of dedicated staff, backed by extensive agency experience and competence, are ready on hand 24 hours a day every day of the year to provide a timely and efficient Port and Husbandry agency services for all your vessels.



Arrival / Departure Planning

- Pre-alert to RSAF; CAAS; MPA
- Port & Customs Clearances
- Port Harbour Towage & Pilotage
- Crew Immigration Clearances
- Crew Change; Sign On/Off Services
- Meet and Greet Services
- Travel and Hotel Arrangement
- Land and Sea Transfers
- Visa and Work Pass Exemption
 Application
- Letter of Guarantee Services
- Rig Moves
- Vessel Escort & Safety Tugs



Husbandry Services

- Bunker & Fresh Water Supply
- Crew Management & Crew Transfer Services
- Freight Forwarding
- Inventory & Warehousing Facilities
- Project Cargo Handling
- Launch Services / Heli-Charter
 - Logistics & Transport
 - Meet & Greet Services
- Off Port Limit Calls
- On / Off-Hire Survey Coordination
- Stevedoring
- Ship's Supply
- Visa & Permit Application

MARINE SUPPLY & CATERING SERVICES

Kim Heng delivers the highest-quality food – fresh or frozen – and all kinds of beverages to all vessels and cruise liners. Our 24/7 secured warehouse of 50,000sqm is catered for frozen, chilled, dry and licensed bonded facilities.

We have a fleet of young reefer containers designed to effectively transport perishable goods in a temperature-controlled atmosphere and multiple loading / unloading bays and multi-temperature storage rooms ranging from $16^{\circ}\text{C} \sim -20^{\circ}\text{C}$.

Our Catering Services include:

- · Cabin Store
 - Galley / Dining Utensils & Equipment
 - Clothing and Linen Items
 - Hygiene Items
 - Stationery & Consumables
 - Medical Equipment & Supplies, etc

- Menu Planning
- Housekeeping
 - Laundry and Sanitation Services
- Catering Crew Management



TRANSPORT & LOGISTICS MANAGEMENT

With its own fleet of vehicles, ranging from mini-vans/buses, trucks to 40ft low bed trailers, Kim Heng can manage all delivery and transportation services for its clients at a low competitive cost.

We can handle all the freight movements and consolidate incoming / outgoing shipments from Singapore with update-to-date inventory report to keep the project team informed of the equipment received.



WAREHOUSING & INVENTORY MANAGEMENT

Providing full scale logistic and warehousing services, Kim Heng engage in a true hands-on approach.











TRACK RECORD

1. New Built and Retrofit

- New Built Pipe Lay Barge Aussie 1
- New Built Pipe Lay Barge McDermott LB32
- New Built Aluminium Boat Coral; Jomad; Huon; Markham; Wilhelm
- Retrofitting of Pipe Lay Crane Barge Jascon 25
- Power Barge Conversion KPS Alican Bey

2. Marine Support Services

- Turnkey Horizontal Directional Drilling (HDD) in South East Asia
- Turnkey Offshore Gas Pipeline Installation CLIFFHEAD, Australia
- Installation of New Fenders and Breasting Dolphins for LNG Q-flex Vessels in Qatar
- Marine Vessels Chartering For Gammon Project
- Oil spill clean-up at Sentosa Tanjung Beach
- Oil Spill Response and Waste Disposal at Pulau Ubin Coastline, AVA Fish Farms
- Offshore Salvage Operation for M/V Hyundai Discovery
- Offshore Salvage and Repair for M/V Grandview

3. Offshore Support Services

- Risers Maintenance and Refurbishment for Deepwater Frontier
- Anchor Chain Removal / Inspection for GSF 140
- Anchor Chain Removal / Inspection for Noble Max Smith
- Thrusters Removal and Installation for Sevan Louisiana
- Thrusters Removal and Installation for Deepwater Millennium
- Thrusters Removal and Installation for Deepwater Frontier
- Thrusters Removal for Transocean Legend
- Overhaul of Seawater Check Valves

4. Heavy Lift Operation

- Heavy Lifting of Flare Tip Package to Derrick Top for Deepwater Proteus
- Pipe Racks Fabrication/ Installation of Piping, Blasting painting for Shapoorji
 FPSO
- Heavy Lift of BOP & LMRP Stack Drillship Noble Bully 2
- Heavy Lift of Gantry Crane Drillship Noble Phoenix
- Heavy Lift of LMRP and BOP Assembly Semi-Submersible Transocean "Actinia"

TRACK RECORD

5. Engineering Services

- Azimuth Thruster Overhaul & Maintenance Drillship Noble Viking
- Dyna Mac Barrosa Superstructure Fabrication & Erection
- Upslip Repair and Maintenance Suction Hopper Barge River Bee
- Fabrication, Installation & Load Testing of Tension Deck & CTU Jackup Rig Noble Tom Prosser
- Modification & Weight Reduction of DES Package Tender Rig SKD T-9
- Reactivation & Commissioning of Rig Jackup Rig Randolph Yost
- Fabrication of Columns Semi-Submersible Ensco 8500 series
- Fabrication of Drill Floor Jackup Rig West Prospero
- Assembly of Riser Spider and Gimbal Drillship Noble Bully 2
- Fabrication of Structure Pipe Laying Vessel Saipem Castorone
- Crane Boom Repair for Offshore Rigs
- Fabrication of BIHS Mockup Structure Saipem Liwan Project

New Built Pipe-Lay Accommodation Barge "AUSSIE 1"

Technical Specifications

Class

ABS A1 (Unrestricted service) MODU code attestation

Dimensions

Length: 112m(3401ft) **Beam:** 32m (98ft)

Depth moulded: 9m (27ft)

Draft: 4.8m (normal operating) 1.8m (min)

Hull Type

Flat Bottom

Deck Area

Large clear deck area (over 2000m2, 12.5t/m2

rating)

Very high capacity: over 11,000 ton

Lifting / Crane Capacity

High specification 280 ton Crawler Crane

Diving Capability

Large in-built mon-pool (5.5m x 5.5m)
Support services for modular saturation diving spread

Helideck

Size: 22 x 22m for Sikorsky S76 and S61

Main Engines

5 x 1000kW generators @ 440V, 60Hz Emergency generator rated to 500kW

Safety Systems

Life rafts to 590 person capacity
600 life jackets/12 life rings
1 x fast rescue boat
Sprinkler system
Machinery guarding systems
Dedicated boat landing transfer points





Commencement of Steel-Work Fabrication





Erection & Installation of Accommodation onto Main Deck





Launch of Aussie 1 on 6th June 2008.

New Built Pipe-Lay Accommodation Barge McDermott "LB 32"

Technical Specifications

Official Flag: Panama Built/year: 2011

Class: ABS + A1 Barge

Hull Dimension:

 LOA:
 111.6m

 Beam:
 31.7m

 Depth:
 9m

 Operating Draft:
 4.8m

Anchor System:

8 @ 9,979kg anchor; 2 in Wire

Communication:

Email / fax / phone / VSAT

Radio:

VHF, GMDSS, SSB

Radar: 1
Gyro Compass: 1
Echo Sounder: 2

Accommodation:

Berths (air conditioned & heated):

292

Cranes:

Crane:

NOV Model 35000 HD Pedestal Crane

Boom Length Main:

51.8 m

Main Hook Capacity Fixed:

62.6 MT

Deck Crane:

1 Manitowoc 999 Crawler Crane, 61m Boom

Bouy Crane:

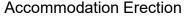
1 @ 9.1 MT (w Boom Length 20 m)





Commencement of Steel Work Fabrication







Heli-Deck Erection



Crane Installation



Pipe Tensioner



Launching of LB32

New Built Aluminium Pilot Boat

"Coral"; "Jomad"; "Huon"; "Markham"; "Wilhelm"

Technical Specifications

Classification: **Bureau Veritas**

GRT / NRT: 32/9 15.5m Length: **Breadth Moulded:** 4.5m Depth moulded: 1.9m

Design Draft / Light Draft: 1.2m / 0.8m 2 + 12 Pax * **Seating Capacity:**

(* Custom Max 24)

Fuel Capacity: 2.000 liters **Fresh Water Capacity:** 500 liters

Approx. 28.0knots @ 100% MCR **Speed Maximum: Cruising Speed:** Approx. 23.0 knots @ 75% MCR



RADAR / GPS **GMDSS / NAVTEX**

ECHO SOUNDER *Other optional per owner spec

LSA / SOLAS Class Complied

Main Engine Propulsion*

2 x MAN diesel engine

(2 x 328kw @1800rpm) 880bhp

Fuel consumption Approx

150 Ltr/hr @85%MCR 110 Ltr/hr @75%MCR

Generators Power System

2 x 11kw Kholer 11EFOZD Diesel Engine Generator









Retrofitting of Pipelay Crane Barge "JASCON 25"

The new 800-ton crane offshore DP3 pipelay vessel was retrofitted, completed and christened at Kim Heng Shipyard in Singapore.

Jascon 25 is one of the first offshore pipelay / crane / construction vessels built according to a new hybrid design philosophy

The barge has an 800-ton main crane with heave compensation

- A state of the art DP3 dynamic positioning system
- Modular S-lay pipe lay system
- 1000sqm deck space and accommodation for 355 people

Technical Specifications

Classification: ABS A1 Barge, PAS, DPS-3,

CRC

Flag: Gibraltar

Dimensions

Length: 118.8m

Breadth: 30.40m

Extreme Breadth: 36.40m

Depth: 8.40m

Operating Draft: 5.00m

Cranes

Main Crane: 800ton @30m, Whip hoist 120t@35m underwater capacity 50t@720m + heave compensated, make Huiman-Ltrec

Auxiliary Deck Crane: Pedestal type, 34t@20m, 22t@30m, make TTS



Jascon 25 Barge at Kim Heng Yard





Installation of 800ton Crane





Installation of Pipe Laying Equipment



Completion and Delivery

Power Barge Conversion KARADENIZ "ALICAN BEY"

Technical Specifications

Port of Registry: MONROVIA

Classification: BUREAU VERITAS

Length: 91.44m

Breath: 30.48m

Moulded Depth: 6.00m

Engine: Sulzer 16ZAV40S Engine X 10 units

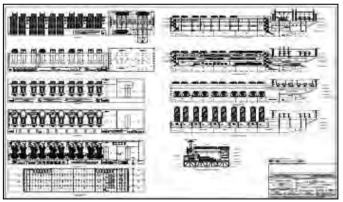
Power Generation: 10 X 11.0 MW

Total Power Output: 110 MW



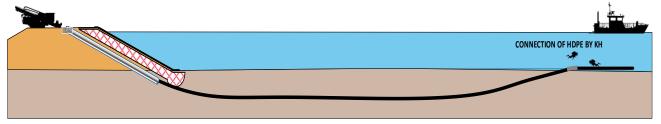






Turnkey Horizontal Directional Drilling (HDD) in South East Asia

In 2018, Kim Heng was awarded and successfully carried out trenchless installation of pipelines and cables in South East Asia. Kim Heng provided the full site equipment which included but not limited to land drilling rig equipment, full marine spread as well as the provision of drillstrings of different sizes and lengths and consumables.













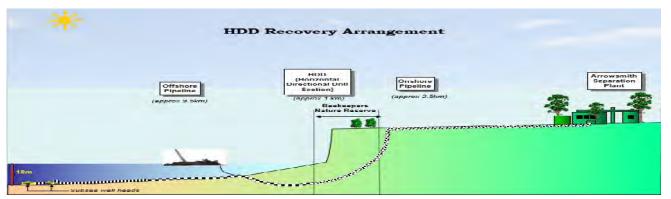






Turnkey Offshore Gas Pipeline Installation - CLIFFHEAD, Australia

In 2005, Kim Heng was awarded and successfully carried out the full turnkey offshore gas pipeline installation. Kim Heng provided the full site equipment which included but not limited to land drilling rig equipment, full marine spread as well as the provision of drillstrings of different sizes and lengths and consumables.















Installation of New Fenders and Breasting Dolphins for LNG Q-flex Vessels in Qatar

In 2010, Kim Heng was awarded and successfully carried out marine civil works in Ras-Laffan, Qatar. Kim Heng provided the full marine spread and civil works both at port and out-port location of sites.





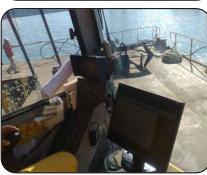














Construction of Sentosa Broadwalk for GAMMON

In 2009, Kim Heng was awarded as the main sub-contractor for GAMMON by Sentosa Development Corporation (SDC) on the construction of 620m Boardwalk running from Vivocity at Harbourfront to Resorts World Sentosa on Sentosa Island.

For Test Pile & Piling Works

- 275-Ton Crane Barge
- Flat Top Service Barge 180ft x 50ft x 10ft
- Flat Top Service Barge w/ Ramp 120ft x 40ft
- Flat Top Storage Barge 210ft x 60ft
- 750HP Tug Boat

For Civil Works

- 275-Ton Crane Barge
- Flat Top Service Barge 180ft x 50ft x 10ft
- Flat Top Storage Barge 210ft x 60ft
- 750HP Tug Boat













Oil spill clean-up at Sentosa Tanjung Beach

On June 14, the Netherlands-flagged dredger Vox Maxima collided with a stationary bunker vessel Marine Honour at Pasir Panjang Terminal after suffering a sudden loss of engine and steering control. This resulted in oil spills in areas such as Sentosa, East Coast Park and Keppel Bay from one of Marine Honour's tanks. Kim Heng deployed a team of 21 workers to assist with the oil spill clean-up to scoop up all the sand contaminated by bunker oil into trash bags for disposal. A total of 1,200 tons of contaminated sand was collected for disposal over the span of one month at Tanjung Beach, Sentosa.

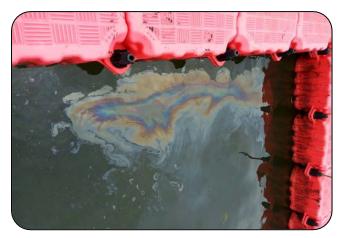






Oil Spill Response and Waste Disposal Pulau Ubin Coastline, AVA Fish Farms

On 3rd January 2017, WAN HAI 301 (Singapore-registered container vessel) and APL DENVER (Gibraltar-registered container vessel) collided off Pasir Gudang Port, Johor Malaysia. The fish farms along the shores of Pulau Ubin were affected from the collision. Kim Heng was activated by Cosmarine Consultants and SPICA to provide assistance for clean-up operations on 6th January 2017. The entire clean-up operations took about one month.

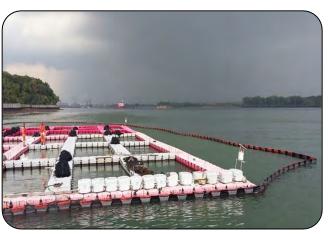












Offshore Salvage Operation M/V "Hyundai Discovery"

11 Dec 2011, UK registered container vessel *Hyundai Discovery* had a collision with Panamanian registered container vessel *ACX Hibiscus* at the end of the traffic separation scheme to the east of Singapore. Both vessels were seriously damaged.

Kim Heng Shipbuilding and Engineering Pte Ltd was mobilized by Zodiac Maritime to recover 18 damaged containers onboard Hyundai Discovery at Singapore Eastern Anchorage on the 13 Dec.

Kim Heng mobilized 2 crane barges and a fleet of 3 tug boats with riggers and crew members on the following day.

On 15 Dec 2011, the recovery job commenced and the entire operation was completed on 17 Dec 2011











Offshore Salvage & Repair M/V "Grandview"

In the early hours of 10 March 2005, MV "Grandview" collided with a VLCC tanker while enroute to Port Kelang after loading containers from Singapore. The collision had caused the aft of MV "Grandview" to be ripped apart.

Within 2 hours, Kim Heng had mobilized a team of Engineers to assess the damage and by daylight, repair works on the aft of MV "Grandview" have commenced. The entire afloat repairs were carried out and completed in two weeks.







Degree of Wreckage after its collision with a VLCC Tanker along Malacca Straits













Mobilization of Material / Equipment and Commence of Afloat Repairs





Riser Maintenance & Refurbishment Drillship "Deepwater Frontier"

In 2011, Kim Heng was contracted to carry out maintenance and refurbishment of 90ft length risers for Transocean Drillship "Deepwater Frontier".

Kim Heng provided the full spectrum of services:

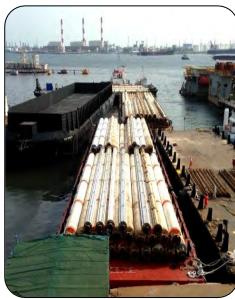
- Full project management from concept to delivery.
- Site surveys and situation analysis to ensure best solution and services at all time
- Marine transportation by tugs & barges from Anchorage to Yard.
- Inspection, blasting, refurbishment and painting works.
- Installation of Buoyancy Modules
- Marine transportation by tugs & barges to rigs at offshore location.











Anchor Chain Removal & Inspection Services Midwater Semi-Submersible "GSF Rig 140"





Kim Heng Crane Barge & Cargo Barge alongside for the Removal of Anchor Chain.







Inspection, Refurbishment, Maintenance and Hydro-Jetting of Anchors and Anchor Chain at Kim Heng Waterfront



Fabrication of 12 units of 40ton Buoyancy.



Spooling of 3" Chain into AHT



Anchor Chain Inspection Services Semi-Submersible "Noble Max Smith"





Inspection of Anchor Chain at Kim Heng Waterfront











Refurbishment, Maintenance and Hydro-Jetting of Anchor Chain

Thruster Removal & Installation Semi-Submersible "Sevan Louisiana"

Six Generation New Built semi Submersible - Sevan Louisiana stopover in Singapore for mobilization loadout and commissioning of equipment in transit to Golf of Mexico.

A fully rig-up SL6000 Crane Barge (Kim Heng 55) and rigging team were mobilized to anchorage to carry out the removal and installation of thruster..

Kim Heng provide the full range of offshore service and support as follows:

- Thruster removal & Installation, Heavy Lifting, Sea fastening
- Logistics Supply Base Support
- Marine Spread of Vessels
- Manpower Supply for Painting job
- Procurement & Equipment Rental
- Onshore & Offshore Crew Management
- Office space for Onshore Team
- VIP Transport Arrangement











Thruster Removal & Installation Drillship "Deepwater Millennium"



Mobilization of Kim Heng 55 Crane Barge and equipment alongside.





Lifting of Thruster units and loading on Kim Heng 55 Crane Barge





Preliminary Inspection. Removal of barnacles / marine growth from Thruster units

Thruster Removal & Installation Drillship "Deepwater Frontier"

In order to provide the 10 years old drillship a further 5 years of operational integrity, the existing 6 unit of azimuth thrusters have to be replaced with another 6 fully rebuilt thrusters.

Transocean – Deepwater Frontier awarded this task of thrusters' removal and re-installation to Kim Heng Marine & Oilfield Pte Ltd

A fully rig-up SL6000 crane-barge (Kim Heng 55) with a 10ton forklift and 20 crews were mobilized to anchorage to commence the job/task.

Kim Heng provide a full range of offshore service and support including

- Offshore Repair
- Equipment Removal / Installation
- Heavy Lifting
- Salvage















Thruster Removal & Installation Semi-Submersible "Transocean Legend"





Mobilization of Crane Barge and equipment alongside.





Lifting of Thruster Unit





Removal of barnacles / marine growth from Thruster units

Overhaul of Seawater Check Valves





Receipt and Inspection of Valves Condition





Hydro-jetting and Sandblasting of Valves in Kim Heng Yard





Assembly and Completion

Heavy Lift of Flare Tip Package to Derrick Top Ultra Deepwater Drillship "Deepwater Proteus"

Kim Heng was engaged by Transocean to provide Engineering solutions for provision of "Kim Heng 55" crane barge to install the Flare Tip Package on the Derrick top of Deepwater Proteus at an outreach of about 50 mtrs at 110 mtrs above water level.





Planning & Mobilisation





Execution





Assembly and Completion

Pipe Racks Fabrication/Installation of Piping, Blasting painting for "Shapoorji FPSO"







Fabrication in workshop

Yard Erection/ Assembly







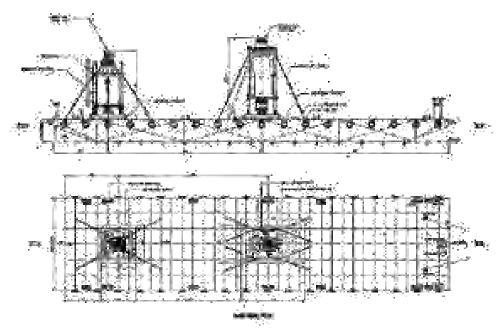




Lifting of pipe racks from yard after completion

Heavy Lift of BOP & LMRP Stack Drillship "Noble Bully 2"

We provide detailed engineering for mooring arrangement & lifting procedure for transportation of 425 ton BOP stack & 210 ton LMRP assembly using our ballast-able barge "Kim Heng 1888".





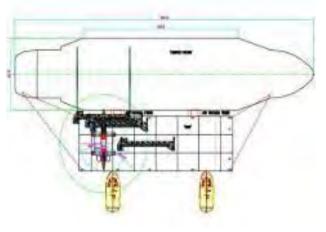


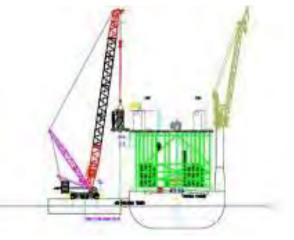






Heavy Lift of Gantry Crane Drillship "Noble Phoenix"





Lifting Calculation and Layout Plan





Kim Heng Crane Barge Alongside

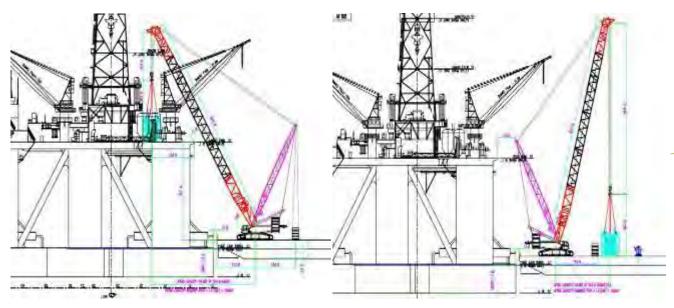




Lifting of Damaged Riser Gantry Crane onto Barge

Heavy Lift of LMRP and BOP Assembly Semi-Submersible Transocean "Actinia"

Kim Heng was engaged by Transocean to provide Engineering solutions for provision of "Kim Heng 55" crane barge to do the heavy lifting of LMRP and BOP Assembly.



Lifting Layout Plan





Kim Heng 55 Crane Barge Lifting of LMRP & BOP Assembly from Rig

Azimuth Thruster Overhaul & Maintenance Drillship "Noble Viking"



Transfer Thruster to Kim Heng open yard



Barnacles scrapping & high pressure wash down



Upright of thruster onto Vertical Frame Cradle



Shaft support overhaul works



Sub assembly of thruster in workshop



Main thruster assembly at open yard



New anode installation



Lifting & transportation to drillship for installation

KIM HENG MARINE & OILFIELD PTE LTD (A subsidiary of Kim Heng Limited)

Dyna Mac Barrosa Superstructure Fabrication & Erection





Fabrication of anodes





Fabrication of superstructure in segments





Assembly of super structure at open yard

Upslip Repair and Maintenance Suction Hopper Barge "River Bee"

In 2017, Kim Heng Marine & Oilfield was contracted to carry out her Special Periodic Survey for TAMS Suction Hopper Dredger Barge "River Bee".

•Kim Heng provided the full spectrum of services:

- Full project management from upslipping to delivery.
- Side shell repairs and Bottom plate replacement
- Tank cleaning and sludge disposal
- Inspection, blasting, refurbishment and painting works.

Before





After









Fabrication, Installation & Load Testing of Tension Deck & CTU Jackup Rig "Noble Tom Prosser"







Fabrication of Tension Deck & Heavy Duty Padeye

Assembly of Tension Deck



Tension Deck Painting



Tension Deck Arm Installation and Trial Function Test



Transportation to Rig



Installation In Progress



Water Bag Load Testing In Progress

Modification & Weight Reduction of DES Package Tender Rig "SKD T-9"

SapuraKencana Drilling had awarded the Removal, Modification and Re-Installation of DES Package for SKD T-9 to Kim Heng Marine & Oilfield Pte Ltd.

Scope Performed:

- i) DES Package Weight Reduction
 - · Off Driller Cantilever Modifications
 - Driller Cantilever Modifications
 - Master Skid Modifications
 - Rig Floor Modifications
- ii) Fabrication & Installation of Deep Well Pump Piping
- iii) Design, Fabrication & Installation of New VSAT Platforms I.W.O Helideck.
- iv) Removal of Baker Hughes Cementing Unit
- v) Installation of Schlumberger Cementing Unit with Piping











Reactivation & Commissioning of Rig Jackup Rig "Randolph Yost"

Kim Heng Marine & Oilfield secured a contract with Shelf Drilling International; to berth the newly re-activated Jackup Rig -Randolph Yost at its waterfront yard on the 29th Jan 2013 and complete all outstanding servicing, maintenance and installation job before the rig depart for the next drilling contract in early April.

The shipyard completed the following major jobs during the stay in Kim Heng:

- **Conductor Tensioning System**
- Ballast tank cleaning and painting

Commissioning of:

- Annulus Flooding System
- 13-5/8" U Ram BOP commissioning
- Diverter and panel commissioning
- Choke and kill manifold commissioning
- Koomey unit commissioning

Servicing and commissioning of:

- **BOP Hoist**
- Rig Floor Tuggers











Fabrication of Columns Semi-Submersible Ensco 8500 series

Due to its track record of timely delivery, Kim Heng Shipbuilding and Engineering Pte Ltd was contracted to fabricate the columns for Ensco 8500 series of Semi-sub built by Keppel FELS in 2006

The construction was carried out at Kim Heng Shipyard; No.9 Pandan Crescent which has an estimated land area of 34 125 sq-meter with a water front of 137 meter.















Fabrication of Drill Floor Jackup Rig "West Prospero"

The timely delivery of the drill-floor structure has again demonstrated Kim Heng's capability to complete all the project on time, on requirement for the customer.

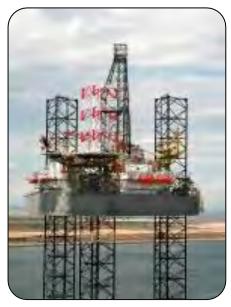












Assembly of Riser Spider and Gimbal Drillship "Noble Bully 2"





Receipt of Riser Spider and Gimbal





Setting of Gimbal on Load Plate









Completion of Installation and Assembly

Fabrication of Structure Pipe Laying Vessel "Saipem Castorone"











Crane Boom Repair for Offshore Rigs





Inspection upon Arrival





Assessment of Damages after Sandblasting





Hot-work Repairs





Completion & Delivery

Fabrication of BIHS Mockup Structure Saipem Liwan Project



Production Kick-Off







Assembly & Outfitting





Owner Inspection, NDT Inspection, Structure Weighing. Completion and Delivery







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