

**Offshore Structure Design.
Transportation and Installation
(T&I) Engineering.**



**Your Success
Our Value**



About Us

First found in 2007, OceanTech Consultants Pte Ltd has been serving APAC oil & gas market for several years, focus on Jack-up rig design as well as marine transportation engineering, and now, new setup as Oceantec Consultants Pte Ltd, we aimed to support our existing and new clients in energy development, both in O&G and renewal sector.

Oceantec is a home of naval architects and engineers with deep experiences in all types of marine operations and assets, with a particular focus on naval architecture, structural engineering and marine systems design, provide engineering solution on FPSO conversion, MOPU conversion, T&I engineering and ensure your project success.

Based in Singapore, an international hub of marine and offshore industry, we connect you to international market and supply chains, help you handling Class approval, and most important, find right people as your project need.

Our people has experience across marine and offshore market sectors:

- Naval architects
- Structural engineers
- Marine systems engineers
- Stability Analysts
- Hydrodynamicists
- Mooring engineers
- Pipeline engineers
- Cable & Riser engineers
- Electrical engineers
- Grillage & Seafastening Designers
- Met-ocean Expertise
- Geotechnical engineers
- Master Mariners



Software Resources

Oceantec has access to the latest version of a wide range of industry-recognized software:

- GHS – Stability, ballasting and global strength analysis
- ORCAFLEX – Cable, riser and mooring design and installation engineering
- DNV SESAM – Software suite for structural and hydrodynamic analysis of ships and offshore fixed and floating structures, including mooring and riser systems.
- ABS EAGLE FPSO – Hull scantling evaluation, global hull strength and fatigue assessment
- ABS OSAP - Offshore Structure design wave calculation; global strength assessment; and buckling and ultimate strength evaluation
- FEMAP/NASTRAN – Structural Finite element analysis
- SACS – Design and analysis of offshore structure
- STAAD – Fixed structure design and analysis
- AUTOCAD – 2D/3D drafting
- OPTIMOOR – Quayside Mooring
- Caesar II – Pipe stress analysis
- DP Assessment In-house Software (Cover DNV Level 1 to Level 3 DP capability)

Our Business

Engineering Services

- Hull Global Assessment
- Steel Renewal Design
- Hull Structural Design
- Hull Interface Structure Design
- Flare Tower Design
- Riser Porch Design
- Finite Element Analysis
- Fatigue Assessment
- Permanent Mooring System Design
- Hydrodynamic Analysis
- Wave Slam & Green Water Analysis
- Stability Analysis
- Site Specific Assessment
- Vibration Analysis
- Marine System Design

Project Management

- EPC Project Management
- Owner Representative
- Bidding Support
- Project Planning and Execution
- Project coordination
- Cost Studies

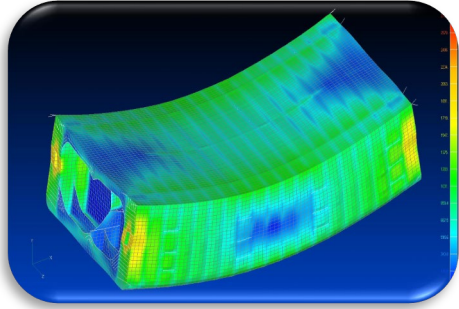
Marine Operation Support

- Stability and Ballast Plan
- Model Test & Motion Analysis
- Mobile & Quayside Mooring Analysis
- Drilling Riser Analysis
- Pipe & Cable Laying / Pull Analysis
- DP Capability Assessment
- Skidding / SPMT Loadout Engineering
- Towing / Dry Transport Engineering
- Dynamic Lift Analysis
- Operability Analysis
- Met-Ocean Studies
- Seafastening & Grillage Design
- Jacket Launching Analysis
- Topside Float-over Engineering
- Geotechnical Studies
- Site Attendance / Supervision
- Salvage Engineering Support

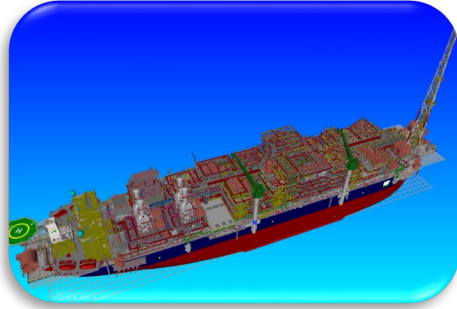
Expert Witness

- 3rd Party Independent Study
- Root Cause Analysis
- Dispute Case Support
- Expert Witness

Engineering Services



Hull Global
Assessment / RBI



FPSO/FSO
Conversion



Hull Interface,
Seafastening



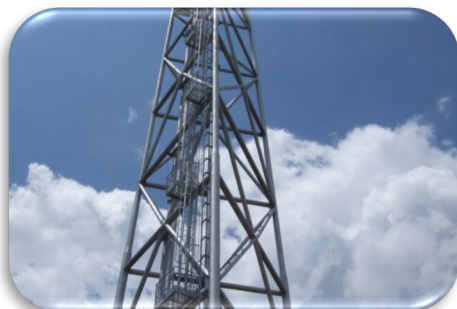
MOPU Conversion/
Fixed Plfm Design/



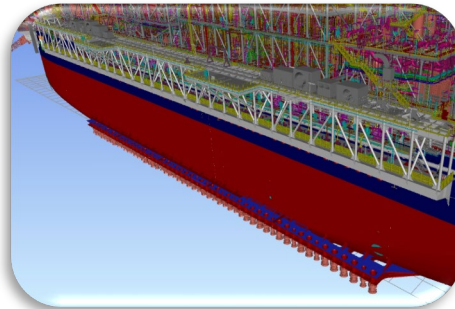
Marine System /
Pipe Stress



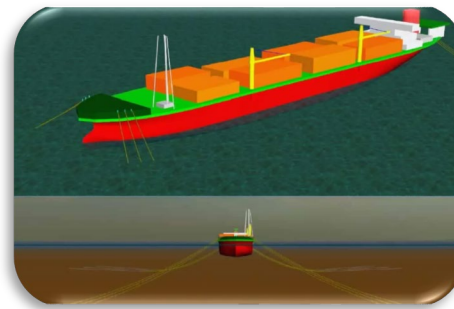
Mooring Porch /
Fairlead Support



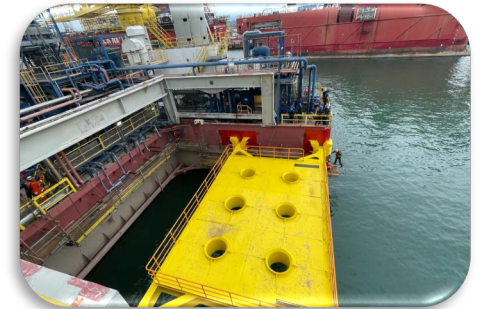
Flare Tower Design
/ Fatigue Analysis



Riser Porch Design



Mooring,
Hydrodynamics



Stability Analysis

Project Management

- EPC Project Management
- Owner Representative
- Bidding Support
- Project Planning and Execution
- Project coordination
- Yard Engineering & Site Attendance



Marine Operation Support



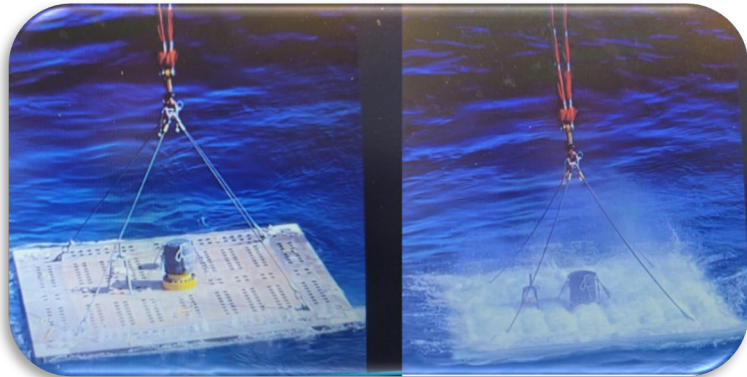
Offshore Installation / Attendance
/ Marine Lifting Planning



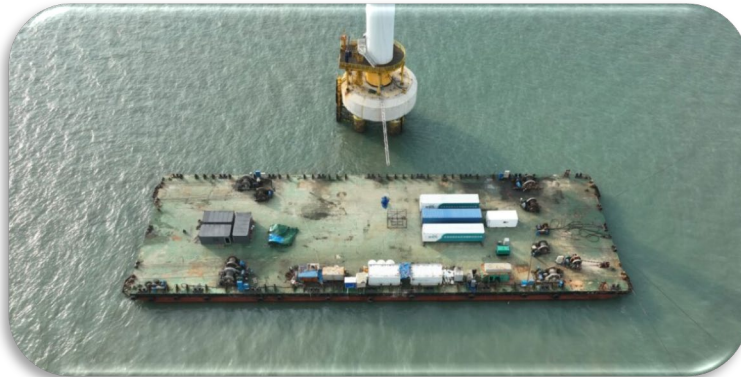
Met-Ocean Study



Transport & Installation (T&I)
Engineering



Dynamic Offshore Lifting /
Lowering Analysis



Geotechnical Study

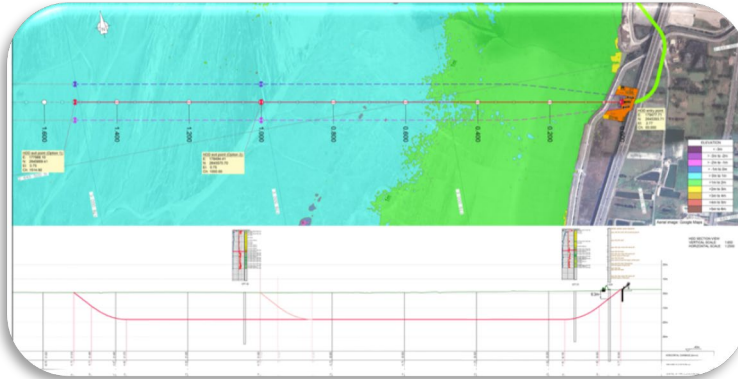


Motion Analysis / Gangway
Workability / DP Capability

Marine Operation Support – Renewable



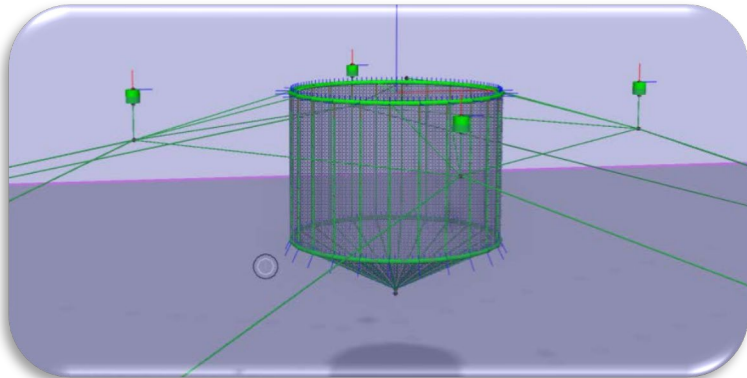
Converter Substation Floatover



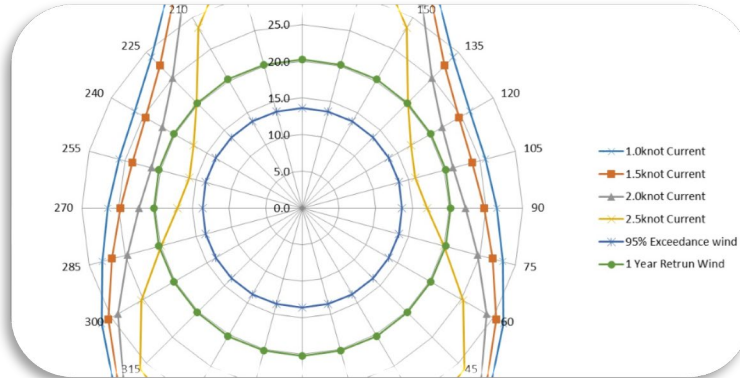
Cable Shore Pull



HDD Engineering



Fishfarm / Floating Solar Mooring



DP Capability

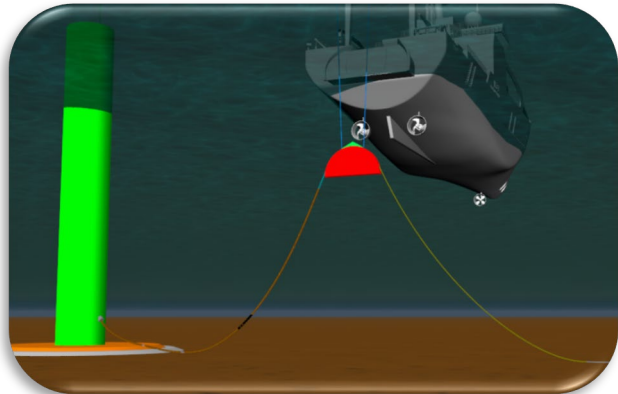


Floating Wind Turbine Mooring

Marine Operation Support – Cable Engineering

Cable Installation Engg

- Cable routing
- On-bottom stability study
- Dynamic Lay Analysis
- 1st end and 2nd end pull-in
- Landfall pull-in
- Cable Burial Risk Assessment (CBRA) and Burial Assessment Study (BAS)
- Cable Crushing Assessment
- Station keeping / Mooring
- Cost Study



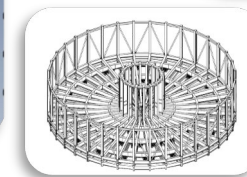
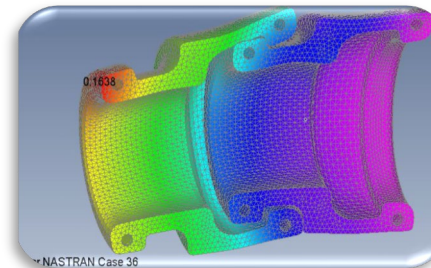
Cable In-Place Analysis

- Cable Protection System (CPS) ULS, FLS VIV analysis
- Free span and VIV study
- Stabilisation remedial design (rock berm, rock dumping)



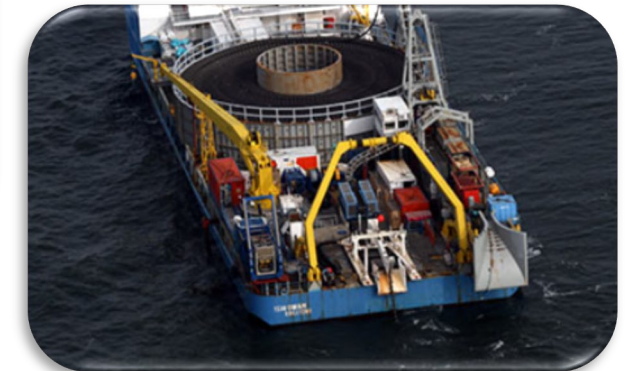
Cable Repair Engg

- Barge mobilisation
- Back deck layout
- Equipment specification
- Chute and Quadrant design
- Seafastening design
- Project management



Cable Laying Vessel

- New build and conversion design
- Back Deck Layout
- Vessel mobilisation engineering
- Motion criteria for equipment specification
- Carousel Design / Integration



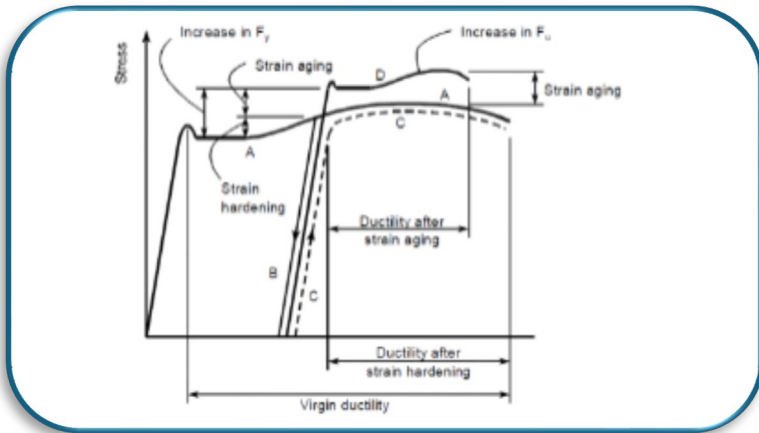
Expert Witness



Expert Witness



Root Cause Analysis



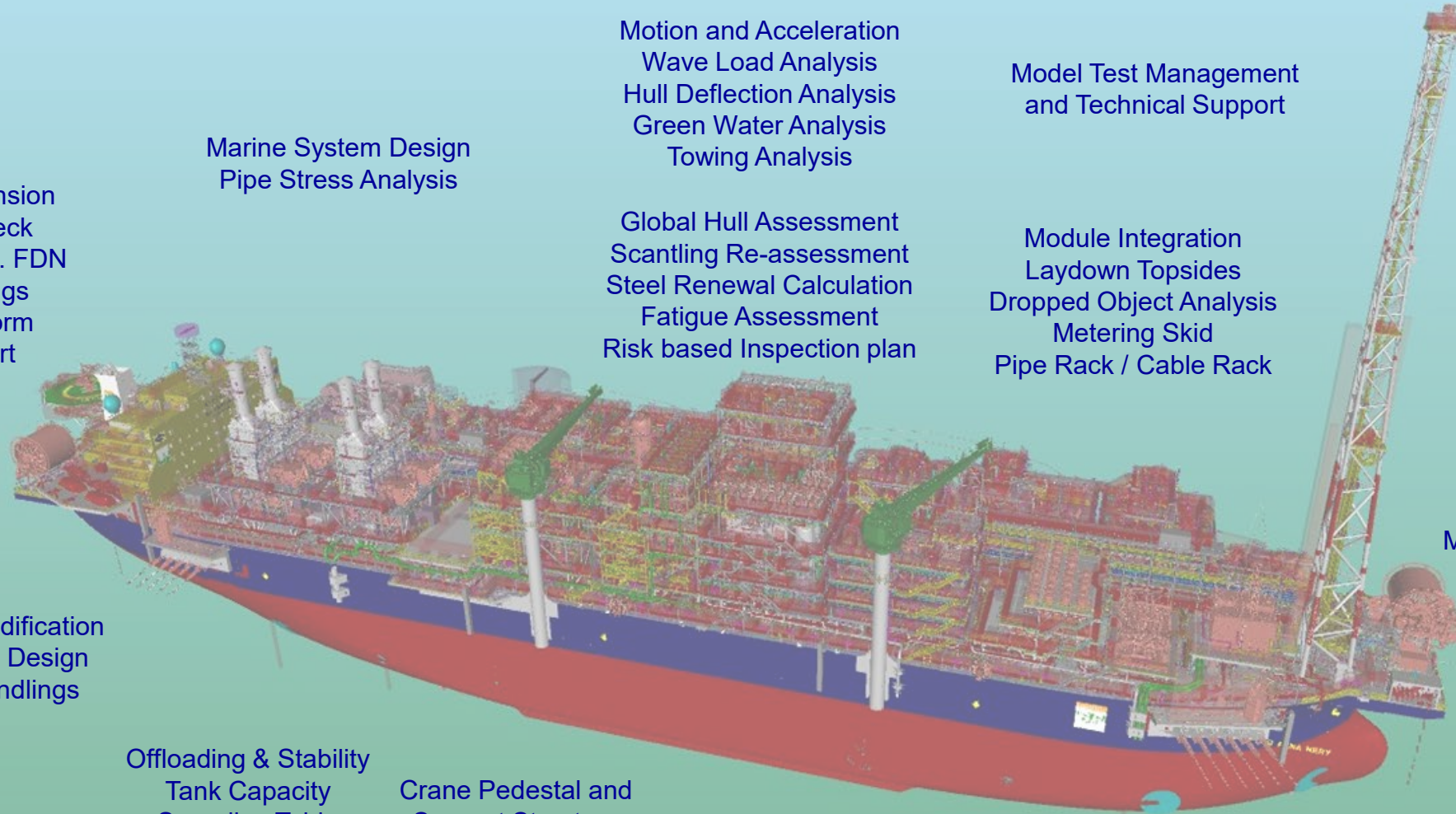
Dispute Case Expertise



3rd Party Independent Analysis

Sample FPSO Conversion Project Scopes Done by Oceantec Consultants

Basic design and Detail design of Naval and Hull Engineering, Construction Support, Design Approval Coordination



AFT Deck Extension
LQ and Helideck
Offloading Equip. FDN
Mooring Fittings
Lifeboat platform
Davit Support

Marine System Design
Pipe Stress Analysis

Motion and Acceleration
Wave Load Analysis
Hull Deflection Analysis
Green Water Analysis
Towing Analysis

Global Hull Assessment
Scantling Re-assessment
Steel Renewal Calculation
Fatigue Assessment
Risk based Inspection plan

Model Test Management
and Technical Support

Module Integration
Laydown Topsides
Dropped Object Analysis
Metering Skid
Pipe Rack / Cable Rack

Flare Tower Structure
Flare Tower Foundation

FWD Deck Extension
Offloading Equip. FDN
Mooring and Towing Fittings

FWD Machinery
Space Modification

Engine Room Modification
Equipment FDN Design
Mechanical Handlings

Offloading & Stability
Tank Capacity
Sounding Table
Loading computer

Crane Pedestal and
Support Structure
Boom Rest
Side shell Protection
Ship Collision Analysis

Bilge Keel Design
Riser Porch Design

Mooring Porch
Mooring Fairlead FDN
Mooring Pull-in Equip.



Our Tech, Make Ocean Green

CONTACT US

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