



KCTC E&T Co., Ltd.

Company Profile



Navigating Innovation In Marine Design

www.ket.engineering



*Foundation day of KET at KCTC head office

WELCOME TO KET

KCTC E&T CO., LTD. (KET)

Founded in 2024, KET was established as a strategic extension of KCTC's legacy, which dates back to 1973. Building on KCTC's decades of expertise in logistics, container handling, and heavy transportation, KET focuses on marine engineering and design. Our mission is to lead the industry in innovation and excellence, offering specialized solutions in marine and offshore engineering. With a strong foundation in technical know-how and a commitment to advancing technology, KET aims to be your trusted partner in delivering cutting-edge solutions that drive your success and shape the future of marine engineering.

Why Choose us?

At KET, we provide turnkey solutions for heavy marine transportation and design, adhering to South Korea's standards of precision, quality, and strict deadline compliance. Having engineering database of multiple vessel ensures accurate, customized planning from the project pre-FEED stage to final delivery. With meticulous attention to detail and competitive pricing, we deliver reliable, high-quality results powered by South Korean excellence. Choose KET for a seamless, superior marine engineering service.

- High quality and cost effective
- Expertise in diverse engineering fields
- Global experience
- International standard
- In-house IT team
- One stop solution
- Customer first mentality
- Proven track record

KEY PERSONS:



MHB HABIB
CEO, Head of Heavy
Marine Transport.
10+ yrs experience
in Naval Architecture.



FRANK VAN HOORN
Technical Advisor
40+ yrs experience in
marine engineering

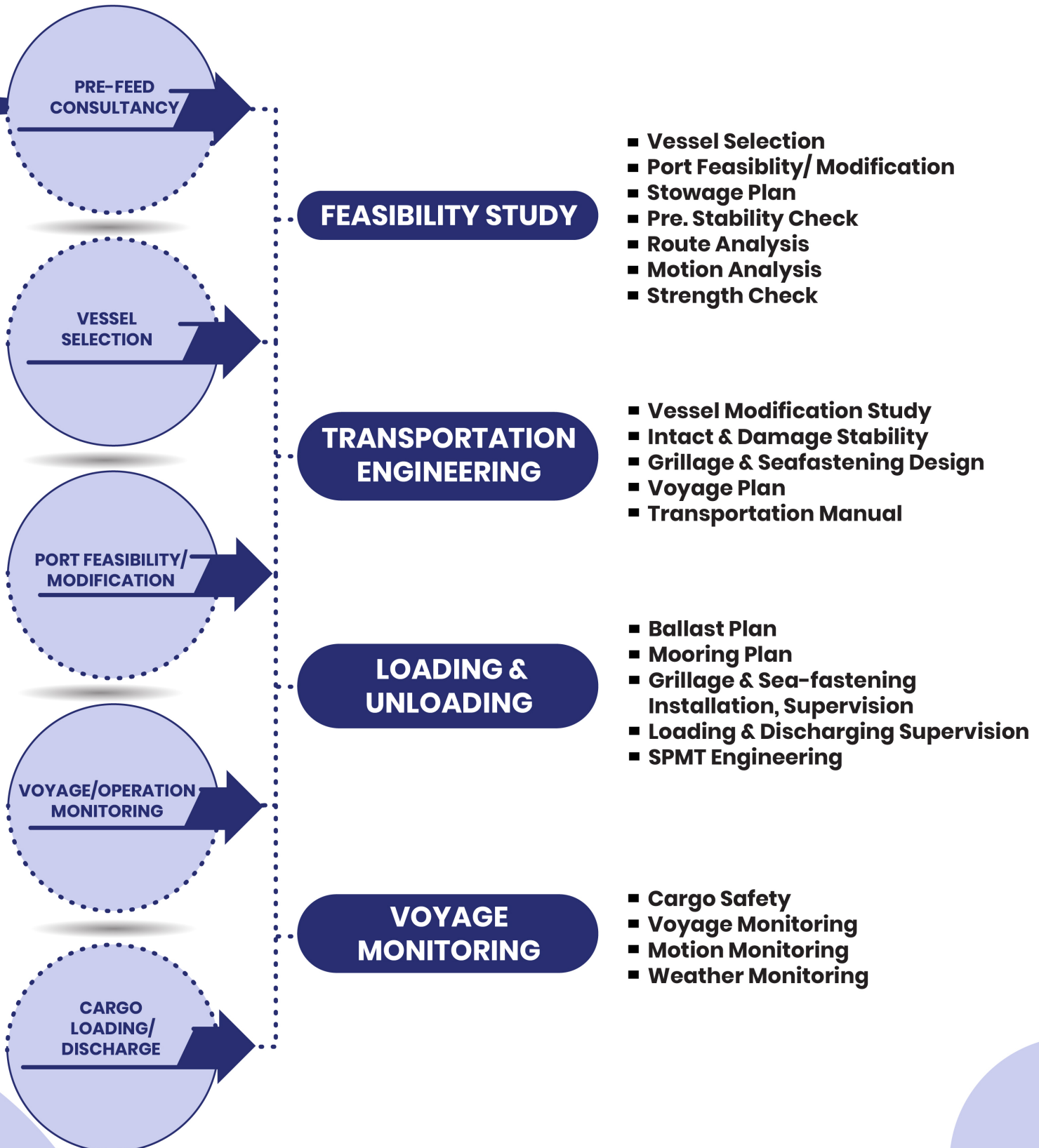


SUNG-KYUN CHO
Technical Advisor
Licensed Naval Architect
30+ yrs experience in DSME



WON-PYO JUNG
Head of Land Operation
25+ yrs experience in
SPMT & Lifting in KCTC

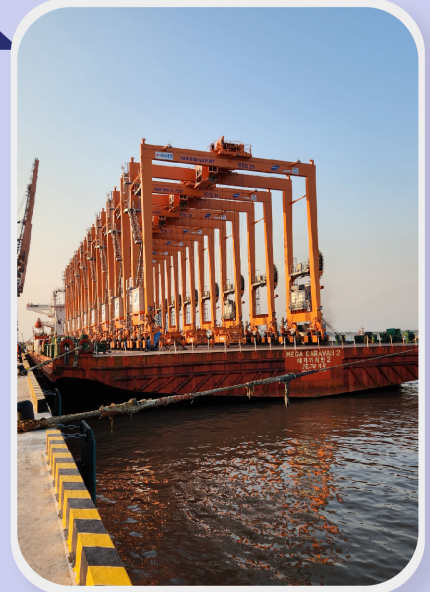
“TURN KEY” Marine Engineering “AtoZ” Consulting



OUR SERVICES

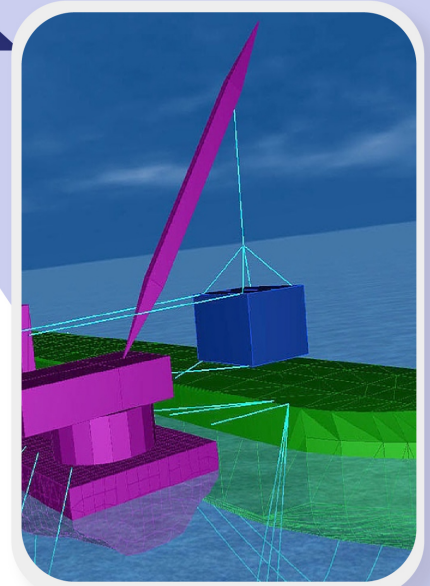
HEAVY MARINE TRANSPORTATION ENGINEERING

- Vessel / port selection, feasibility consultancy
- Shipment optimization
- Vessel stability
- Loading / unloading analysis (RO-RO / LO-LO / FO-FO)
- Mooring plan and analysis
- Motion response (Acc/RAO)
- Transportation manual
- Cargo loading unloading supervision



DYNAMIC ANALYSIS & CFD

- Analyze stability and motions of floating structure (including multi body) in frequency domain using 3D diffraction analysis.
- Can consider full dynamic environment for any floating systems.
- Integrated analysis with lifting slings, anchor lines, mooring lines, non-linear springs, pins, fenders and items that connect multi bodies or with the ground.
- CFD for estimating marine hydrodynamics, sea-keeping simulations.



OUR SERVICES

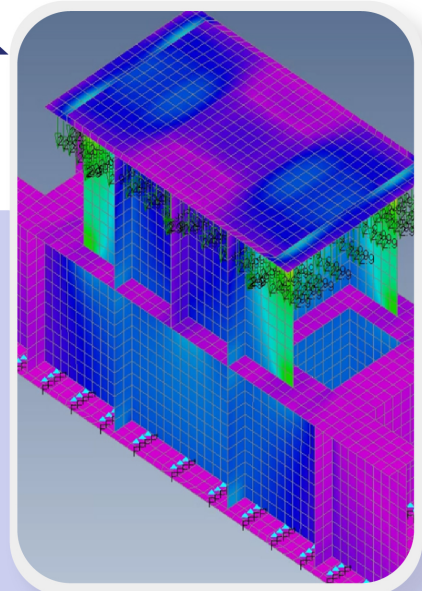
MARINE SURVEYS

- Marine warranty surveys for transportation.
- Loading/unloading port survey
- Ship, barge, crane, spmt condition survey.
- On/off-hire survey.
- New building / steel construction survey.



STRUCTURAL ANALYSIS

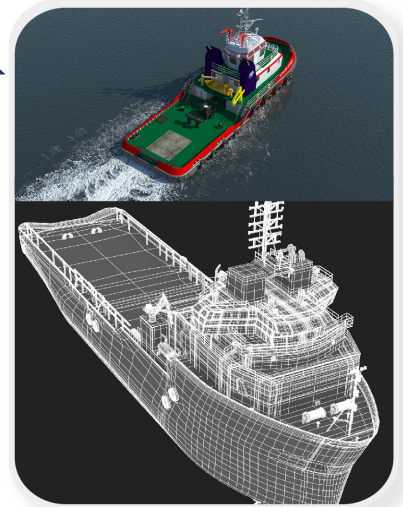
- Grillage and lashing / sea-fastening design
- Vessel deck strength
- Material procurement and construction supervision
- Vessel strengthening / modification engineering
- NDT / QC engineering



OUR SERVICES

ENGINEERING GRAPHICS & ANIMATIONS

- 2D graphics
- 3D modelling of ships, cargo.
- 3D animations presenting engineering methodology, process
- Graphical presentation of engineering projects



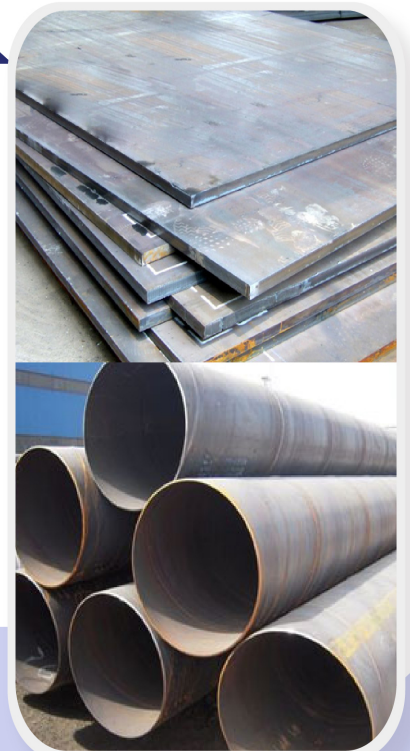
SERVICE ON DEMAND

ENGINEERING IT

- Web based engineering tool
- Automation in reporting
- Software for marine transportation
- Making on demand macro

MATERIAL SUPPLY

- Negotiations
- Optimization
- Preparation
- Survey
- Sourcing
- Pre procurement inspection



OUR CLIENTS



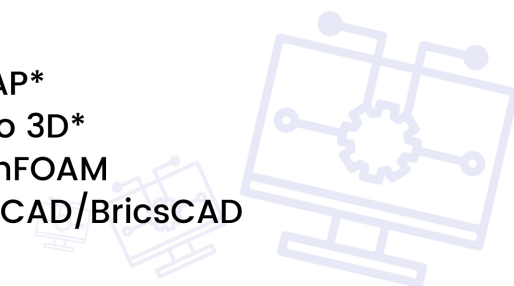
PROJECT NAME	CARGO	CLIENT / PROJECT OWNER
New Gasification Plant ,Singapore	RTG Crane	Linde, Germany
Consolidate Linde Shipment, China	Column, Transformed	Linde, Germany
Gallaf 3, Qatar	Module	HMC, Netherlands
Marjan, Saudi Arabia	Jacket, Boat landings	HMC, Netherlands
P78 FPSO, Indonesia	Topside Module	Seatrium, Singapore
Empire Wind, US	Jacket, topside	HMC, Netherlands
Costal Virginia offshore wind farm, US	Monopiles	DEME, Belgium

SOFTWARE WE USE

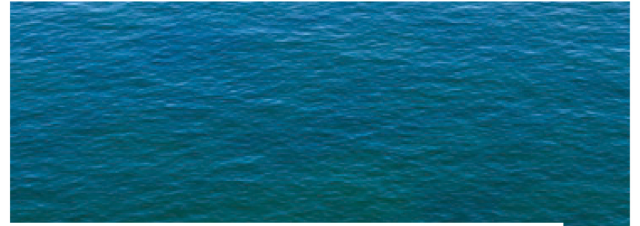
- Moses
- Octopus
- Optimoor
- Cyloader

- FEMAP*
- Rhino 3D*
- OpenFOAM
- AutoCAD/BricsCAD

*Outsource/used by KET's sub-contractor



KEY MILESTONES & CHALLENGES



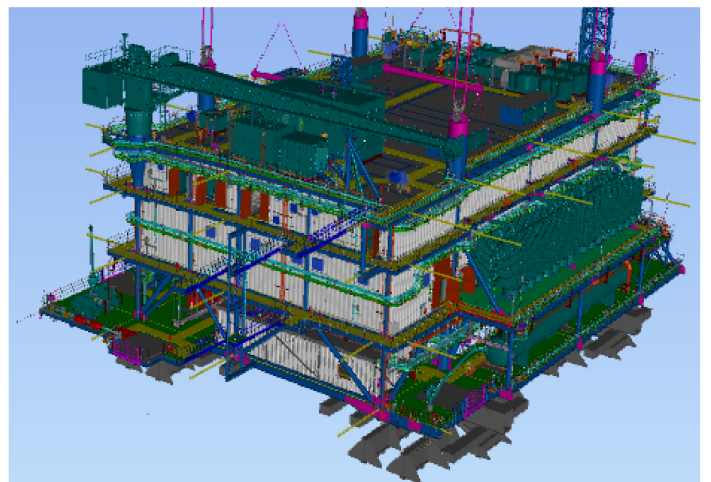
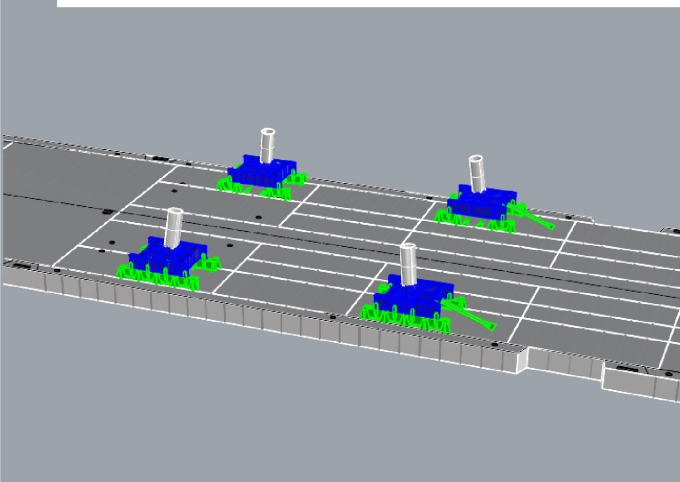
Coastal Virginia Offshore Wind Project – Monopile Transportation With DEME

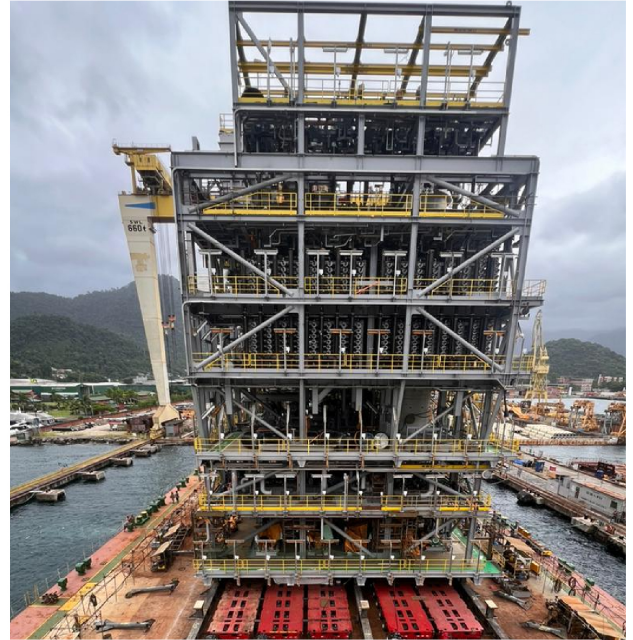
KET engineered the sea-fastening design for transporting 137 monopiles from Rostock, Germany, to Norfolk, USA, on the Mega Caravan 2. The design supported 6 monopiles per shipment and was flexible to accommodate any loading order. It also allowed aft monopiles to be inserted into forward ones, requiring detailed insertion and fatigue analysis to ensure safety and durability. KET conducted thorough risk assessments, addressing design, construction, and operational challenges, delivering a secure and efficient transport solution for DEME.



Empire Wind – Jacket/topside Transportation Project With HMC

KET conducted an integrated transportation analysis for the Empire Wind project with HMC, overseeing the transport of a 4,156-ton topside and a 4,200-ton jacket in two shipments. The team tackled challenges with loading these massive structures on a carrier with limited capacity by analyzing the vessel's structural stability. Using MOSES and OCTOPUS tools, We optimized RAO and motion acceleration data. KET also coordinated the offshore mooring system for secure anchoring alongside the 'Thialf,' ensuring safe and successful transport of the cargo.





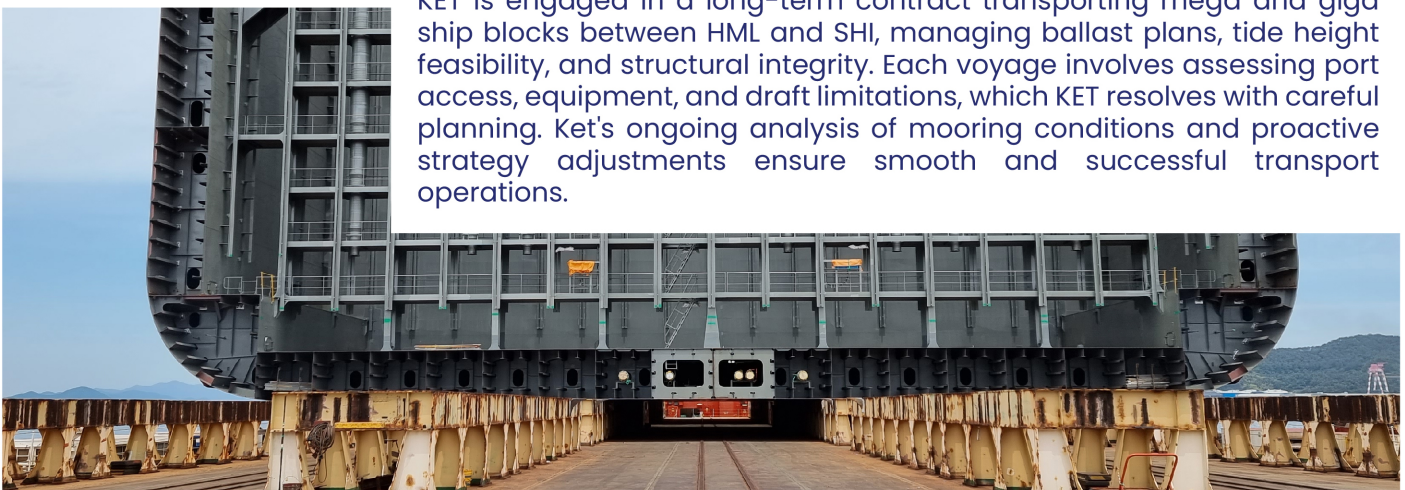
P78 Project – Topside Transportation Project With Seatrium

KET successfully led transportation engineering for a project at the BrasFELS yard, Brazil. This included developing ballast plans and navigating vessel access at a port with limited draft by carefully analyzing tide heights. KET supervised grillage installation and coordinated the entire process, ensuring smooth communication, onsite issue resolution, and project execution.



Megablock Transportation Project With SHI & HML

KET is engaged in a long-term contract transporting mega and giga ship blocks between HML and SHI, managing ballast plans, tide height feasibility, and structural integrity. Each voyage involves assessing port access, equipment, and draft limitations, which KET resolves with careful planning. Ket's ongoing analysis of mooring conditions and proactive strategy adjustments ensure smooth and successful transport operations.





Singapore New Pitch Gasification Project With LINDE

KET took over an ongoing project between HML and Linde, stepping in without access to existing resources. We quickly integrated into the project, leveraging our high-quality transportation engineering expertise to ensure smooth and hassle-free operations. This successful transition demonstrated KET's capability to handle complex global projects and effectively coordinate among multiple stakeholders, reinforcing our reputation for excellence in navigating intricate logistical challenges.



GEARED FOR SUCCESS
NAVIGATE CHALLENGES
WITH
KET



SERVICE COST ESTIMATION

ITEM	FREE	ADVANCED	PREMIUM
Stowage proposal	O		
Berthing feasibility	O		
Vessel feasibility		O	
Grillage and sea-fastening concept		O	
Grillage and sea-fastening report			O
Vessel feasibility		O	
Vessel deck strength check		O	
Mooring plan	O		
Mooring analysis		O	
Stability check / voyage condition		O	
Motion analysis using 3D diffraction analysis			O
Cargo reaction load			O
Ballast plan			O
Lifting plan			O
Pre-heeling condition			O
Rigging calculation			O
Route analysis including Hs selection			O
Site supervision			O
Motion monitoring			O
3D visualization			O
Integrated transportation manual			O
SPMT calculation			O
MWS comment resolution			O
Survey			O
NDT/QC engineering			O

*For advanced & premium services contact us for pricing.

*Premium includes all advanced service.

GET IN TOUCH



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