

















55 YEARS IN ASIA KIM HENG

Established in 1968

450+ Employees

Two established waterfront shipyards in Singapore

Offices in Malaysia, Singapore, Korea, Thailand, Vietnam & Taiwan

S\$100mil+ annual turnover

45+ Marine Vessels

29 Cranes (100t – 1,250t lift capacity)

Extensive fabrication, vessel build & maintenance expertise

Extensive track record serving customers across more than 25 countries

Wide Services Offerings (incl. Marine, Fabrication, Offshore Accommodation, Transportation, Construction & Survey support, Cable Lay, Agency Services, Crewing, Logistics, Subsea Construction Support, Offshore Geotechnical Drilling and Survey, Salvage & Air Diving, HDD drilling solutions, pipeline and cable trenching)





Shipyard & Fabrication Services

Marine Vessel Support

Port Agency and Logistics

Offshore Salvage and Diving

Crane Lifting Solutions

Offshore Renewables Support

Geotechnical Drilling and Surveys

Shallow Water Cable Lay Solutions

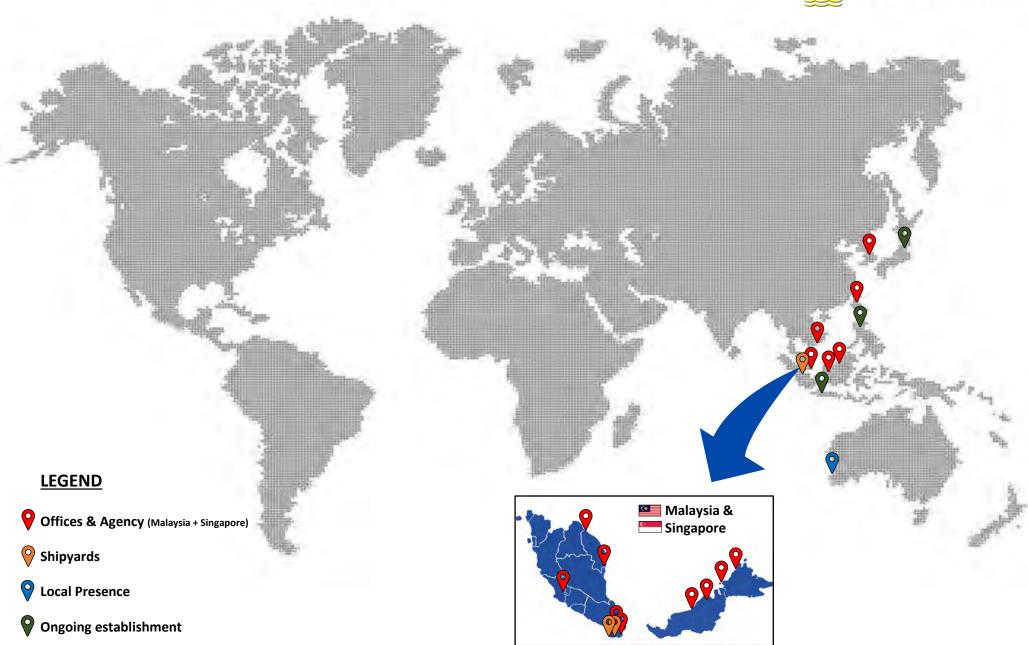
Horizontal Directional Drilling (HDD)

Offshore Construction Support

Pipeline and Cable Trenching Solutions

GROUP LOCATION MAP





GROUP SUPPORT SERVICES





Shipyard Services & Repairs



Air Diving & salvage



Module fabrication



Renewables services



Anchor handling (incl. DP1 & DP2)



Logistics & Agency Services



Crane Lifting Solutions



Horizontal
Directional Drilling
(HDD)



Module Lifting



Barge Transport & Towing



Supply/
Crew Services



Geotechnical Survey & Construction



402 pax Accommodation Barge



Ocean Towing



New Vessel Builds & Modifications

SHIPYARD AND FABRICATION SERVICES





ACCOMMODATION OUTFITTING & FURNISHING

HIGH STANDARDS OF ACCOMMODATION OUTFITTING FOR RIGS, VESSELS & BARGES









OFFSHORE VESSEL SUPPORT

45+ OFFSHORE SUPPORT VESSELS AVAILABLE (INCLUDING):



Large Ocean-Going Tow Tugs (156t Bollard Pull)

DP2 Anchor Handling Tugs (50-130t bollard pull)

402 Pax Accommodation/Crane barge (suitable for upgrade to pipelay)

DP2 120 pax Multipurpose Support Vessel (with moonpool)

Shallow water DP2 cable lay barge (under construction)

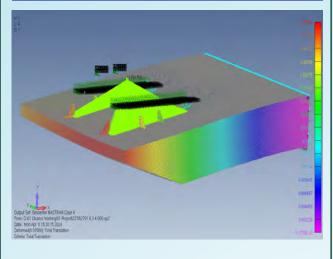
Rock dumping barge and rock hopper split barges

Selection of Tugs & Barges for materials and structures transportation

Supply/crew boat

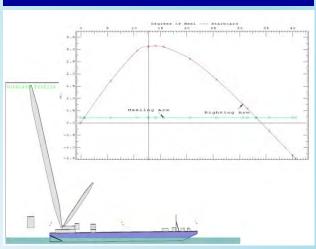
ENGINEERING & NAVAL DESIGN SERVICES

STRUCTURAL ENGINEERING



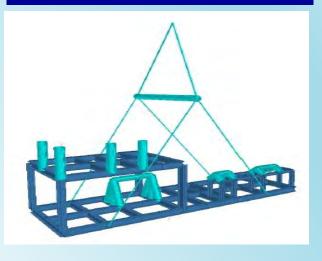
- ☐ Steel Structure Design
- Global Strength Analysis
- Local Strength Analysis
- Structural Optimization
- □ Fatigue Analysis
- Impact Analysis
- Vibration Analysis

NAVAL ARCHITECT DESIGN



- Vessel Intact & Damage Stability
- Vessel inclining Experiment
- Dead weight Survey
- Ballasting Calculations
- Vessel / Barge Loading Assessments

INSTALLATION ENGINEERING



- Lifting Analysis
- ☐ Rigging Design
- □ Sea Fastening Design
- □ Towing Analysis
- □ Towing Gear Design
- Mooring Design*
- ☐ Transportation Analysis*

Familiar with Industry Leading Software suites including:









FEMAP

STEEL
3D BEAM STRUCTURAL ANALYSIS

MARINE SUPPORT VESSEL SNAPSHOT

HIGH-CAPACITY TOWING TUGS



- Fleet of 156t Bollard
 Pull Long Distance
 Towing and Anchor
 Handling Tugs
- Approx 12,000BHP
- 68m long x 16.4 beam x 7.2m depth
- 5.2m 6m typical draft
- Recommended for large pull capacity ocean towing, Anchor Handling and offshore Salvage support

DP2 / DP1 ANCHOR HANDLING/TOW TUGS



- Fleet of DP2 & DP1
 Towing and Anchor
 Handling Tugs
- Typically, 65t 135t
 Bollard Pull Capacity
- Approx 5100BHP –10800BHP
- Recommended for ocean towage, anchor handling, salvage and DP survey and construction support operations

402 PAX ACCOMMODATION BARGE (with pipelay upgrade option)



- 402 pax capacity
- 300t Huisman offshore pedestal crane
- Approx. 1500m2 free deck space area
- 12.5t/m2 deck load rating
- 8-point mooring
- 3.2m est. minimum draft
- Upgrade option for pipelay
- Suitable for accommodation, hook up works, decommissioning, diving support, cable lay & construction support

DP2 MULTIPURPOSE VESSEL MSV (with moonpool)



- DP2 Multi PurposeSupport Vessel
- Geotechnical Drilling
 Capable (Twin Tower)
- Industry leading CPT& Vibrocore Systems
- Moonpool
- 4-point mooring
- 20m vessel beam and approx. 550m2 deck
- 60t offshore crane
- Kongsberg HIPAPUSBL system ready
- 59 pax, lab, offices

TRANSPORTATION BARGES AND TOWING TUGS



- Fleet of flat top transportation
 barges (100ft - 300ft size)
- Majority of flat top transportation barges are ballastable
- Transport barges
 typically have 10 –
 15t/m2 deck strength



TRANSPORTATION BARGE SOLUTIONS

80ft – 400ft size TRANSPORTATION BARGES

Range of transportation barges available

80ft – 400ft size can be made available

5t/m² – 20t/m² deck strength

Ballastable and non-ballastable type

Can be fitted with spud and/ or mooring systems





402 PAX
ACCOMMODATION
/ WORK / CRANE
BARGE "BRIDGEWATER
SUPPORT"

111m long x 32m wide

Large deck with high 12.5t/m2 load rating

300t Huisman Pedestal Crane

Minimum draft only approx. 3.2m

Option for upgrade to pipelay

PORT AGENCY AND LOGISTICS



MARINE & PORT AGENCY SERVICES

- Port Harbour Towage & Pilotage
- Vessel Escort and Safety Tug Services
- Vessel and Rig Move Planning and Marine Support
- Assistance for vessel surveys, inspections, and maintenance services



CREW MANAGEMENT

- Crew changes, visa's & immigration clearances
- Travel & Hotel Arrangements
- Work Permit Applications,
 Support & Authority follow up



FREIGHT FORWARDING & CUSTOMS CLEARANCES

- Freight Forwarding including global shipping logistics & documentation.
- Custom's processing and clearance services
- Warehousing &Storage solutions for goods & materials



HUSBANDRY SERVICES

- Ship Supply Services
- Bunkering & Fresh Water Assistance
- Launch Services / Heli-Charter
- Stevedoring & Cargo Handling



VESSEL LAYUP & PRESERVATION SUPPORT

- Assistance for location of secure vessel layup area (offshore or alongside)
- Provision of crews for assistance with vessel & equipment preservation
- Provision of crews and assistance as required for vessel re-activation



CHARTERING & BROKERAGE SERVICES

- Facilitation of vessel chartering arrangements
- Charter support services vessel for voyages, time and bareboat hires
- Brokerage services for vessel sales and purchases

OFFSHORE SALVAGE, SPILL & DIVING SUPPORT









VESSEL SALVAGE SUPPORT

- Tug towage services
- Marine vessel support
- Crane lifting
- Barge transportation

AIR DIVING SOLUTIONS

- · Air diving inspections
- Subsea visual surveys (divers)
- Underwater repair support
- Recovery & lifting assistance

OFFSHORE SPILL RECOVERY

- · Vessel oil boom operations
- Debris removal assistance
- Offshore transportation
- Environmental clean up

ONSHORE CLEAN UP

- Beach cleanup
- Onshore oil recovery
- Oil & debris disposal
- Beach restoration



CRANE LIFTING SOLUTIONS



CRANE LIFTING SOLUTIONS

WIDE SELECTION OF 100T -**600T CRAWLER CRANES**

(for onshore & offshore use)

- High specification crawler cranes
- 100t 1600t lifting capacity
- Kobelco, Sany and Hitachi-Sumitomo models
- Many near new models
- Can be used onshore and optionally offshore

HIGH CAPACITY 1250T CRAWLER

CRANE (suitable for renewables, onshore and offshore option)

- 1250t lift capacity (with Superlift option)
- 108m (max) boom length
- 17000t-m (maximum lifting moment) capacity (with Superlift option)
- Mercedes Benz (Euro Tier III) engine
- Porsche design cab with Red Dot A/C
- Ideal for renewables and long reach high-capacity lifting applications

VESSEL AND BARGE CRANE LIFTING SOLUTIONS (ideal for onshore, shipyard and offshore vessel lifting operations)

- 300t offshore pedestal Huisman crane (on Bridgewater Support 402 pax barge)
- 60t knuckle boom crane (on DP2 MSV Bridgewater Discovery)
- 1000t 3000t Shear leg lifting solutions (3rd party charter options)







OFFSHORE RENEWABLES SUPPORT

SERVICES INCLUDING:

High-capacity towing tug support (up to 150t bollard pull)

Anchor Handling Tug Support (AHTS) 45t to 130t bollard pull incl. DP2

DP2 MSV Geotechnical/Geophysical survey vessel support (with moonpool & drilling rig option + optional ROV and diving support)

Horizontal Directional Drilling solutions for shore approaches and environmental impact mitigation

Cable lay support options including shallow water cable lay assistance

Cable and pipeline trenching and burial solutions

SHALLOW WATER CABLE & UMBILICAL INSTALLATION SUPPORT SERVICES

- Offshore geotechnical drilling and soil sampling/testing services (including drilling, CPT, Vibro coring, drop & gravity test sampling)
- Extensive shallow water marine assets support including DP2 MSV, DP2/DP1 and non-DP tugs and transportation barges
- Wide range of Horizontal Directional Drilling (HDD) Equipment & Services (onshore / offshore)
- Shallow water cable lay equipment and installation solutions
- Trenching and burial solutions for cables, umbilicals and flexibles
- Cable, umbilical and flexibles repair
- Rock dumping and mattress protection installation
- Air diving and ROV support



ADRIA300 CABLE LAY BARGE

(currently under construction in Singapore)

DP2 Cable Lay Barge Specification Summary

300ft cable lay barge with DP2 and 6-point mooring system

 $91.5 \text{m} \times 27.5 \text{ m}$ with high deck strength (15 t/m2)

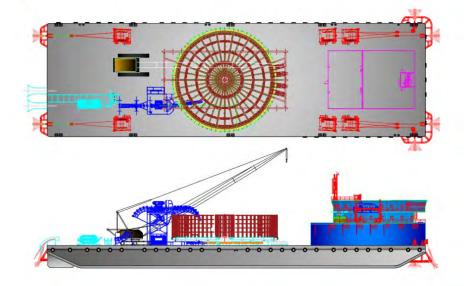
Suitable for cable and umbilical lay

3000t turntable for cable or umbilical product with 15t tensioner

Accommodation: for 60 persons

250-ton crawler crane

Shallow water capable





GEOTECHNICAL & SUBSEA CONSTRUCTION SUPPORT

BRIDGEWATER DISCOVERY

DP2 GEOTECHNICAL DRILLING SURVEY VESSEL

(with option to use for subsea construction support & trenching)



DP2 GEOTECHNICAL DRILLING SURVEY VESSEL

76m long x wide 20m beam Geotechnical vessel with large moonpool

Extensive vessel accommodation facilities with 59 pax capacity, recreation rooms, gym, offices and hospital facilities

Equipped with industry leading equipment for Geotechnical soil investigations including large laboratory

Heave compensated Twin Tower drilling rig for soil core sampling through moonpool

Advanced WILSON-ABB-Classic CPT + Manta 200 system for moonpool deployment

High performance Vibro and grab coring equipment

60t knuckle boom crane with constant tension winch and man-riding capability (Class approved)

High Accuracy Kongsberg 452 HiPAP system (with 4 x cNODE USBL transponders)

Optional use of DP2 vessel with moonpool for subsea construction support and/or trenching







GEOTECHNICAL SURVEY VESSEL (DP2 + MOORING)

Fully equipped geotechnical DP2 vessel (also with 4-point mooring)

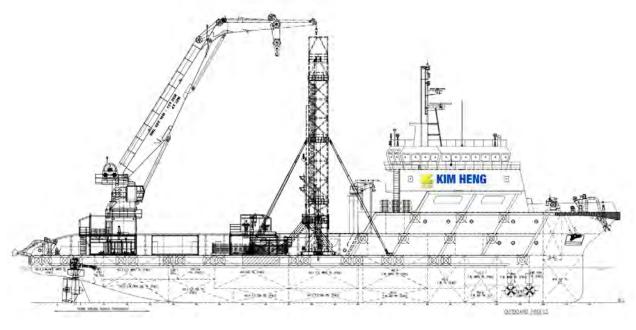
Advanced twin tower drill rig for soil core sampling down to 300m

Vessel equipped with industry leading CPT system

High performance Vibro Coring and Grab sampling systems

59 pax capacity and with large soil testing laboratory, offices & recreation rooms

Offshore 60t knuckle boom crane with constant tension winch & man-riding



Fully equipped Geotechnical Survey Vessel "Bridgewater Discovery"

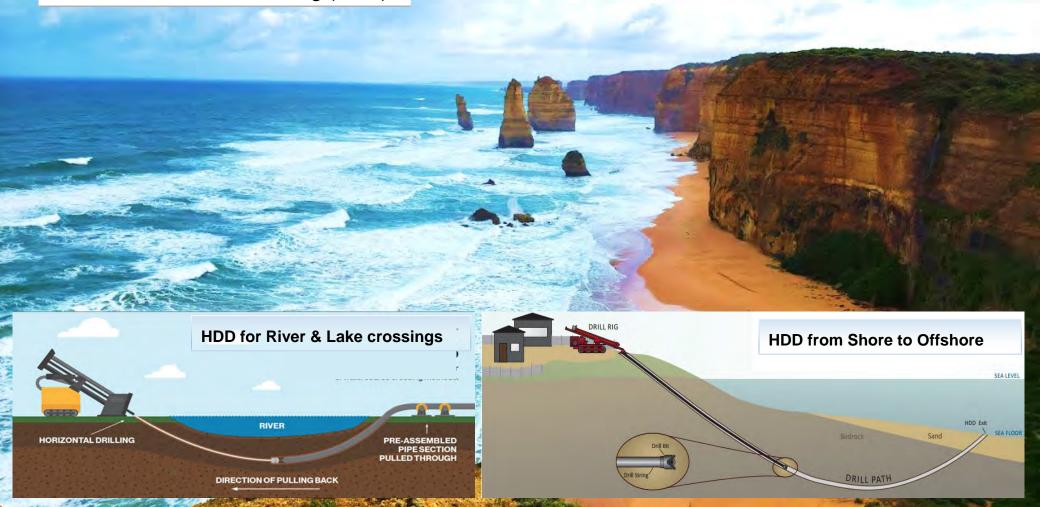


Large 5.4m x 4.8m moonpool

ADVANCED CABLE AND PIPE SHORE CROSSING SOLUTIONS

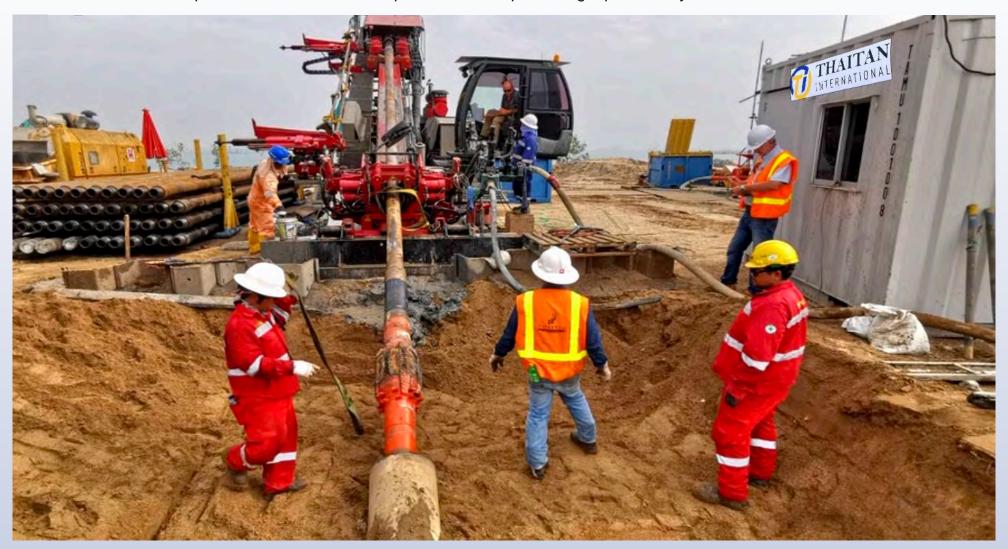
Direct Pipe Drilled Installation (DPI)

Horizontal Directional Drilling (HDD)



HORIZONTAL DIRECTIONAL DRILLING (HDD)

- o Owners of high-capacity HDD drilling equipment with an extensive track-record for successful HDD solutions in rock to soft clay and silt
- o HDD solutions safeguards against environmentally damaging and higher cost open cut trench alternatives
- o Minimizes surface disruptions and environmental impacts as well as preserving aquatic ecosystems and critical habitats



HORIZONTAL DIRECTIONAL DRILLING (HDD)

Successful HDD drilling and shore crossing solutions for oil & gas industry, communications, power distribution and renewables

HDD solutions mitigates environmental impacts and avoids open trench

Up to 2km drilled in single length

Drill hole diameter ranging from 6" to 65"

Over 300 HDD drills successfully performed including 64" drill hole with 30 different products in single bundle



DIRECT PIPE DRILLING SOLUTIONS

Combines benefits of HDD & Micro tunneling

Lower risks, quicker & more cost effective

One-pass solution, no back reaming required

Suitable for any soil condition

No requirement for casing pipe/bore hole liner

26" to 60" dia. pipe size

Up to approx. 1700m drilling distance





DIRECT PIPE DRILLING SOLUTIONS

New state of the art Direct Pipe Drilling equipment for lower risk crossing solutions (combining some of the best qualities of micro tunneling and HDD while avoiding some of their drawbacks)



OFFSHORE HDD & DPI DRILLING MARINE SUPPORT

Full Marine Vessel Support Spread for HDD & DPI Drilling Operations

Support Services and Marine Assets including, barges, tugs, crew boats, cranes & IMCA approved dive systems etc.



PIPELINE & CABLE SHORE PULL-IN SOLUTIONS





Pipeline and Cable Shore Pull-In Solutions

400t linear shore pulling winch available

Selection of buoyancy options

Nearshore pipe & cable burial equipment

Support barges and vessels

Air Diving Equipment & Support



TRENCHING AND BURIAL

Proven Pipeline and Cable Trenching Solutions

High performance & high-capacity jet trenching

Trenching solutions from shore to offshore

Extensive track record including trenching to 9m+

Free span rectification solutions











SUBSEA CABLES, UMBILICAL & FLEXIBLES INSTALLATION



Simultaneous cable lay and trenching solutions

400t Hub Reel Drive System for cable, flexibles & umbilical lay

Selection of cable and pipeline lay tensioners available

Cable repair and burial solutions

J-Tube cable pulling and hook-up support

Wide range of marine support barges and vessels available





ROCKDUMPING & TRANSPORTATION SOLUTIONS

(barge currently under final construction)

SHALLOW WATER FALLPIPE ROCK DUMPING BARGE

100m x 30m rock dumping barge (under development)

4300m3 rock capacity

Fallpipe system for accurate rock placement

Fallpipe can move horizontally 40m hydraulically to cover full width of typical rock berm width

Komatsu PC 1250 excavator with extended arm

8 point mooring system

Shallow draft (est. 1.75m to 3.9m fully loaded)



MATERIAL / DREDGING TRANSPORTATION SOLUTIONS

SELF PROPELLED SPLIT HOPPER BARGE

(build recently completed in Kim Heng Singapore shipyard)

Design & build solutions for innovative split hopper barge vessels

Fast, reliable and maneuverable split hopper barges

Suitable for accessing small and shallow water Ports

Convenient sea transport of dredged materials, soil, rock and waste

Typically, 500m3 hopper material capacity ++



















