



CORPORATE SUMMARY PRESENTATION

BUILDING A STRONG FUTURE

(TOWARDS GREENER WATERS)





COMPANY KEY METRICS SNAPSHOT

55 YEARS IN ASIA
 **KIM HENG**

Established in 1968

300+ Employees

Two established waterfront shipyards in Singapore

Offices in Malaysia, Singapore, Korea, Thailand & 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, HDD drilling solutions, pipeline and cable trenching)



COMPANY KEY SERVICES



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)

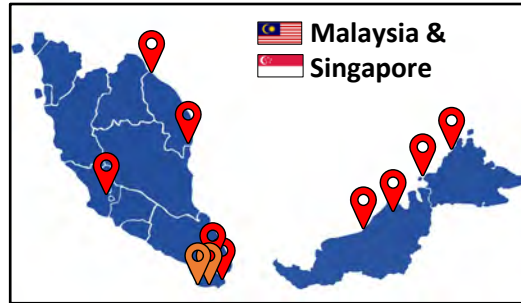
Offshore Construction Support

GROUP LOCATION MAP



LEGEND

- Offices & Agency (Malaysia + Singapore)
- Shipyards
- Local Presence
- Ongoing establishment



GROUP SUPPORT SERVICES



**Shipyard Services
& Repairs**



**Subsea Construction
Support**



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



Ocean Towing



**New Vessel Builds
& Modifications**

SHIPYARD AND FABRICATION SERVICES

Two well established waterfront shipyards

Combined yard area of more than 53,000m²

More than 200m combined waterfront quayside

Advanced welding and material handling facilities

Vessel shipyard repairs & barge and vessel slipping facilities

New build vessel and barge track record

Strong module fabrication capability



SHIPYARD AND FABRICATION SERVICES



NEW VESSEL BUILDS



MODULES



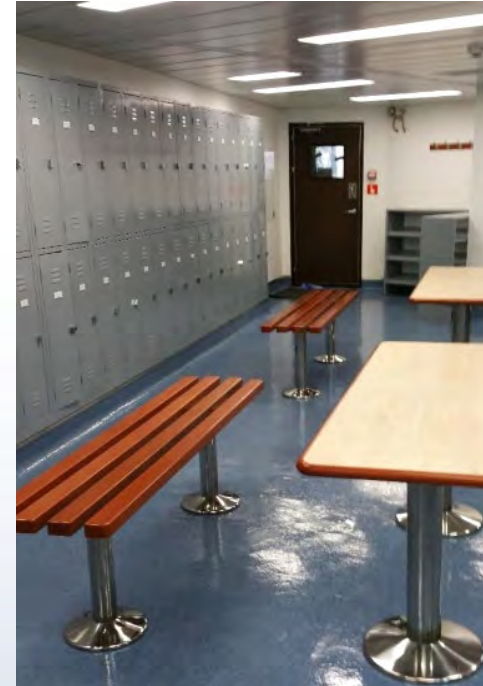
OFFSHORE STRUCTURES



BARGE CONSTRUCTION

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)

DP2 120 pax Multipurpose Support Vessel (with moonpool)

Shallow water DP2 cable lay barge (under construction)

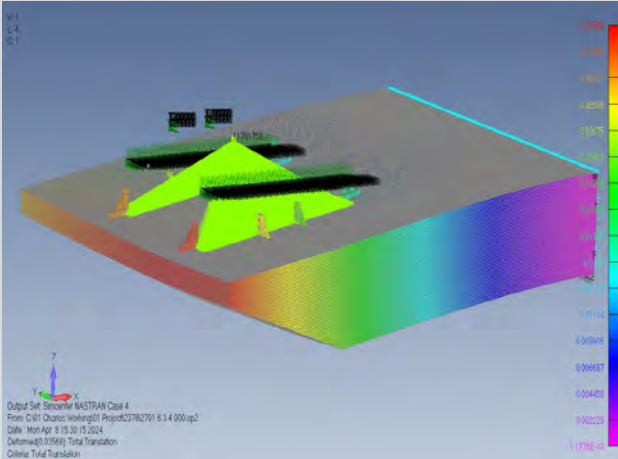
Rock dumping barge and rock hopper split barges

Selection of Tugs & Barges for materials and structures transportation

Supply/crew boat

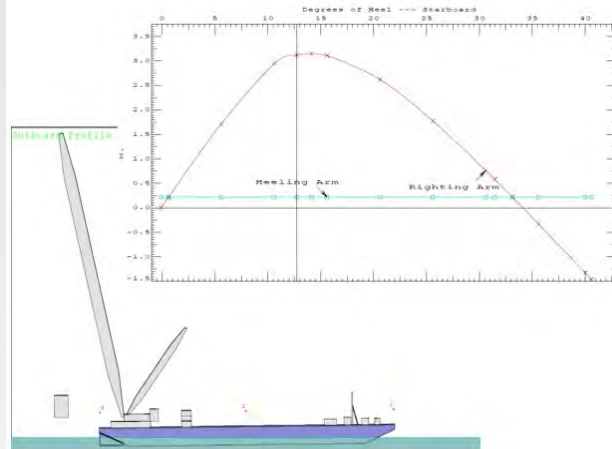
ENGINEERING & NAVAL DESIGN SERVICES

STRUCTURAL ENGINEERING



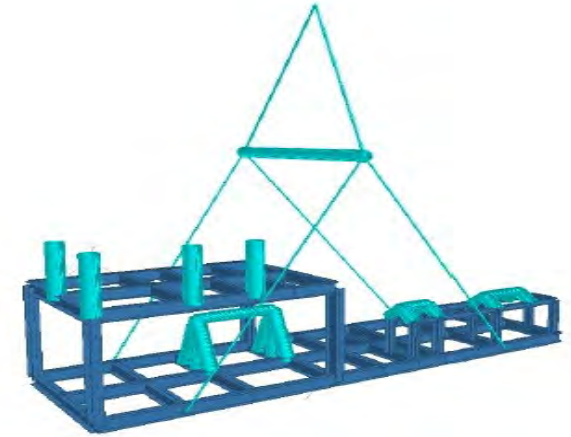
- Steel Structure Design
- Global Strength Analysis
- Local Strength Analysis
- Structural Optimization
- Fatigue Analysis
- Impact Analysis
- Vibration Analysis

NAVAL ARCHITECT DESIGN



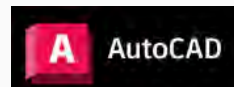
- Vessel Intact & Damage Stability
- Vessel inclining Experiment
- Dead weight Survey
- Ballasting Calculations
- Vessel / Barge Loading Assessments

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

* Certain scopes may be in collaboration with external consultants.

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

DP2 MULTIPURPOSE VESSEL MSV (with moonpool)



- DP2 Multi Purpose Support 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 HIPAP USBL 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

TUGS & TOWING



20t – 156t Bollard Pull Tugs

1,600BHP - 12,000BHP Capacity

DP2, DP1 and Non-DP tug options

Ocean Towing Solutions

Tug and Barge combinations (100ft - 400ft)



TRANSPORTATION BARGE SOLUTIONS

80ft – 330ft size TRANSPORTATION BARGES

Range of transportation barges
available

80ft – 330ft 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



PORT AGENCY AND LOGISTICS



MARINE & PORT AGENCY SERVICES

- Port Harbour Towing & 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



SUBSEA CONSTRUCTION SUPPORT

- 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

**WIDE SELECTION OF CRANES
AVAILABLE**

1,250t, 600t, 400t, 280t & 100t capacity
Many new or near new units



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)

- 600Ton crane barge, Kim Heng 280
- 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



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
- 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

91.5m x 27.5 m with high deck strength (15t/m²)

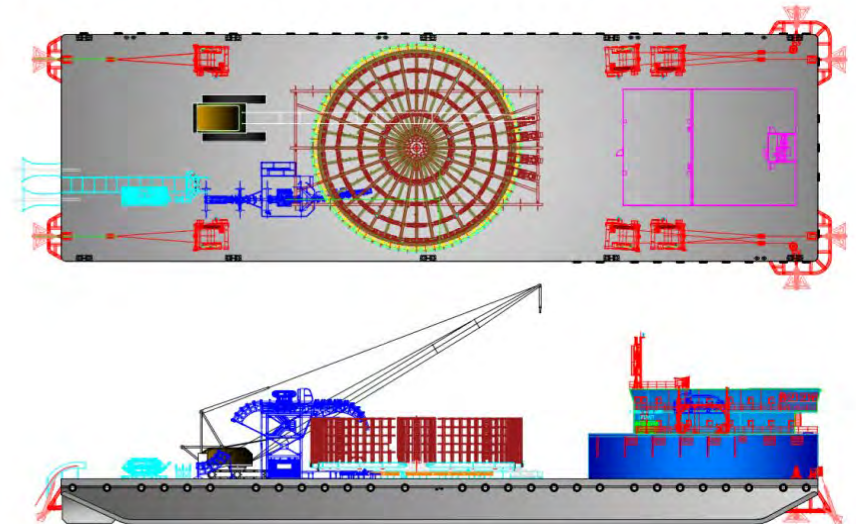
Suitable for cable and umbilical lay

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

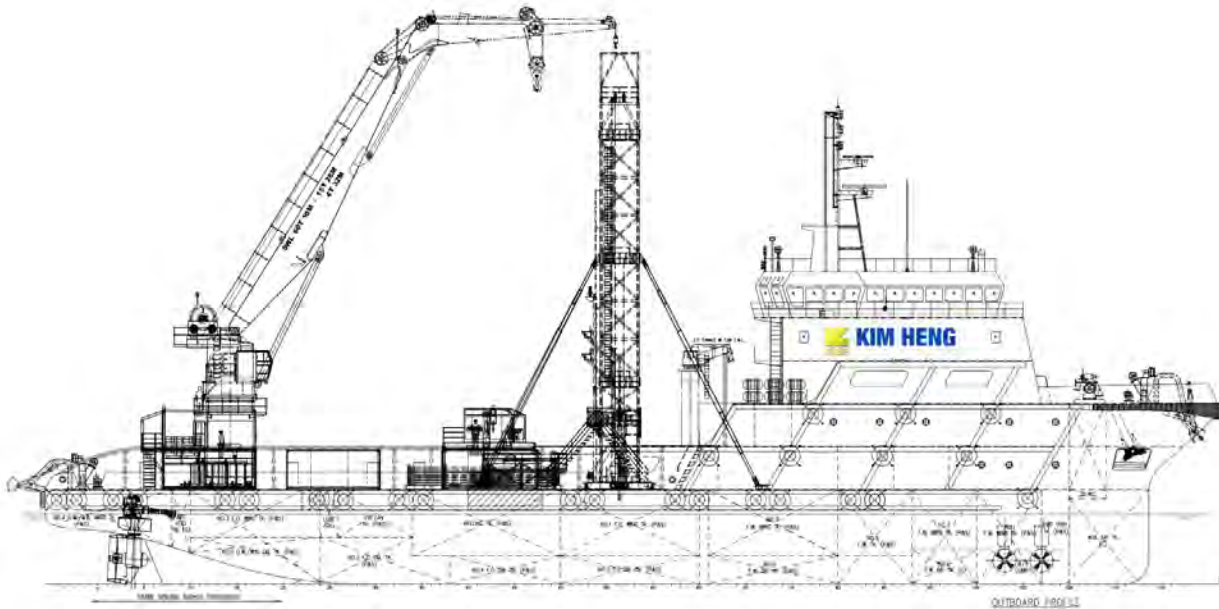
High performance Vibro Coring and Grab sampling systems

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

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



Large 5.4m x 4.8m moonpool



Fully equipped Geotechnical Survey Vessel *“Bridgewater Discovery”*

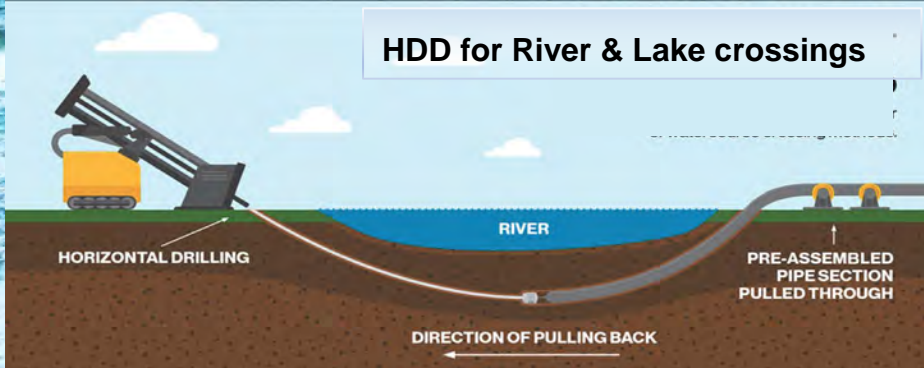
ADVANCED CABLE AND PIPE SHORE CROSSING SOLUTIONS

Direct Pipe Drilled Installation (DPI)

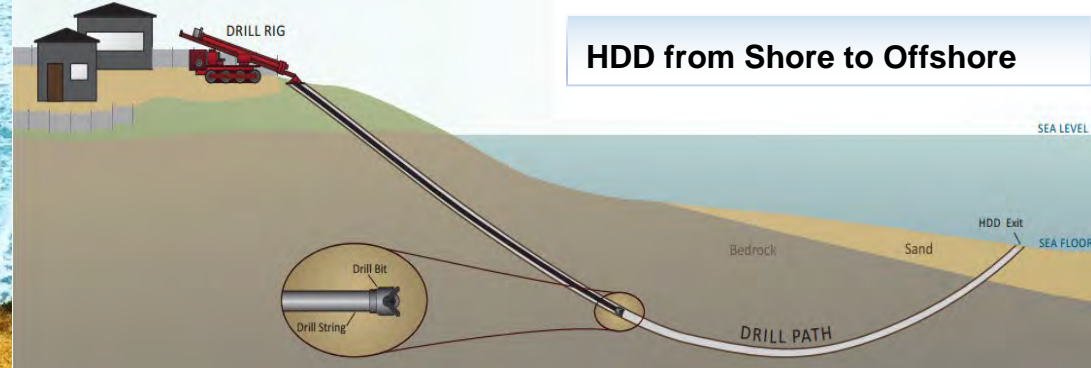
Horizontal Directional Drilling (HDD)



HDD for River & Lake crossings



HDD from Shore to Offshore



HORIZONTAL DIRECTIONAL DRILLING (HDD)

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



HORIZONTAL DIRECTIONAL DRILLING (HDD)

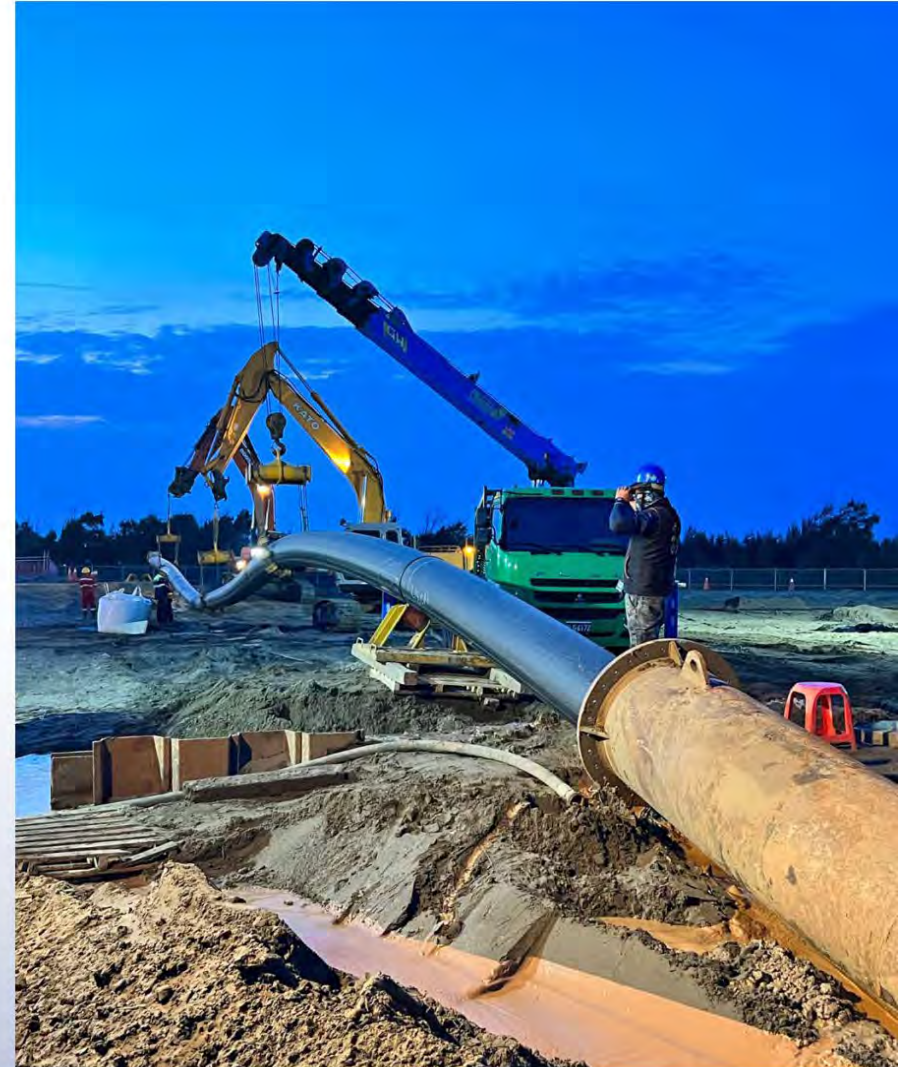
Successful HDD drilling and shore crossing solutions for oil & gas industry, communications, power distribution and renewables

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

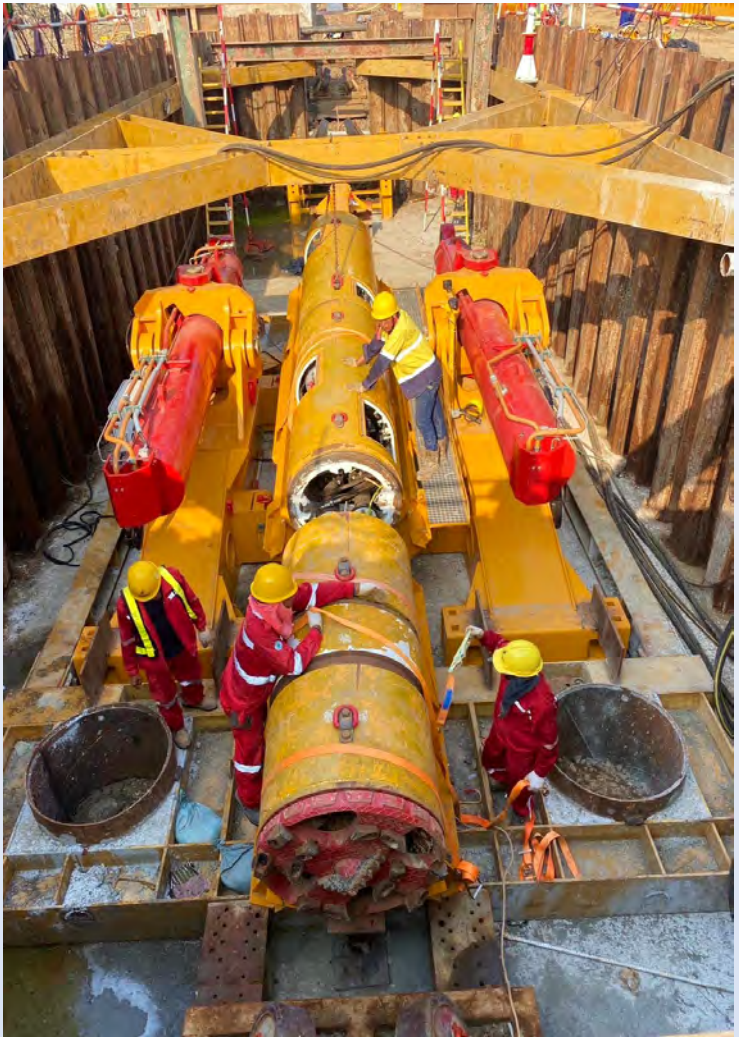
26" to 60" dia. pipe size

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 etc.



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 ++





THANK YOU

Part of the
KIM HENG
Group

 **THAITAN**
INTERNATIONAL

 **ADIRA**
RENEWABLES

 **BRIDGEWATER**
OFFSHORE PTE LTD

 **MAZU OFFSHORE**

 **RUHMMAZU**

 **ALPINE MARINE**
FURNISHINGS