Acteon

Mooring integrity management track record



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We act on our customers' challenges

Acteon helps customers extend the life of floating assets and ensure safe, compliant operations by managing mooring system health across the lifecycle. From in-field inspections and fatigue analysis to repairs, replacements and digital monitoring, we deliver tailored mooring integrity programmes grounded in engineering rigour and real-world operational experience.

Our integrated approach combines project management, data insight and offshore delivery to reduce downtime, control cost and mitigate failure risks. We work across all mooring types, chain grades and environments – supporting confidence and compliance in even the most demanding offshore conditions.

50+

Large mooring inspection, maintenance and repair projects in the past decade

Asia Pacific

Year	Client	Project name	Water depth (ft)	Work summary
2015	Atwood Oceanics	Atwood Eagle	35	• Project management, engineering, procurement and installation of chains, and wire replacement scope for a semi-submersible rig • Changeout of 32 km of wire and 8 km of chain
2014	Offshore Oil Engineering (COOEC) (South China Sea)	Panyu FPSO	345	• Project management and engineering • Installation of the mooring system using the existing mooring pattern and mooring changeout conducted ensuring that the existing floating production, storage and offloading vessel (FPSO) remained in production throughout the installation
2012	Offshore Oil Engineering (COOEC) (South China Sea)	LuFeng NHSK Floating Storage and Offloading Unit (FSOU)	433	Upgrades, relocation and hookup services: • Project management and engineering • Provision of anchors, ground chain and excursion chain during pre-lay stage • Provision of buoy hookup, dip-zone chain and riser joint support ships (JSS) wire during hookup stage • Installation of 8 inch static flow line and 8 in. dynamic riser between FL13-2 platform and the NHSK buoy • Provision of guide frame and gravity base for the midwater arch
2011	Murphy Sabah Oil (Malaysia)	Kikeh Spar	4,362	• Hawser changeout • Tender-assist drilling (TAD) hookup • Provided offshore personnel

Americas

Year	Client	Project name	Water depth (ft)	Work summary
2024	Equinor	Titan Platform	4,000	Mooring line repair: • Project management • Engineering analysis • Procurement • Offshore execution • Heading control • Personnel
2023-2024	Altera Ocyan	Cidade de Itajaí FPSO	984	Mooring line inspection: • Project support • Engineering analyses, offshore procedures • Personnel and equipment
2022-2023	Trident Energy	P65 Platform	312	Replacement of broken mooring lines: • Recovery, inspection and repair procedures • Chain cleaning and inspection equipment • Survey equipment and personnel • Equipment and offshore personnel
2022-2023	Karoon	Cidade de Itajaí FPSO	984	Replacement of broken mooring lines: • Recovery, inspection and repair procedures • Chain cleaning and inspection equipment • Survey equipment and personnel • Equipment and offshore personnel
2022	ExxonMobil	Hoover Diana Platform	4,808	Replacement of nine top chains and one full mooring line: • Project management • Engineering analysis • Procurement • Vessel selection • Offshore execution • Heading control • Personnel
2021	Trident Energy	P08 Platform	N/A	Top chain replacement: • Project management • Engineering • Procurement • Offshore execution
2019	MODEC/Ardent	Cidade do Rio de Janeiro MV14 FPSO	N/A	Mooring master and positioning system for MV14 disconnection and tow out: • Positioning equipment and tow master provision for MV14 salvage plan • Tow out
2018	Shell	Fluminense FPSO	2,297	Mooring line remedial work: • Project management • Engineering • Procurement • Marine base services • Offshore execution
2017, 2019, 2022, 2024	MODEC	Various FPSOs	N/A	FPSO fleet mooring system inspection: • Project management • Cleaning and measurement, tooling provision • Offshore executions • Reporting

Year	Client	Project name	Water depth (ft)	Work summary
2011	Shell Offshore	Auger Tension Leg Platform	2,861	Removal of the existing eight platform wires and the installation of new platform wires, including: • Development of the project execution plan • Design and fabrication of installation aids • Provision of offshore personnel
2011	Anadarko Petroleum	Innovator Platform	3,000	Mooring maintenance and upgrade (change-out of rig wires, upgrade of five mooring legs with new anchors and components for possible life extension and inspection): • Project management • Engineering • Mooring design • Regulatory interface • Procurement • Offshore execution

Europe

Year	Client	Project name	Water depth (ft)	Work summary
2023-2024	Anasuria	Anasuria FPSO	308	Mooring line replacement and inspection: • Project management • Engineering analysis • Vessel selection • Rigging procurement • Management and bridging docs – dive scope • Heading control • Offshore execution • Personnel
2023	Ithaca Energy	FPS1	N/A	Design and installation of chain hang-off plates: • Project management • Design engineering • Offshore installation • Personnel
2023	Dana Petroleum (E&P)	Western Isles FPSO	N/A	Engineering for chain/line replacement mooring line inspection
2022	Petrofac	Global Producer 3 FPSO	476	Chain change-out life extension scope: • Project management • Engineering analysis • Procurement • Offshore execution • Heading control • Personnel
2023	TotalEnergies	Gryphon FPSO	367	Mooring line inspection and repair: • Project management • Engineering analysis (repair scope) • Rigging procurement • Heading control • Offshore execution • Personnel
2022	Dana Petroleum (E&P)	Western Isles FPSO	N/A	• Development of skidding procedures • Marine consultancy
2022	Enquest Heather	Enquest Producer FPSO	N/A	Quayside mooring analysis
2022	Repsol Sinopec Resources UK	Bleo Holm FPSO	N/A	Chain inspection and fatigue load testing of FPSO chain: • Loading analysis • Cyclic fatigue load testing • Integrity management plan
2022	Carnival	Queen Victoria II	N/A	Full chain inspection and recertification of ship's anchor chain: • Inspected to ABS standards • Inspected under A0SS 413 accreditation • Inspection of all chain connecting links • Chain inspection consultancy

Year	Client	Project name	Water depth (ft)	Work summary
2022-2023	Repsol Sinopec Resources UK	Bleo Holm FPSO	N/A	Chain changeout: • Project management • Engineering analysis • Procedure writing • Marine consultancy • Installation analysis • Offshore chain inspection (recovered lines) • Heading control • Offshore project support personnel
2021	Petrofac Facilities Management	Global Producer 3 FPSO	N/A	• Thruster change out • Heading control
2021	Ponticelli UK	Ailsa FSO	295	Ailsa hawser line replacement: • Project management • Engineering and installation analysis • Procurement • Disconnection and recovery of old and new hawser • Heading control operations • Procedure development • Offshore personnel
2021	Ithaca Oil and Gas	Captain FPSO	N/A	Top chain replacement: • Project management • Engineering analysis • Procedure writing • Marine consultancy • Installation analysis • Offshore chain inspection (recovered lines) • Heading control • Offshore project support personnel • Chain procurement • Onshore chain inspection support • Rigging procurement
2020	EnQuest Heather	Northern Producer	N/A	Mooring integrity review
2019	EnQuest Heather	Northern Producer	N/A	Top chain replacement: • Project management • Engineering analysis • Procedure writing • Offshore analysis
2019	Repsol Sinopec Resources UK	Bleo Holm FPSO	N/A	Chain changeout: • Project management • Engineering analysis • Procedure writing • Marine consultancy • Installation analysis • Offshore chain inspection (recovered lines) • Heading control • Offshore project support
2019	Chevron UK	Alba floating storage unit (FSU)	459	Replacement of 12 mooring lines: • Engineering and offshore procedures • Equipment and personnel • Survey and positioning services • Full project management and vessel charter

Africa

Year	Client	Project name	Water depth (ft)	Work summary
2024	RMC/GMT (Nigeria)	Agbami FPSO	4,800	Mooring line replacement: • Project management and engineering • Installation engineering • Equipment and offshore personnel • Offshore prep and execution
2023-2024	RMC/GMT (Shell)	Bonga FPSO	3,084-3,366	Top chain replacement on all 12 mooring lines: • Project management • Engineering analysis • Offshore execution • Heading control • Personnel
2021	Chevron Nigeria	Escravos FSO	138	Replacement of six mooring lines: • Project management and engineering • Installation engineering • Equipment and offshore personnel • Offshore preparation and execution
2020	MODEC Management Services	FPSO Baobab Ivoirien MV10	N/A	Top chain replacement: • Project management • Engineering analysis • Procedure writing • Marine consultancy • Installation analysis • Offshore chain inspection (recovered lines) • Heading control • Offshore project support personnel
2019	MODEC Management Services	FPSO Baobab Ivoirien MV10	N/A	Mooring line repair: • Project management • Engineering analysis • Procedure writing • Marine consultancy • Installation analysis • Offshore chain inspection (recovered lines) • Heading control • Offshore project support personnel
2019	Chevron Nigeria	Escravos FSO	138	Replacement of broken mooring line: • Recovery, inspection and repair procedures • Chain sizing and length requirement • Survey equipment and personnel • Equipment and offshore personnel
2018-2019	Maersk Supply Service (for MEGI)	Serpentina FPSO	1,558	Removal of temporary mooring system and installation of new permanent mooring system: • Design, fabrication and installation of nine suction embedded plate anchors (SEPLAs) and their ground chains • Disconnection and laydown of nine temporary mooring lines and installation and hookup of the new permanent mooring lines • Recovery of temporary anchors from the seabed • Equipment and offshore personnel
2018	Esso Exploration and Production Nigeria	Erha FPSO	3,832	Replacement of nine mooring lines: • Project management and engineering • Equipment and offshore personnel

Year	Client	Project name	Water depth (ft)	Work summary
2018	Tullow Oil (Ghana)	Kwame Nkrumah FPSO (Jubilee)	3,609	Installation of anchors for permanent spread moorings: • Project management and engineering • Offshore operations personnel • Fabricated and installed eight SEPLAs
2016-2017	Tullow Oil (Ghana)	Kwame Nkrumah FPSO (Jubilee)	3,609	Installation of six interim turret remediation moorings: • Project management and engineering • Offshore operations personnel • Installed six stern mooring lines on the FPSO
2015-2016	Cabinda Gulf Oil Company (Chevron) (Angola)	Sanha FPSO	197	Replacement of nine mooring lines: • Project management, engineering and procedures • Procurement and offshore operations personnel
2015	MODEC International (Cote d'Ivoire)	FPSO Baobab Ivoirien MV10	3,182	Maintenance of one mooring line: • Engineering and procedures • Offshore operations services
2015	Bumi Armada Nigeria	Armada Perkasa	50	Top chain replacement of ten FPSO mooring lines: • Repositioning of two mooring lines, with no production shutdown required
2015	Boskalis/MEGI (Equatorial Guinea)	Zafiro Producer	591	Inspect and replace old mooring chains and wire ropes for nine of twelve mooring lines: • Provided engineering and offshore operations services • Replaced two drag anchors
2014	MODEC International (Cote d'Ivoire)	FPSO Baobab Ivoirian MV10	3,182	• Development of procedures for replacing mooring lines • Provision of offshore crew

We act across the project lifecycle

Acteon business lines Intermoor Moorings and Anchors | UTEC Geo-services | **Engineering consultancy** 2H

Solutions

Site investigation and characterisation

Geophysical and geotechnical surveys

Geospatial surveys

Why Acteon

- Comprehensive data collection
- Well-organised data orchestration
- Insightful interpretation
- Enhanced asset value

What we deliver

- Mitigating risks
- Optimising design, construction and maintenance

Offshore construction

Positioning and construction support

Installation services

Mooring solutions

Why Acteon

- Robust experience in the most challenging environments
- Advanced equipment
- Intelligent approach

What we deliver

- Ensuring safety
- Reducing total cost of installation
- Accelerating schedule

Asset integrity management

Offshore inspection

Monitoring and digital solutions

Mooring inspection, maintenance, repair and replacement

Why Acteon

- Extensive data-gathering
- Insightful analysis
- Highly efficient maintenance, repair and replacement

What we deliver

- Ensuring compliance
- Realising maximum asset lifetime value
- Reducing total cost of operations

Life extension and decommissioning

Decommissioning engineering

Removal and disposal services

Asset life extension

Why Acteon

- Tailored decommissioning and life extension plans early in the project lifecycle
- Efficient offshore execution

What we deliver

- Maximising asset value
- Limiting decommissioning costs
- Minimising environmental risks

Underpinned by agile engineering consultancy that enhances project-critical decisions, optimises economic viability and minimises risk throughout the energy project lifecycle.

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