

AFRICA

Floating production & subsea services

From installation to decommissioning



01
Install

02
Moor & connect

03
Operate

04
Maintain

05
Decommission

ABOUT US

One contractor for the whole life of the field

Marlin Subsea is the offshore engineering and subsea services division of Marlin Energy Resources Ltd, a Nigerian-owned energy services company headquartered in Lagos, serving offshore operators across Africa.

We bring international offshore construction experience to operators across Africa. Our delivery team and technical partners have installed, moored, hooked up and decommissioned floating production units across West Africa, the Gulf of Mexico and Latin America. We pair that experience with a regional base in Lagos and a focus on the integrity of assets already in service.

Our services cover every phase of an offshore production asset: installation, mooring and hook-up, SURF and risers, inspection, maintenance and repair, life extension and, at the end of field life, safe removal.

Headquarters

5 Bishop Howells Street, Lagos,
Nigeria

Parent company

Marlin Energy Resources Ltd

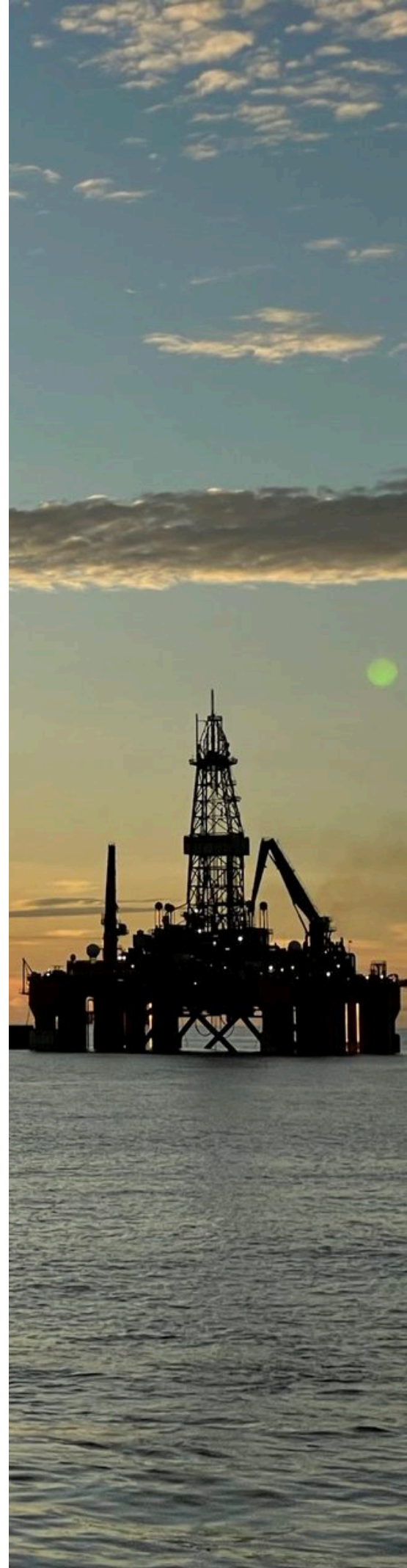
Ownership

Nigerian-owned and managed

Focus

FPSO, FSO and subsea assets across
Africa

Offshore Africa relies on floating production. We cover every phase of those assets, from installation to removal.



WHAT WE DO

Services across every phase of the field

Operators can bring us in for a single scope or for the whole life of an asset. The same team carries knowledge of the asset from installation into operations and, finally, removal.

01**Install**

- FPSO & FSO installation
- Field development marine services
- Tanker conversions to FPSO / FSO
- Offshore construction vessels

02**Moor & connect**

- Spread mooring systems
- CALM buoys
- SURF installation
- Production risers & pull-in

03**Operate**

- Client representation
- Offshore project support
- Subsea engineering consultancy
- Digital engineering

04**Maintain**

- Inspection, maintenance & repair
- ROV project management
- Asset integrity management
- Mooring change-out
- Asset life extension

05**Decommission**

- FPSO & FSO removal
- Fixed-platform removal
- Riser & mooring recovery
- Environmental recycling

One contractor, fewer interfaces

A single point of responsibility from mooring pre-set through hook-up, maintenance and removal.

Regional base

A Lagos-based company serving operators across Africa, with local participation built into delivery.

International delivery experience

Our delivery team and technical partners have executed FPSO, mooring, SURF and decommissioning projects for international and national oil companies.

Engineering-led equipment

Mooring, pull-in and installation equipment designed in-house and matched to each operation.





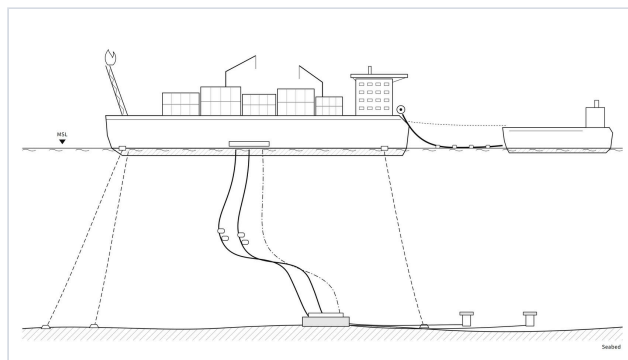
FPSO & FSO INSTALLATION · FIELD DEVELOPMENT

Floating production units, installed and on station

We deliver FPSO and FSO installation as a full EPCI scope, combining marine operations and installation engineering with custom offshore equipment. Every deployment is fit for purpose, matched to the field's production requirement.

EPCI scope

- Engineering and fabrication of deck mooring equipment
- Engineering, fabrication and integration of installation equipment
- Project management and engineering of mooring pre-set and hook-up
- Project management and engineering of riser installation and hook-up
- Offshore execution



Spread-moored FPSO: mooring, riser and offloading arrangement (schematic).

Field development services

- FPSO and FSO deployments
- Tanker conversions to FPSOs and FSOs
- EPC mooring and SURF packages
- Spread mooring systems
- Offshore installation services

SELECTED PROJECTS

Armada Perdana FPSO, Oyo field, Nigeria, 425 m · Armada Perkasa FPSO, Nigeria, 13 m · FPSO TN, Front Puffin and FSO Eli Akaso, Nigeria · FSO Ratu Songkhla, Indonesia · FPSO re-deployment, West Africa (2026)



MOORING SYSTEMS · CALM BUOYS · DECK MOORING

Holding production assets on station

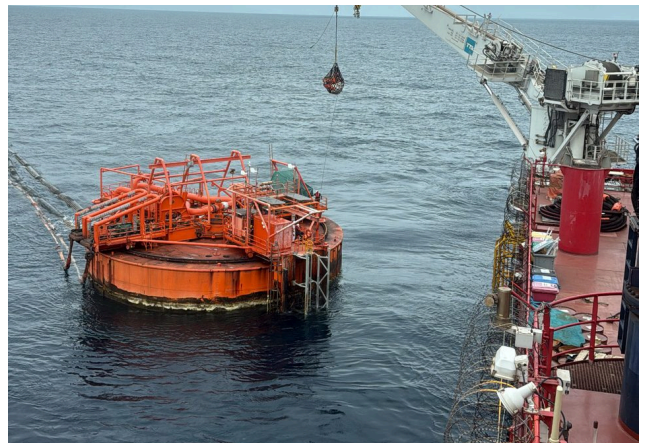
A mooring system holds a vessel on station in operating and survival conditions, within specified tolerances. We manage every part of offshore mooring installation: engineering, fabrication, offshore installation, hook-up and testing.

Delivery record

Mooring installations executed by our delivery team have been completed ahead of schedule, under budget and without safety incident.

Scope

- Spread mooring systems for FPSOs and FSOs
- CALM buoy installation, maintenance and repair
- Mooring change-out on producing assets
- Mooring equipment, hardware and systems supply



CALM buoy offshore, with the support vessel alongside.

Deck mooring systems

We supply deck mooring systems from concept design through detail design, fabrication and integration to offshore operation: chain stoppers, fairleads, wildcats, winches and chain jacks, engineered as one system.

SELECTED PROJECTS

Forcados Export Terminal, Nigeria · FSO Safer 9-point mooring and CALM buoy, Red Sea · Thunder Horse chain mooring, 1,844 m · Sendje Berge mooring replacement, Nigeria · SPM3 CALM buoy, Nigeria · 800 t CALM buoy terminal (2026)



SURF · PRODUCTION RISERS

Subsea umbilicals, risers and flowlines

We install subsea umbilicals, risers and flowlines (SURF), with installation equipment designed, specified and proceduralised in-house.

- Umbilical and riser installation, termination and hook-up
- Umbilical and riser installation equipment, including in-house designs, specifications and procedures
- Subsea inspection, maintenance and repair
- Installation of subsea manifolds, trees, PLEMs, PLETs and jumpers



Production riser projects

Steel catenary and flexible production risers, installed and decommissioned under one project management team.

1

Installation

Procedures, equipment, vessel and offshore execution

2

Pull-in

Pull-in equipment design, delivery and operation

3

Ancillaries

Mats, receptacles, bend stiffeners and installation aids

4

Removal

Flushing, disconnection and removal from the host facility

SELECTED PROJECTS

Atlantis, deepest SCRs ever installed, 2,150 m · Stampede TLP, 8 SCRs, US Gulf of Mexico · Thunder Horse production risers · Front Puffin and Tamara Tokoni riser systems, Nigeria · Armada Perdana riser pull-in, Nigeria

Keeping assets in service, safely and for longer

Once an asset is producing, Marlin Subsea protects its integrity with planned inspection, maintenance and repair, ROV operations and engineering support.

Inspect

General and close visual inspection, ROV surveys, CP and thickness data

Assess

Integrity assessment, anomaly management and risk ranking

Maintain & repair

Planned and reactive IMR campaigns and repair engineering

Extend

Life extension studies and asset upgrades

Inspection, maintenance & repair (IMR)

Planned and reactive IMR campaigns for subsea infrastructure, risers, moorings and floating assets.

ROV project management

Scope definition, spread selection, offshore supervision and reporting for ROV campaigns.

Asset integrity management

Integrity strategy, inspection planning, anomaly tracking and risk-based maintenance.

Subsea engineering consultancy

Independent engineering support for operators and contractors, from concept to operations.

Digital engineering & life extension

Data-led assessment of remaining life, and the engineering needed to extend it.

Client representation

Owner's representatives and offshore project support, from planning to offshore execution.

What operators receive

- Inspection reports and survey data
- Anomaly registers and risk rankings
- Integrity management plans
- Repair procedures and engineering
- Life extension studies

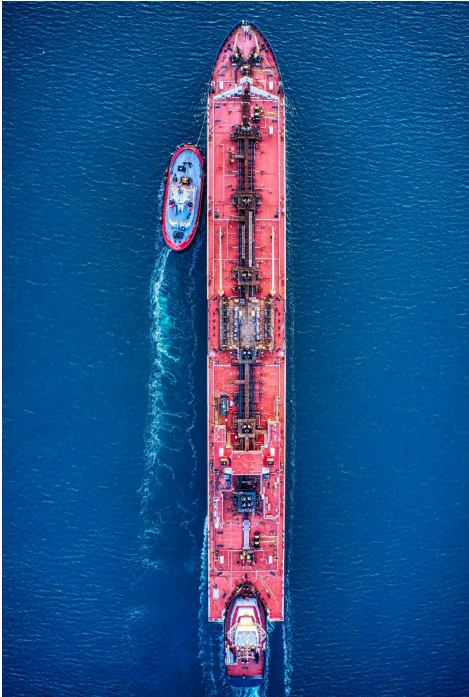
Connected to installation

Because the same team installs moorings, risers and SURF, our IMR engineers start from as-built records and installation data. Anomalies are assessed against how the asset was actually put in place.

SELECTED PROJECTS

OML 119 subsea intervention, Nigeria · Tamara Tokoni mooring life extension and IMR, Nigeria · Sendje Berge inspection and IMR, Nigeria · FPSO TT life extension, 2009 and 2019 · OML 122 FPSO FEED, Nigeria

Safe, planned removal at the end of field life



FPSO & FSO decommissioning

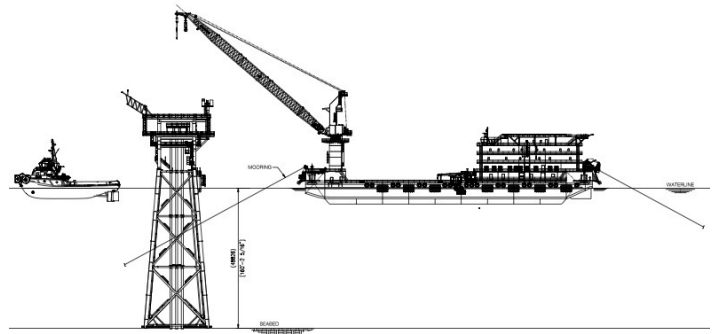
Our delivery team has executed FPSO and FSO decommissioning projects for international and national operators.

- NORM removal and tank cleaning
- Deck equipment refurbishment
- Flushing of risers and umbilicals
- Disconnection and removal of risers and umbilicals
- Disconnection and abandonment of mooring lines
- Station keeping of the FPSO
- Towing operations
- Planning and management of all marine operations

Fixed platform decommissioning

Full removal and abandonment services, including:

- 3D scanning and engineering
- Offshore procedures and abandonment requirements
- Flowline flushing
- Heavy lift vessels and offshore construction crews
- Environmental recycling of removed structures



Platform removal arrangement: heavy lift vessel, jacket and support tug.

SELECTED PROJECTS

FSO Safer, Red Sea, Yemen · Xikomba FPSO, Angola, 1,310 m · Largest FSO (ULCC) of Mexico's national oil company, Gulf of Mexico

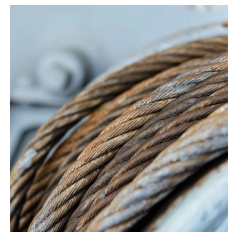


WINCHES · PULL-IN SYSTEMS · CUSTOM DESIGNS

Equipment engineered for the operation

We specify, design and supply offshore equipment matched to each operation. Our marine operations experience and engineering capability let us evaluate the functional requirements in detail, so the equipment fits the user and the application.

Riser pull-in systems and deck mooring systems are delivered from concept design through detail design, fabrication and integration to offshore operation.



100 tonne

mooring winches designed and delivered

Custom designs

A-frames

Overboarding and subsea deployment

Chain jacks

Mooring line tensioning

Vessel equipment

Multi-purpose anchor-handling equipment

Winches

Mooring, pull-in and installation winches

Wildcats & fairleads

Chain handling and guidance

Construction vessels

Marine construction vessel design

Tensioners

Lay and installation tensioners

Riser pull-in systems

Concept to offshore operation

Installation aids

Bespoke aids for each scope

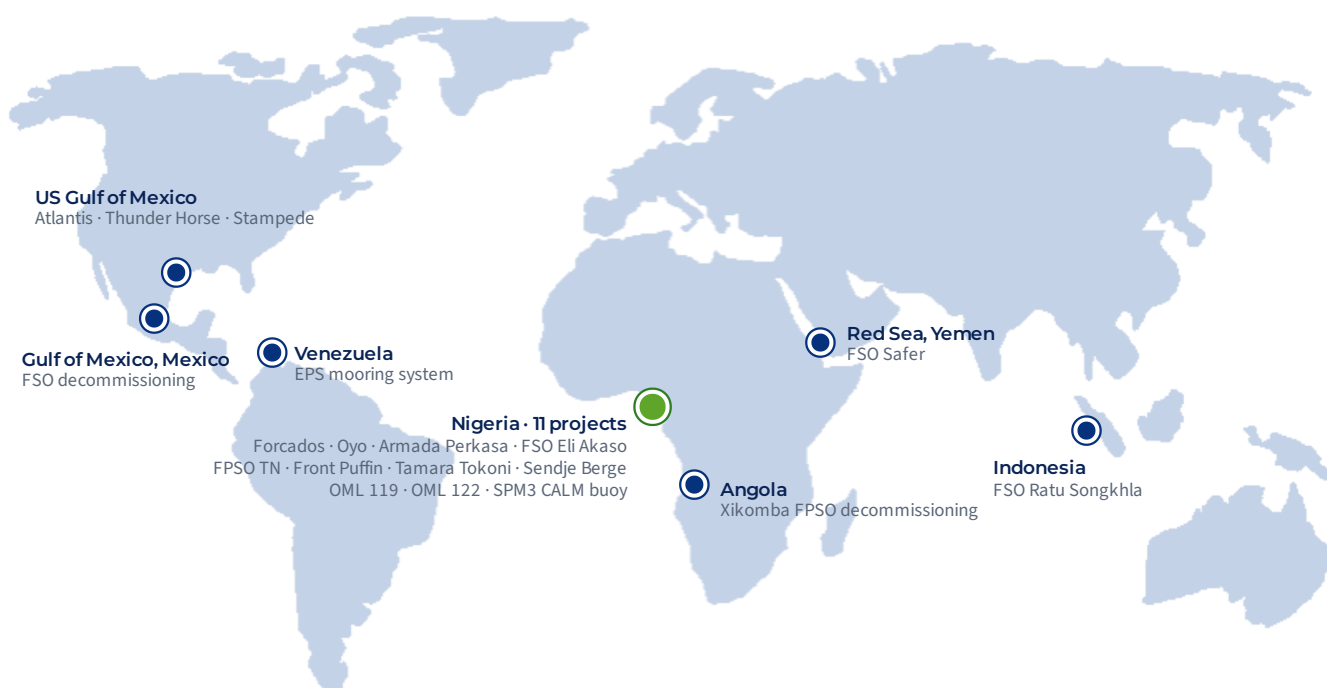
SELECTED PROJECTS

1,250 t chain jack SCR pull-in system, Atlantis · Complete EPS vessel mooring system, Venezuela · Armada Perdana deck mooring and riser pull-in equipment · Thunder Horse rigging and installation aids

Experience behind Marlin Subsea

22 major projects executed by the Marlin Subsea delivery team and technical partners between 2005 and 2026: from the shallowest FPSO ever installed (13 m) to the deepest steel catenary risers ever installed (2,150 m), across Nigeria, West Africa, Angola, the Gulf of Mexico, Venezuela, the Red Sea and Indonesia.

22 major projects, 2005–2026	2,150 m deepest SCRs ever installed (Atlantis)	13 m shallowest FPSO installed globally (Armada Perkasa)	15 projects in West & Central Africa, including Nigeria and Angola
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Projects by phase

Install

- 01 · 02 · 05 · 06
- 07 · 19 · 20 · 21

Moor & connect

- 04 · 14 · 15
- 16 · 22

Maintain & extend

- 08 · 09 · 11
- 12 · 18

Engineering

- 13

Decommission

- 03 · 10 · 17

Recent FPSO, FSO and terminal projects

INSTALL

REF 01

FSO CALM buoy export terminal

2026 · West Africa

FSO and 800-tonne CALM buoy

West African operator

- Provision of 800-tonne CALM buoy
- Infield flowlines
- Mooring installation
- Buoy installation
- Subsea and floating hose installation
- FSO modification and deployment
- Field hook-up and commissioning

INSTALL

REF 02

FPSO re-deployment project

2026 · West Africa

FPSO

West African operator

- FPSO shipyard and re-deployment scope
- Field SURF package
- Conversion to spread mooring
- Conversion to mid-ship riser porch
- Topsides conversion to field production specification

DECOMMISSION

REF 03

FSO Safer replacement and decommissioning

2024 · Red Sea, Yemen · engineering in Houston

FSO Safer and 800-tonne CALM buoy

International development agency

- Disconnection and recovery of turret mooring system
- Disconnection and recovery of production risers
- Ship preparation and delivery of hull for recycling
- Installation of 800-tonne CALM buoy
- 9-point mooring installation
- Subsea hose installation
- Commissioning and start-up of offloading export terminal
- VLCC loading operations start-up

MOOR & CONNECT

REF 04

Forcados Export Terminal emergency restoration

2023 · Forcados, Nigeria

Crude export terminal

Major international operator

- Emergency restoration of the export terminal
- Replacement of CALM buoy with tri-catenary mooring and floating hose offloading system
- PLEM, subsea and surface floating hose assembly
- Tri-catenary mooring positioning system for VLCCs
- Procurement through global vendor network
- System commissioning and testing

Second-largest crude offloading terminal in Africa

INSTALL

REF 05

FSO Eli Akaso installation

2023 · Nigeria

FSO Eli Akaso

West African FPSO owner-operator

- EPC of FPSO installation scope
- Mooring pre-set: 14 mooring lines
- Mooring proof load of 270 tonnes
- FSO tow and positioning
- FSO mooring system transfer and hook-up
- FSO mooring tensioning

INSTALL

REF 06

FPSO TN conversion and re-deployment

2022–24 · Nigeria

FPSO TN

West African FPSO owner-operator

- EPC FPSO conversion and re-deployment
- Turret to spread mooring conversion
- Deck mooring equipment
- Riser porch
- 12-point mooring pre-set
- FPSO tow and hook-up operations
- Riser installation and hook-up

INSTALL

REF 07

FPSO Front Puffin

2022–24 · Nigeria

FPSO Front Puffin

West African FPSO owner-operator

- EPC construction and delivery
- Mooring system installation
- Production riser system installation
- Installation of the unit
- Production riser hook-up and commissioning

MAINTAIN

REF 08

FPSO Tamara Tokoni

2022 · Nigeria

FPSO Tamara Tokoni

West African FPSO owner-operator

- EPC scope with procurement through global vendor network
- Mooring system life extension
- Production riser system tie-back
- FPSO installation services and IMR
- Production riser hook-up and commissioning

Nigeria, Mexico and deepwater Gulf of Mexico

MAINTAIN

REF 09

FPSO Sendje Berge mooring replacement

2022 · Nigeria
FPSO Sendje Berge
International operator

- EPC scope
- Mooring system replacement
- Mooring system inspection
- General IMR

DECOMMISSION

REF 10

Decommissioning of Mexico's largest FSO (ULCC tanker)

2016 · 2023 · Gulf of Mexico, Mexico
FSO TKT
National oil company, Mexico

- FSO decommissioning engineering package
- 36-inch pipeline decommissioning
- Removal of two 16-inch production risers
- Crude storage tank cleaning
- Disconnection and removal of 10 turret mooring lines
- FSO positioning and station keeping
- Removal from site and international tow
- Delivery for ship recycling

MAINTAIN

REF 11

FPSO TT life extension

2009 · 2019 · West Africa
FPSO TT
West African marine contractor

- EPC FPSO life extension
- Flexible riser installation
- SURF integrity inspections
- Mooring recovery, re-certification and re-installation
- Third-party topsides refit and refurbishment
- Mooring pre-set and re-installation

Delivered twice, ten years apart

MAINTAIN

REF 12

OML 119 subsea intervention and FPSO services

2018-19 · Nigeria
OML 119 field (NPDC)
Nigerian national operator

- Subsea intervention vessel
- Subsea intervention equipment spreads
- Subsea intervention services
- FPSO field services

ENGINEERING

REF 13

OML 122 FPSO field development FEED

2018-19 · Nigeria
OML 122 FPSO development
Nigerian independent operator

- Topsides FEED
- Hull FEED
- Production risers FEED
- Moorings FEED

MOOR & CONNECT

REF 14

Stampede TLP production risers

2013-18 · US Gulf of Mexico · 1,100 m water depth
Stampede tension leg platform
US independent operator

- Eight steel catenary production risers (SCRs), installed at 1,000 m depth
- Riser pull-in system engineering and SCR installation system
- Integration of the installation system on the TLP
- SCR installation engineering and procedures
- Offshore installation of all risers
- Interface with the operator, installation contractor and engineering contractor

Under schedule, under budget, zero incidents

MOOR & CONNECT

REF 15

Thunder Horse mooring and risers

2012-17 · US Gulf of Mexico · 1,844 m water depth
Thunder Horse PDQ
Supermajor

- Chain mooring system installation
- Production riser installation
- Mooring chain jack replacement procedures and modifications
- Equipment and specialised design engineering
- Installation aids engineering and construction plan
- Mooring hang-off procedures and rigging equipment design

Decommissioning and record-depth installations

MOOR & CONNECT

REF 16

Early production vessel mooring system

2012–13 · Venezuela

Early production system (EPS) vessel

National oil company, Venezuela

- Design and delivery of the complete vessel mooring system
- Mooring fairleads, chain stoppers and monitoring system
- Mooring pull-in winches

DECOMMISSION

REF 17

Xikomba deepwater FPSO decommissioning

2011 · Angola · engineering in Houston and

Monaco · 1,310 m water depth

FPSO Xikomba

Supermajor

- Project management and client representation
- Decommissioning and disconnect procedures, review and approval
- NORM removal and cargo tank cleaning
- Flushing, disconnection and removal of risers and umbilicals
- Disconnection of turret moorings; turret refurbishment
- FPSO station keeping, positioning and short tow

MAINTAIN

REF 18

SPM3 CALM buoy repair

2009 · Nigeria · 50 m water depth

SPM3 production CALM buoy

Major international operator

- Mooring analysis
- Repair engineering and procedures
- Supply of all offshore construction crew and supervisors
- Management of vessels and offshore crew
- Offshore mooring and floating hose repair and adjustment
- CALM buoy returned to operation

INSTALL

REF 19

Oyo field: Armada Perdana FPSO installation

2008–09 · Oyo field, Nigeria · 425 m water depth

FPSO Armada Perdana

FPSO owner-operator

- Shipyard conversion scope; mooring deck equipment and riser porch design, delivery and integration
- Riser pull-in system design
- Supply of ROV system
- Conversion of a mid-sized AHTS to a subsea construction vessel
- Offshore mooring pre-set
- FPSO mooring hook-up and positioning
- Riser pull-in and hook-up

Full EPCI, from shipyard to first oil

INSTALL

REF 20

Ratu Songkhla FSO installation

2008–09 · Indonesia · engineering in Singapore ·

50 m water depth

FSO Ratu Songkhla (turret moored)

FSO owner-operator

- Project management and client representation
- Installation procedure review and approval
- Mooring pile and mooring installation
- Hook-up to turret moorings
- Flowline, riser and umbilical installation
- Offshore positioning and station keeping

INSTALL

REF 21

Armada Perkasa FPSO installation

2007 · Nigeria · 13 m water depth

FPSO Armada Perkasa

FPSO owner-operator

- EPIC installation contract and installation engineering
- Deck pull-in equipment preparation
- Supply of chartered marine spread
- Conversion and upgrade of main installation vessel
- Supply of installation components and aids
- Mooring pre-set, FPSO hook-up and positioning
- Riser pull-in and hook-up

Shallowest FPSO water depth installed globally

MOOR & CONNECT

REF 22

Atlantis production semi-submersible riser installation

2005 · US Gulf of Mexico · 2,150 m water depth

Atlantis

Supermajor

- Installation and assembly of 1,250-tonne chain jack SCR pull-in system
- Management and execution of all riser pull-in operations at 2,150 m
- Client representative for review of J-lay pipelay procedures
- Client representative for all hook-up operations

Deepest steel catenary risers ever installed

ALSO DELIVERED FOR

A Nigerian national oil company (FPSO mooring change-out) and a major subsea contractor (mooring and SURF support).

How we work

Our values spell **TEAM**

The four principles behind how every project is planned and delivered.

T

Technical excellence

Engineering-led planning, proven procedures and equipment designed for the operation.

E

Environmental care for a clean ocean

A clean ocean is part of every scope, from NORM removal to recycling removed structures.

A

Autonomous safety-first culture

Every person on the job owns safety and has the authority to act on it, from the first procedure to the last lift.

M

Manage business to ensure commercial value

Each project is managed to deliver commercial value of service for both the client and the company.

How an engagement runs

01

Scope definition

Site data, field requirements and the operator's constraints

02

Engineering

Installation analysis, equipment specification and procedures

03

Procurement & fabrication

Equipment, vessels and materials, integrated and tested

04

Offshore execution

Marine operations under one project management team

05

Close-out

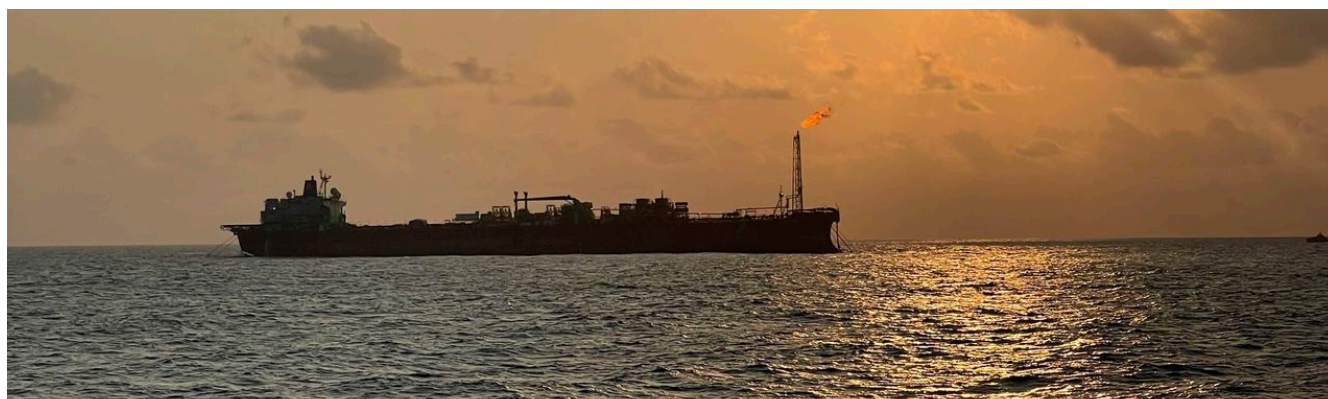
As-built records, handover and integrity baseline for IMR

Local content

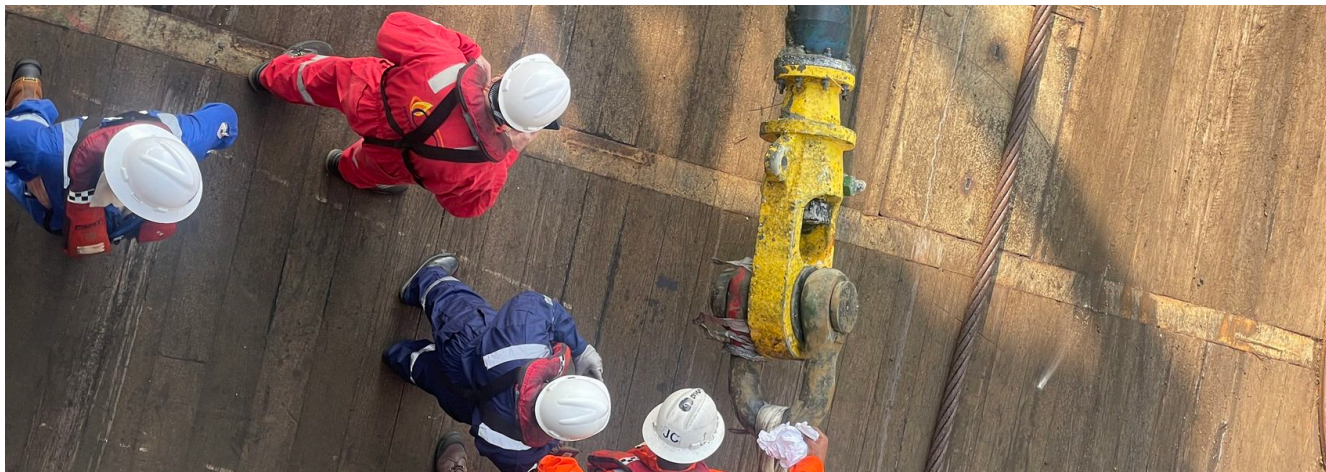
We plan each scope around the operator's local-content requirements, building local participation into how the work is planned and delivered in each country.

Working with operators

We can take on a single scope, such as a mooring change-out, or support an asset for its full life, from installation through maintenance to removal.



Safety is planned in from the first procedure



OUR COMMITMENTS

Leadership and accountability

Line managers own HSE performance, and every person on the job has the authority to stop unsafe work.

Risk management

Hazard identification, job safety analysis, permit-to-work and management of change on every scope.

Competence

Offshore survival (BOSIET / HUET), valid medicals and role-specific training for all personnel.

Emergency preparedness

Project emergency response plans, bridging documents with the client and regular drills.

Environment

Waste, NORM and spill prevention managed to national and international regulatory requirements.

Reporting and learning

Incidents and near misses reported, investigated and shared so lessons reach every crew.

ON EVERY SCOPE

- Risk assessments and method statements
- Approved procedures before mobilisation
- Toolbox talks and permit-to-work offshore
- HSE reporting to the client throughout



Install • Moor • Maintain • Decommission



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