

2020-2021

Project: **SDDS - Shallow Draft Drilling System**
 Vessel type: Ultra shallow draft Submersible units
 for North Caspian Sea

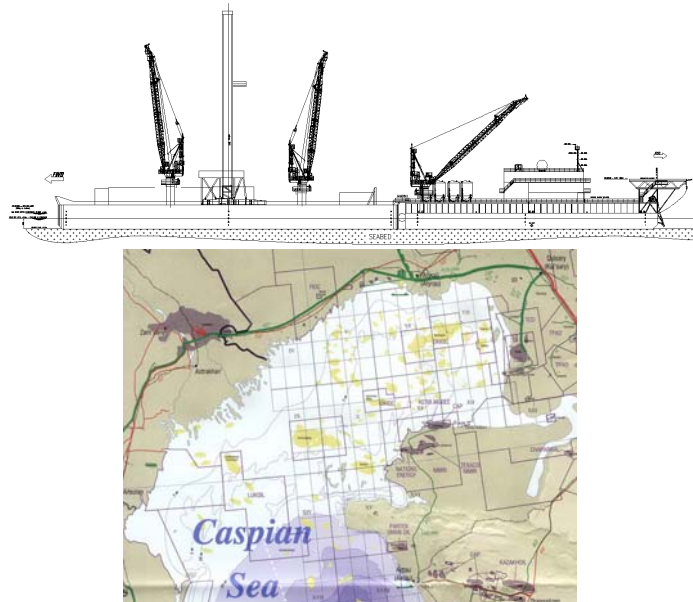


Our scope of work:

Engineering & project management
 services - Pre-FEED Phase

- Preparation of a comprehensive technical package including drawings, schematics, primary specifications, weight estimations, key equipment specs.
- Organise and manage 1st round bid to Caspian Sea shipyards for construction of the SDDS.

In partnership with Drillmec from Italy.



2016 – 2021 (On going)

Vessel Name: **UniMopu**
 Vessel type: production jack-up



Our scope of work:

Conceptual & basic design of the self-
 Installing Platform (SIP).

Main scope:

Preparation of a complete technical
 package and manage tender to shipyards
 for construction of platform and
 integration of top sides.

Additional scope:

Consultancy mission in PNG at the field
 site, onboard drilling jackup. Collect site
 information – geotechnical & operational
 - in view of SIP installation.



2019

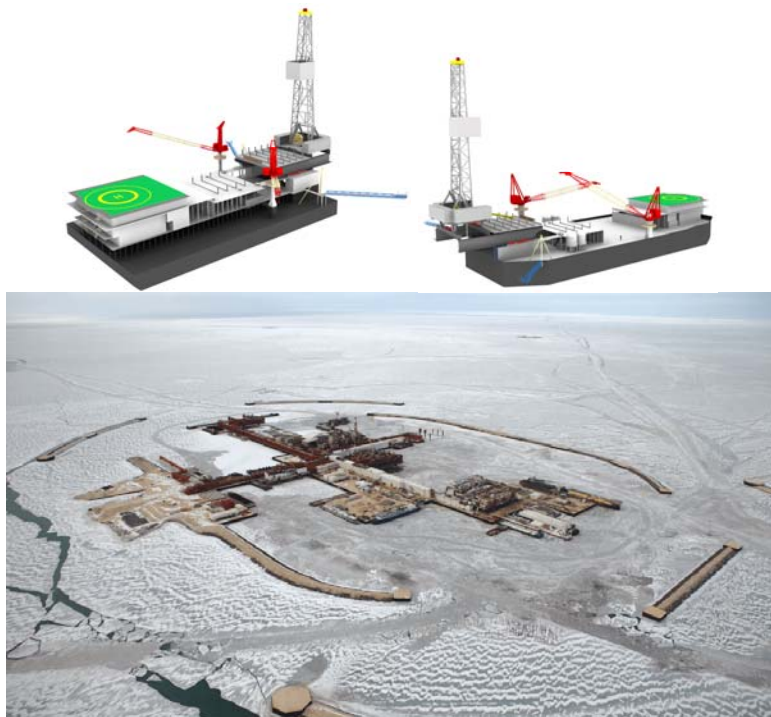
Project: **Ultra Shallow Draft MODU**
Vessel type: Ultra shallow draft Submersible units
for North Caspian Sea



Our scope of work:

Evaluation of several submersible MODU concepts potentially suitable for operations in Kashagan field and with a main focus on reducing transit draft to the greatest possible extent.

Engineering work performed in partnership with Drillmec from Italy.



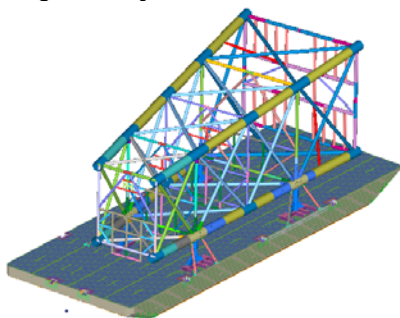
2019

Project: Qatar North Oil Company - **Al Shaheen**
Subject: Jackets Transportation analysis



Our scope of work:

Extensive Finite Element Analysis for the transport of three jackets on a single Heavy Lift Vessel.



2019

Vessel Name: **Raisis**
Vessel type: Drilling Swamp Barge (Upgrade)



Our scope of work:

- New Stability Analysis
- New hull global strength analysis
- New Marine Operations Manual.



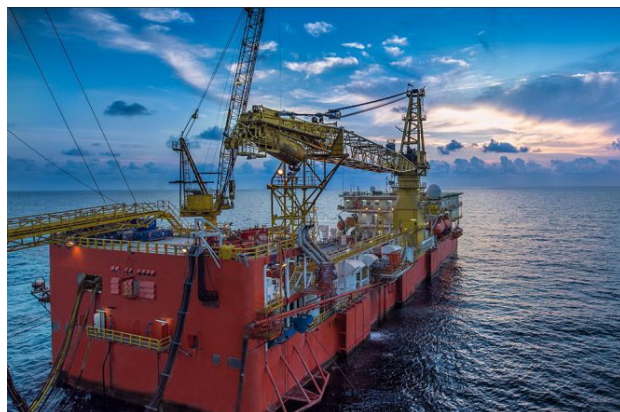
2018-2019

Vessel Name: **Sapura T17 & generic DES**
Vessel type: Tender assist drilling barge



Our scope of work:

Conceptual studies for DES weight reduction.
Target weight reduction: 100 MT.



2018

Project: **Ultra Shallow Draft MODU**
Vessel type: Ultra shallow draft jack-ups
& Submersible units



Our scope of work:

Evaluation of several MODU concepts potentially suitable for operation in this field and with a main focus on reducing transit draft to the greatest possible extent.



2016 – 2017

Vessel Name: **KAOMBO**
Vessel type: FPSO
Shipyard: GPC Abu Dhabi & Sembawang Shipyard



Our scope of work:

Scope #1:

Engineering consultancy (Naval architecture / Structural engineering) for turret loadout operation.

Scope #2:

Engineering consultancy
Structural design verification – FPSO hulls, topsides structures, turret, mooring & weight control.



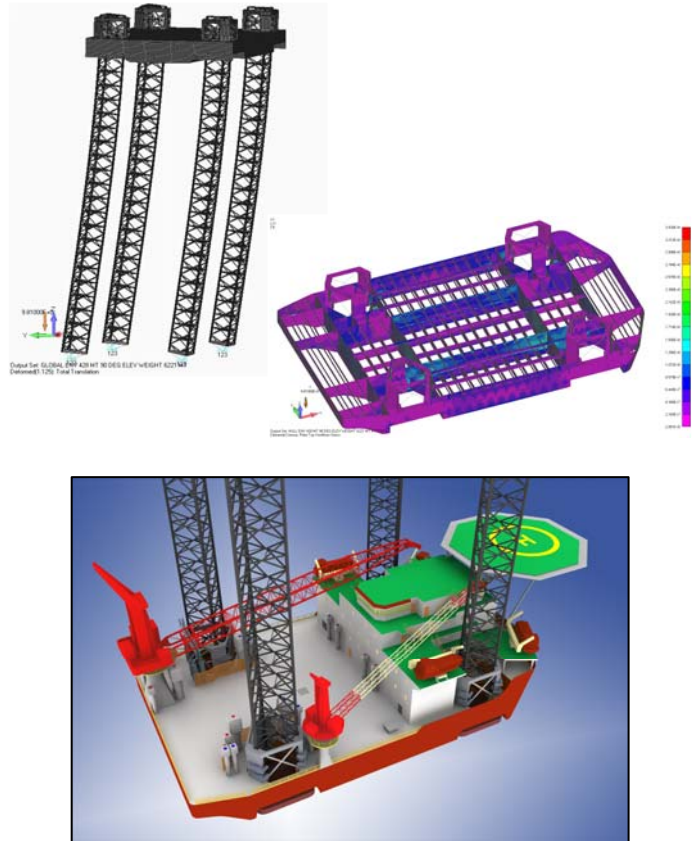
2015

Vessel Name: **MPJ 328 Buffalo Class**

Vessel type: Multi-purpose self propelled self-elevating unit (Liftboat)

Our scope of work:

"in House" Basic Design Package (Global strength, leg design, main scantling stability, general arrangement, accommodations)



2015

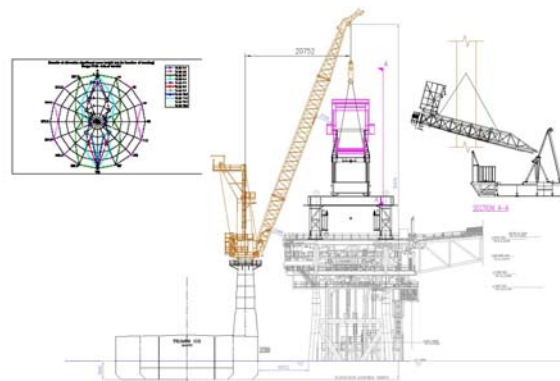
Vessel Name: **Triumph 109**

Vessel type: Tender assist drilling barge

TRIUMPH DRILLING

Our scope of work:

Engineering services: Stability and lifting analysis for DES rig up.



2014 / 2015

Vessel Name: **TD7000**

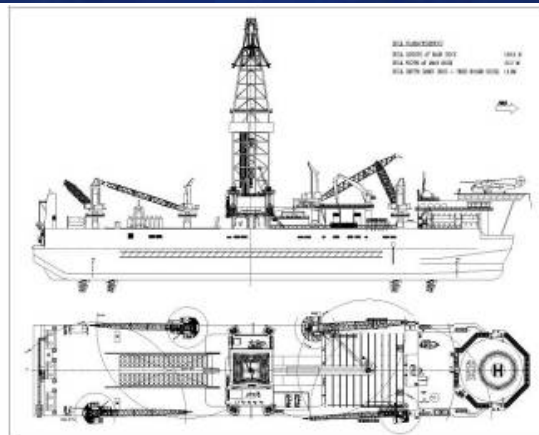
Vessel type: Ultra deepwater compact drillship – New Build

Our scope of work:

Complete “in House” Basic Design Package (Structure, stability, hydrodynamics, general arrangement, accommodations, drilling systems)

Development of constructions specification.

Enquiries for main equipment. Cost analysis.



2014

Vessel Name: **ICHTHYS - FPSO**

Vessel type: FPSO

Shipyard: Keppel Shipyard



Our scope of work:

LOWER TURRET SKIDDING OPERATION

Engineering consultancy for loadout operation (Naval architecture / Structural engineering)



2013 / 2015

Customer: **Mena Offshore Investments Ltd**

Vessel Name: **Explorer I**

Vessel type: Jack-Up Drilling Rig (LeTourneau Super 116E)

Shipyard: YZJ Offshore (Shanghai)



Our scope of work:

Review and adjustments to Construction Specifications before signature with builder.

Owner Representative & technical adviser during engineering and procurement phase. Multi-disciplinary team provided:

- Rearrangement of hull tanks
- Conceptual arrangements of shaker house, drill floor, cantilever, helideck, living quarters, Mud mix room and other various areas.
- Assist / advise Builder for design of all rig systems (piping, HVAC, electrical)
- Assist Builder for drilling equipment selection.
- Review and approval of all purchased equipment.
- Review and approval of all detail design drawings.



2012

Customer: **GSP Offshore– Grup Servicii Petroliere**

Vessel Name: **GSP Venus**

Vessel type: Ultra Deepwater Drillship – New Build

Shipyard: TBD



Our scope of work:

Review of contractual construction specifications and clarification meeting with potential builder.



2012-2013

Customer: **Triumph Drilling / Sungjin Geotec**

Vessel Name: **Triumph T650**

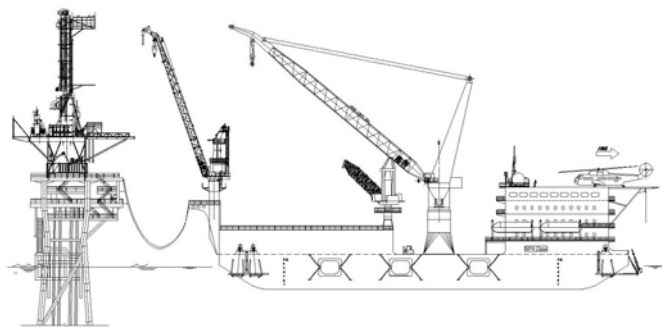
Design model: Moonpool **MP4**

Vessel type: Tender assist drilling barge

TRIUMPH DRILLING

Our scope of work:

Conceptual design for new built Tender Barge type "MP4".



2012

Customer: **Triumph Drilling**

Vessel Name: **Triumph 109 (Ex Searex 9)**
Vessel type: Tender assist drilling barge
Shipyard: ST Marine, Singapore

TRIUMPH DRILLING

Our scope of work:

Complete Basic Design Package for jumboisation project.

- Conceptual design, including hull resizing, new shape.
- Structural design hull and heavy lift crane pedestal
- Motion analysis
- Mooring analysis
- Strength and various FEA analysis.
- Deck layout with D.E.S.
- D.E.S. lifting studies.
- Anti-heel fast ballasting system and associated piping

All classed approved by ABS.

Marine operation manual update.



2010/2012

Customer: **Sungin Geotec (Posco Plantec)**

Vessel Name: **KJU Tiger Class**
Vessel type: Jack-up Drilling rig – New Build
Shipyard: Sungin Geotec

SUNG JIN
posco Family

Our scope of work:

Complete "in House" Basic Design Package,
Complete set of construction specifications,
Obtained design class approval,
Detail equipment specifications,
RFQs for long lead items.



2012

Customer: **Transocean**

Vessel Name: **Actina**
Vessel type: Semisubmersible drilling unit
Shipyard: Sembawang shipyard for modification



Our scope of work:

Performed survey onboard the vessel. Designed complete rearrangement of the mud treatment system



2010/2011

Customer: **Marina Technology and Construction**

Project Name: **Floating hotel structures,**
Location: Marina bay, Singapore



Our scope of work:

Complete basic and detail design package for hull and superstructures



2010

Customer: **Pacific Drilling Inc.**

Vessel Name: **Pacific Bora**
Vessel type: New ultra deepwater drillship
Shipyard: Samsung Heavy Industry



Our scope of work:

- 1) Engineering support & project management : post delivery modifications and improvements.
- 2) Participation in the Hazop session.

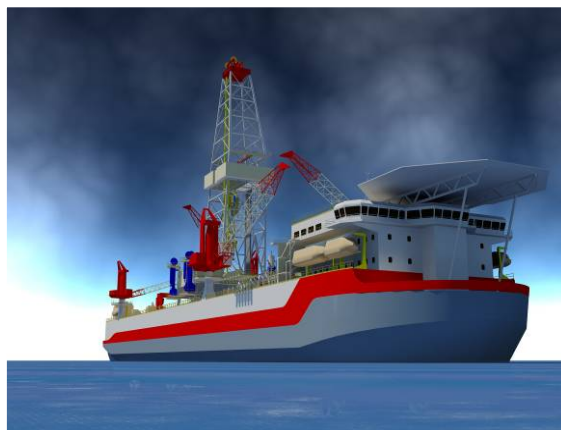


2009/2010

Vessel Name: **Tropical Driller**
Vessel type: Ultra deepwater compact drillship – New Built
Shipyard: TBD

Our scope of work:

Complete “in House” Basic Design Package (Structure, stability, hydrodynamics, general arrangement, accommodations, drilling systems)



2009

Customer: **Songa Offshore**

Vessel Name: **Songa Mercur**
 Vessel type: Existing Semi-submersible
 Shipyard: N/A



Our scope of work:

- 1) New stability analysis IMO Modu & DNV.
- 2) Complete New Marine Operations Manual up to class approval.
- 3) Structural FEM analysis of upper deck under special loading conditions.
- 4) Derrick modification & installation of new top drive (Engineering & project management).



2009

Customer: **Transocean**

Vessel Name: **Transocean Legend**
 Vessel type: Existing Semi-submersible
 Shipyard: At anchorage in Malaysia



Our scope of work:

- 1) On site project management for miscellaneous repairs & modifications.
- 2) Misc engineering studies:
 - FEA analysis of lifeboat platforms
 - Mechanical engineering for new iron roughneck
 - Design of retractable BOP umbilical sheaves
 - Feasibility study for mooring winches
 - Feasibility study for installation of Weatherford stabbing arm.
 - Engineering study for installation of telescopic stabbing basket.
 - Misc. electrical engineering studies.



2006-2008

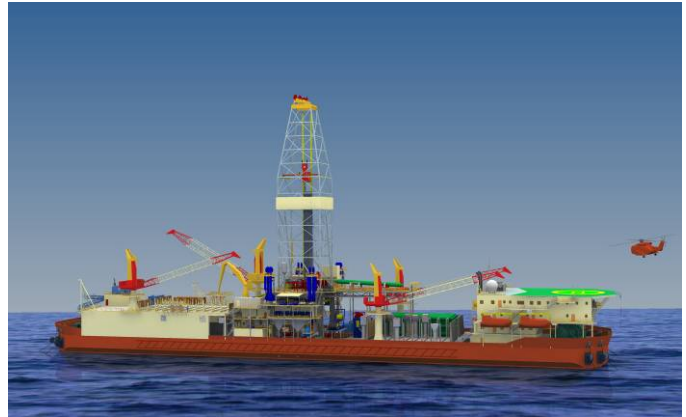
Customer: **Swiber & Black Gold Drilling**

Vessel Name: **Equatorial Driller**
Vessel type: Deepwater drilling barge – New Built
Shipyard: TBD



Our scope of work:

Complete "in House" Basic Design Package,
Complete set of construction specifications,
Obtained design class approval,
Shipyard preparation,
Project management,
Detail equipment specifications,
Procurement of long lead items.



2004-2007

Customer: **PT Apexindo**

Vessel Name: **Soehanah**
Vessel type: Jack-up drilling rig – New Built
Shipyard: PPL Singapore



Our scope of work:

Shipyard preparation, construction specifications.
Drill floor & BOP handling new conceptual design. Personalized vessel arrangement.
Construction supervision from engineering to commissioning and vessel delivery.



2003

Customer: **PT Apexindo**

Vessel Name: **Rig 105**

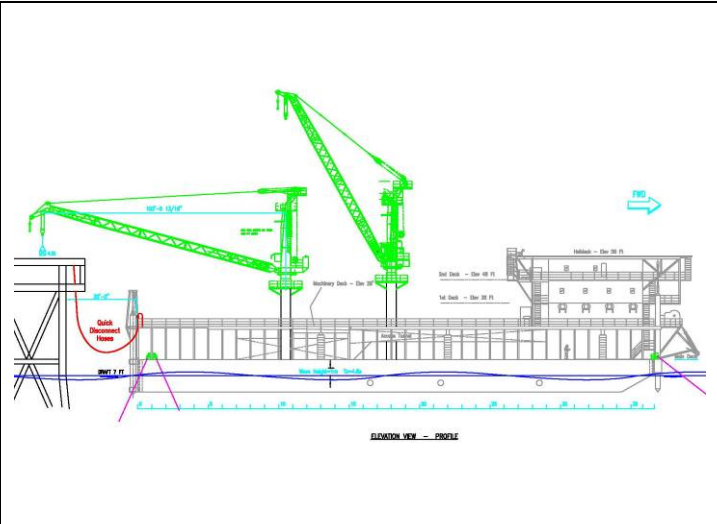
Vessel type: Multi-purpose Barge - Conversion

Shipyard: Labroy Shipyard, Batam, Indonesia



Our scope of work:

Engineering package for conversion of existing swamp barge into a multi-purpose vessel.
 Studies for conversion as tender assisting workover drilling vessel.
 Preparation of Shipyard scope of work.



2002-2003

Customer: **PT Apexindo**

Vessel Name: **Yani Rig 104**

Vessel type: Drilling Swamp Barge - New Built

Shipyard: Keppel Fels, Singapore



Our scope of work:

(With PROTOMAX Ltd)

Basic Design
 Construction specification
 Construction supervision from engineering to commissioning and vessel delivery.



2002-2003

Customer: **PT Apexindo**

Vessel Name: **Maera**

Vessel type: Cantilever Drilling Swamp Barge - Major Conversion

Shipyard: Keppel Fels, Singapore



Our scope of work:
(With PROTOMAX Ltd)

Basic Design
Construction specification
Construction supervision from
engineering to commissioning and vessel
delivery.



2002-2003

Customer: **PT Apexindo**

Vessel Name: **Raissa**

Vessel type: Cantilever Drilling Swamp Barge - New Built

Shipyard: Keppel Fels, Singapore



Our scope of work:
(With PROTOMAX Ltd)

Basic Design
Construction specification
Construction supervision from
engineering to commissioning and vessel
delivery.

