

CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
YOKOHAMA RUBBER CO.	SPM		India	40 m	 Static & Dynamic Analysis of subsea hoses with CALM Buoy Dynamic analysis of hoses in 100-10-1 yr. storms 		2025
ARGO MARINE	Container Barge		PNG	~	 Design of the changes to the barge to be come a container transport barge. Obtaining class approval for the new classified barge. Naval architecture, stability, structural engineering. 		2025
MOOREAST	BSRC	MOOREAST	Thailand	20 m	 Design & Engineering of installation procedures. Full Offshore installation engineering, drawings, analysis. Offshore Construction Management and Offshore Execution of the installation 		2025
вніс	MRDF	E Branet Branchard	Malaysia	25 m	 Design & Engineering of installation requirements Full Offshore installation engineering, drawings, procedures. Naval architecture, Stability of vessels 		2025
NOVA-X	G1 FSO CALM BUOY		Thailand	60 m	 Analysis of the riser system Installation Detailed drawings of the riser system installation Technical support for Offshore Installation Technical support for the riser design Design & Review of engineering documents and Procedures 		2024 - 2025
Bhagwan Marine Limited	ROV ANALSYIS	BHAGWAN"	Australia	75 m	 Analysis and simulation of the ROV Launch for different environmental conditions 		2024
Yntegra Group	Floating Paddle Court	yntegrag	USA	10 m	 Engineering & Design of a paddle court for use in harbours and protected waterways. Detailed naval Architectural design. 		2024
OPPY INTNAL	DELFT House	*•Орру.	Netherlands	5 m	1. Design support drawings of floating office		2024
EPCM ENGINEERS LIMITED	FSO	INSPIRATION . INNOVATION . INSIGHT	Nigeria	70 m	 Design of mooring system Design of mooring Buoys 		2024

Offshore Installation

Supply of Chain, Connectors etc. / Equipment

Detailed Design & Engineering / FEED

Offshore renewables

DEEPBLUE CONSULTANCY & ENGINEERING

PROJECTS TRACK RECORD

CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	ТҮРЕ	YEAR
EXAIL, FRANCE	MRDF	exail	Malaysia	25 m	 Procedures for offshore installations for Submerged Cable / umbilicals MAC Sensors 		2024
YINSON	AGOGO FPSO	YINSON HOLDINGS BERHAD (29147.4) YOUR MATTINE NI INTEGNATED OFFSHORE SERVICES	Angola	1,700 m	 Supply of Offshore Chain and subsea connectors through VICINAY MARINE 		2024
YOKOHAMA RUBBER CO.	Balongang Field	УОКОНАМА	Indonesia	15 m	 Static & Dynamic Analysis of subsea hoses with CALM Buoy Dynamic analysis of hoses in 100-10-1 yr. storms 		2024
YOKOHAMA RUBBER CO.	Widuri terminal	УОКОНАМА	Indonesia	25 m	 Static & Dynamic analysis of subsea hoses with FSO Static & Dynamic Analysis of subsea hoses with CALM Buoy Dynamic analysis of hoses in 100-10-1 yr. storms 		2024
YOKOHAMA	Pertamina CALM Buoy	УОКОНАМА	Indonesia	25 m	 Static & Dynamic Analysis of subsea hoses Dynamic analysis of hoses in 100-10-1 yr. storms 		2023
YINSON	Maria de Quiteria FPSO	VINSOUN HOLDINGS BERHAD (20147-4) YOUR MATTINE BLINTEGANTED OFFSHORE SERVICES	Brazil	1,300 m	 Supply of Offshore Chain and subsea connectors through VICINAY MARINE 		2023
LNG EASY	MFP	LNG Easy	Malaysia	25 m	 Design of mooring system Design of flexible hose system 		2023
VENTURER TIMBERWORK	Cave Cay	Venturer ^{Totarenen} Beilige wis Neare	Bahamas	25 m	 Survey & review of existing floats Stability analysis for Neptune floating suite Mooring analysis Hurricane system mooring 		2023
BW ENERGY / TUFF OFFSHORE	Maromba Field FPSO	$\overset{\mathrm{B}}{W}$ by energy	Brazil	152 m	 Mooring analysis Mooring Fatigue analysis Mooring design Field lay-out. 		2023
YINSON	ENAUTA FPSO	VINSON HOLDINGS BERHAD (19942-4) Toda Iverine B InfloamID Offsiciel Structs	Brazil	1,500 m	 Supply of Offshore Chain and subsea connectors through VICINAY MARINE 		2022

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Offshore renewables

Decommissioning



CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	ТҮРЕ	YEAR
BUREAU VERITAS	FPSO Armada Sterling V	BUREAU VERITAS	Singapore / India	400 m	 Independent review of the SPOG FPSO marine and oil and gas systems for sail away status and readiness from the yard Independent review of the commissioning status of marine, vessel and process systems. Independent review of classification Society status. Independent review of the health Safety and Environment plans, HAZOP's, etc. 		2022
SEAGULL GROUP	Vessel refurbishment	Seagull	Singapore	~	 Piping lay-out / Piping isometrics / Piping drawings 		2022
INDIAN NAVY / METS	Floating Dock		India	20 m	 Engineering, analysis and procedures for the unmooring and relocation of the dock Procedures adapted to the existing vessel spread Towing of Floating dock Relocation of Floating dock along the quay side Offshore Construction Manager on-site for the offshore phase 		2022
BW ENERGY / TUFF OFFSHORE	Maromba Field FPSO		- Brazil	152 m	 Detailed mooring design, field lay-out Fatigue Analysis Offloading analysis Specifications for mooring system and offloading systems 		2022
LLOYDS REGISTER	CORAL FLNG	Lloyd's Register	Mozambique	2,000 m	 Preparation of documentation for the operation of the FLNG HAZID & Document review Preparation of the Emergency Cyclone Response Plan 		2022
VESTIGO / VANTAGE	MAMPU-1 FPSO Nautica-Muar FSO	VESTIGO Investigate, Seek, Explore	Malaysia	75 m	 Procedures, engineering & analysis for mooring retrieval, mooring system installation and relocation of FPSO / FSO Procedures, engineering, analysis for riser retrieval & hook-up at FPSO & Platform Offshore Construction Manager offshore on-site 		2022
ECA	Gen-Set		Malaysia	~	1. Client representative during the FAT		2022

Offshore Installation

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YOKOHAMA RUBBER CO	CALM Buoy Hoses	УОКОНАМА	Japan	100 m	 CALM Buoy system hose design Complete Subsea Hose static & dynamic analysis and design Subsea design of hose and ancillary equipment, buoys etc. 		2022
EPCM ENGINEERS LIMITED	Barge		Nigeria	70 m	 Design review of flare bridge Pile design & review Mooring system review 		2021
ARAMCO / KAVIN ENGINEERING	Marjan Field		Saudi Arabia	55 m	 Detailed design of 3.4 km, 15 kV Subsea Power Cable with fibre optic and ancillary equipment, between two existing platform On-bottom stability, On-bottom walking assessment Route assessment and final route design Installation engineering, analysis, procedures & requirements Bend stiffeners, J-tube, protection Specifications for the cable and its equipment 		2021 / 2022
ECA VANTAGE BSES	Subsea Equipment		Malaysia	25 m	 Engineering, design, analysis of subsea installation Engineering design and analysis of subsea cable installation (10 km) Design of offshore support system 		2021 / 2022
YOKOHAMA RUBBER CO	CALM Buoy Hoses	YOKOHAMA	Indonesia	50 m	 CALM Buoy system hose design Subsea Hose static analysis 		2021
MOOREAST	Klang River Rubbish collector	Mooreast Pte Ltd	Malaysia	10 m	 Mooring analysis of vessel Analysis of floating booms Review design suitability Installation requirements & procedures 		2021
BWO / SEAGULL	FSRU	Seagull	Singapore	NA	 Design and engineer of pump support system for LNG tanks Integration of support with existing tanks 		2021
SAIPEM	Barges	SAIPEM	Thailand	20 m	 Engineering support for offshore installation Engineering, procedures, drawings, analysis 		2020

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Expert Witness - 3rd Party Independent Review

Decommissioning



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JAMES FISCHER / KRIS ENERGY	Apsara Field	James Fisher and Sons plo Marine Services Worldwide	Cambodia	80 m	 Supply of Offshore construction Manager and project engineer for offshore installation Design of riser and power cable hang-off balcony at the platform. Offshore installation of risers and Power cable OCM & Engineers for the installation 		2020
YOKOHAMA RUBBER CO	CALM Buoy Hoses	УОКОНАМА	Japan	100 m	 CALM Buoy system hose design Complete Subsea Hose dynamic analysis and design Complete floating Hose analysis 		2020
LNG EASY	MFP		Myanmar	10 m	 Mooring & SURF Installation, hook-up, and commissioning engineering of an LNG Floating platform for the connection with an LNG Tanker as FSU Installation and commissioning Management Installation and commissioning manager of the MFP 		2020
NOC / TUFF	FSO & CALM Buoy	شرکة ففط الشمال North Oil Company	Qatar	70 m	 FEED STUDY level 2&3 for the mooring systems and vessel conversion requirements for FSO and CALM Buoy system Chain stoppers and mooring system, specifications, RFQ Naval Architecture for conversion Mooring analysis Mooring Fatigue analysis Mooring system design 		2019
SOA / HYUNDAI (HOB)	CALM Buoy		Korea	34 m	 Review of chain thickness report Calculating and establishing the chain remain Life from Calculating and establishing the fatigue life Procedures for changing out chain segments Approval from Class Society for the change out proposed. Chain tensioning system engineering, analysis, procedures and drawings Offshore installation analysis and procedures 		2020



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NOC / TUFF	FSO & CALM Buoy	شرکت نفط الشمال North Oil Company	Qatar	70 m	 FEED STUDY for mooring systems options Technical commercial review of solutions Design of mooring system, mooring analysis 		2020
YOKOHAMA RUBBER COMP.	MVS	УОКОНАМА	Vietnam	90 m	 Dynamic analysis of offloading hose when free floating behind FPSO Dynamic analysis of offloading hose when looped back behind FPSO Dynamic analysis of offloading hose when used in Tandem FPSO – Shuttle tanker Loads from floating hose on full system. 		2020
NOC	FSO & CALM Buoy	شركة نفط الشمال North Oil Company	Qatar	70 m	 FEED level 1 STUDY for the mooring systems and vessel conversion requirements Chain stoppers and mooring system Thruster and their requirements and analysis Naval Architecture for conversion 		2019
AMANIAGA	CALM Buoy		Malaysia	30 m	 Detailed Mooring Analysis, including Fatigue for CALM Buoy Review of requirements for upgrade of buoy. Procedures for installation 		2019
BLUESEAS ENERGY / EA TECHNIQUE	TST SEPAT - C	BLUESEAS MARIITIME SERVICES	Malaysia	53 m	 Detailed Riser and flowline design Field lay-outs Fabrication of components Management of Riser / flowline system 		2019
T7GLOBAL / CHOC	FSO Puteri Cakerawala	T7 GLOBAL BERHAD	Malaysia	55m	 Detailed design of offloading floating hose system. Dynamic analysis and resonance analysis of floating hose during offloading and during extreme conditions. 		2019
AMANIAGA	CALM Buoy	A MANIAGA	Malaysia	30 m	 Inspection of CALM Buoy prior to removal Engineering, stability, and dynamic analysis for Calm Buoy removal and Tow out. Decommissioning procedures Support personnel for the preparation of the Tow out Tow-out and delivery to quay side. 		2019

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MOPU HOLDINGS	Temporary Storage Tanker	MOPUHOLDINGS A Cepsa Company	Malaysia	60 m	 Reinstatement of Mooring System Complete analysis design checks and reviews for the mooring system Complete Installation procedures and on-going review 		2019
SOA / HYUNDAI (HOB)	CALM Buoy		Korea	34 m	 Hydrodynamic analysis of CALM Buoy Complete Mooring analysis, design and engineering, fatigue assessment etc. Riser analysis, design and engineering Detailed Installation Procedures 		2019
HESS EXPLORATION & PRODUCTION	FSO	HESS	Malaysia	56 m	1. On going Technical and Marine Consultancy		2019
LNG-EASY	FSRU-Barge		Singapore / Indonesia	25 m	 FEED for the development of a Regassification LNG Barge to be moored and to receive offloading LNG vessels, and transfer gas to power plants on-shore Naval Architecture, Motion analysis, stability checks 		2018- 2019
HESS EXPLORATION & PRODUCTION	FSO	HESS	Malaysia	56 m	 DEEPBLUE was appointed as the overall Technical and Managerial consultant for the engineering of the offshore installation. Multiple DB personnel were appointed as the overall HESS Transport & Installation Management, in order to manage the different subcontractors from a technical and managerial point of view onshore and during the offshore campaign for the FSO, mooring and SURF Installation. Including flowline lay, mooring installation and hook-up, SAT diving etc. 		2018
CAFHI	Jet-fuel offloading terminal		Singapore	15 m	 Design and engineering of the mooring system for several size tankers for the offloading of cargo Design and engineering of the Hose and SURF system for the offloading of the cargo at the terminal 		2018
Offshore Installa	tion Conne	ectors atc /	led Design & eering / FEED	Offshore	e renewables Expert Witness - 3 rd Party Independent Review Decommissioning	F	Page 7



CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	ТҮРЕ	YEAR
HESS EXPLORATION & PRODUCTION	Temporary Storage Tanker		Malaysia	56 m	 Complete EPIC contract of the Temporary Storage Tanker Design of the mooring system for a Temporary Storage Tanker (TST) for condensate storage Design of the subsea flowline, riser and hose system for condensate transfer from Central Processing Platform (CPP) to the TST Design of subsea support bases and gravity systems 		2018
HESS EXPLORATION & PRODUCTION	Temporary Storage Tanker		Malaysia	56 m	 Upgrading of 6-point mooring system to 8-point mooring system to increase the operability Install 2 chain stoppers and 1 QRH at the stern of the TST Installation engineering for the tanker, mooring and SURF. Provision of all personnel for installation, management, Flowline installation management EPIC of the Offshore installation of the tanker, mooring system and SURF Offshore TST changeout of 6-point moored tanker with a new 8- point moored tanker Design engineering and offshore procedures for offloading of condensate 		2017- 2018
JMUS	Floating Dock Installation	JMU	India	25 m	 Installation engineering and procedures for mooring installation and hook up Offshore installation of the mooring system. Offshore Personnel support during the installation 		2017
ARDENT GLOBAL	Containership Salvage	GLOBAL LOGISTICS	New Caledonia	5 m	 Hydrodynamic analysis for the crane barge for the salvage of the grounded container ship Motion and acceleration analysis for the crane barge 		2017
COMPASS ENERGY	Stability analysis – LNG vessel	compassenergy Intelligent Engineering	Singapore	-	 Stability analysis for the LNG Fortune Stability analysis for the LNG Lucky 		2017
AMANIAGA	Offshore Installation		Malaysia	70 m	 Design of installation aids Full design drawings 		2017

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SPT OFFSHORE	Accommodation barge		Netherlands / Malaysia	73 m	 Field lay-out and mooring system design Mooring analysis and design for a construction support barge All engineering drawings for the design and installation 		2017
LNG LINK	FSRU	LNG Link	Indonesia	4 to 10 m	 FEED for Mooring system FEED for SURF and Hose system Budgets and project execution 		2017
OPTIMA ENERGY	Multi Buoy Mooring for LPG Offloading	o ptima	Cameroon	20 m	 Feasibility and FEED study for the mooring of LPG Offloading System Preliminary costing for equipment and installation 		2017
OPTIMA ENERGY	Multi Buoy Mooring for LPG Offloading		Nigeria	8 m	 Feasibility and FEED study for the mooring of LPG Offloading System Preliminary costing for equipment and installation 		
ECA (FRANCE)	Subsea Design		Malaysia	20 m	 Design and engineering of subsea support system, templates, frames etc. Installation engineering and design of subsea templates. Procedures for Offshore installation of subsea templates. Offshore management and engineering support by DEEPBLUE personnel. 		2017
ANGLO EASTERN SHIPMANAGEMENT	Gas Concord	ANGLO-EASTERN	Singapore	120 m	 Decommissioning Support to Client at shipyard of an LPG Carrier. Perform stability review of the vessel. Perform lightship measurement and calculations. Obtain stability sail away approval from BV. 		2017
YINSON	FPSO	VINSON HOLDINGS BERHAD (29147.A) YOUR MATILE BLATEOMITID OFFICIAL SERVICES	Singapore	300 m	 Review of mooring proposals performed by others Review of hydrodynamics performed by others 		2017
TUFF	FPSO	TUFF	UAE	80 m	 OCM for the offshore mooring & SURF Installation, FPSO Hook-up. Engineering and design of Offshore mooring, SURF installation & Hook-up. Additional DEEPBLUE engineering personnel during Offshore installation. 		2016- 2017

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CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	ТҮРЕ	YEAR
WOODSIDE / SAPURA KENCANA	Balnaves RTM		Australia	140 m	 Detailed analysis and engineering of mooring system removal Detailed analysis and engineering of riser system removal Detailed analysis and engineering of Tower lowering from vertical to horizontal position Tow analysis and procedures of the RTM Analysis and simulation of ballasting and de-ballasting sequence off- shore Offshore support engineering personnel 		2016
COASTAL ENERGY	Banang Field	E N Æ R G Y	Malaysia	70 m	 Engineering & Detailed design of a temporary mooring system for the tanker Detailed installation procedures, analysis and drawings MWS approval Offshore Installation management and engineering execution by DEEPBLUE personnel 		2016
COASTAL ENERGY	Kappal Field		Malaysia	70 m	 Detailed design and engineering of removal of the mooring system Detailed de-installation procedures, analysis and drawings Offshore removal of Tanker MWS approval Offshore management and engineering support by DEEPBLUE personnel 		2016
CAFHI	Vessel Terminal	CAFHI	Singapore	15 m	 Mooring system design and analysis for loading vessel Mooring design and analysis for vessel along the quay side Naval Architectural review of the vessel with respect to the components and systems required for Mooring Drawings, analysis, procedures Installation procedures 		2016
EXON MOBILE / AMANIAGA	Mooring system Installation	E xonMobil	PNG	15 m	 Detailed design and engineering of mooring system installation. Sea-fastening of all equipment. Detailed installation procedures, analysis and drawings. HAZID – SIMOPS. Offshore management and engineering support by DEEPBLUE personnel 		2016

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Decommissioning



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EXON MOBILE / AMANIAGA	Mooring system decommissioning	ExonMobil	PNG	15 m	 Detailed design and engineering of mooring system decommissioning Sea-fastening of all equipment Detailed decommissioning procedures, analysis and drawings HAZID – SIMOPS Offshore Support personnel 		2016
MITSUI	Floating Windmill	MITSUILCO.	Japan	70 m	 Detailed design Naval Architectural requirements Mooring and anchoring system Suction piles and drag anchors design Installation procedures and engineering review Cost estimation for mooring system and installation 		2016
ECA (FRANCE)	Jacket		Malaysia	20 m	 FEED Design and Engineering of Jacket Structural design and Jacket in place stress analysis Geotechnical design for jacket stability and strength 		2016
TUFF	FPSO	TUFF	UAE	80 m	 EPIC for the following: Mooring system, anchors, winches Subsea, Risers and umbilical Detailed design of under deck strengthening for all non-process related topsides and marine equipment Design of riser & Umbilical porches, floating hose porches General Naval Architecture Marine systems engineering and design Offshore Installation support, engineering and procedures 		2015- 2016
DOLPHIN DRILLING/VIKING	Mooring Analysis	DOLPHIN DRILLING	Indonesia	30 m	 Detailed design and Engineering: 1. Mooring analysis of drill ship with Class / MWS approval 2. Drawings of mooring system and field layout 3. Installation specification for the mooring systems 		2015

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CLIENT	PROJECT		COUNTRY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
CONFIDENTIAL	FSO, subsea system and semi- submersible		India	60 m	 Expert witness to the Arbitral Tribunal in Delhi, India for all technical matters comprising: Mooring System Subsea System Offshore Installation Offshore Operations Emergency operations Analysis and simulations of System failure and vessel behaviour Preparation of Affidavits for the Arbitral Tribunal and representation in court 		2015
GLOCAL	Floating Windmill	GLOCAL JAPAN INC.	Japan	70 m	 Detailed design Naval Architecture Hydrodynamics Mooring design and anchoring system Suction piles and drag anchors design Installation procedures and engineering review Cost estimation for mooring system and installation 		2015
ING – BANK	FPSO OSX-2 Decommissioning and lay-up	ING BANK	Indonesia	15 m	 Decommissioning of the mooring system. Detailed mooring analysis for vessel lay-up Structural strength analysis of the FPSO and jetty bollards Offshore installation drawings Acted as owner representative 		2015
BUMI ARMADA	FSO Feasibility Studies	BUMIARMADA	Myanmar	20 m	 Mooring analysis for spread moored system Offloading analysis of FSO and shuttle tanker Field layout and mooring drawings Comparative study of various mooring and offloading options 		2015



BC PETROLEUM	EPV Balai Mutiara	E PETROLEUM	Malaysia	70 m	 Engineering design and Consultant for the EPV Upgrade for SURF, mooring and installation: Field lay-out review and development Mooring analysis, mooring fatigue, tandem analysis Riser analysis Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation Specifications for mooring systems, components, vessel equipment, offloading hoses, winches and dependant structures and equipment Offshore installation analysis, procedures, methodology, requirements and specifications Review of Company produced engineering packages and detailed design Review of Company subcontractors work and proposals Marine warranty surveyor, review of 3rd party engineering 	2014 - 2015
COBALT /	Cameia	Cobalt Diternational Energy	West Africa	2800 m	 SURF, Subsea mooring and installation detailed engineering for an FPSO comprising of: Field lay-out review and development Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water Mooring analysis for turret and spread-moored Riser and umbilical analysis coupled analysis with mooring system, for the different options Design and engineering of vessel structural modifications requirements for mooring systems, components, vessel equipment and dependant structures and equipment. Offshore Installation analysis, procedures, methodology, 	2014
FOS	KK-Field Accommodation	FOS ENERGY LLC	Malaysia	60 m	requirements and specifications Study for an accommodation barge: 1. Field lay-out review and development of vessel positioning in proximity of platforms 2. Mooring analysis, mooring fatigue, Specifications for mooring systems, components, vessel equipment and dependant structures and equipment	2014

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M3NERGY	Perintis FPSO	M3NERGY	Indonesia	30 m	 Mooring and installation detailed design & engineering: 1. Detailed Mooring analysis for vessel lay-up 2. Specifications of mooring system 3. Offshore Installation requirements 	2014
COASTAL ENERGY	Banang Field	ENÆRGY	Malaysia	70 m	 Mooring and Offshore installation detailed engineering and design and execution: 1. Detailed design and engineering of mooring system 2. Detailed design and engineering of Side-by-Side offloading, simulation of SBS 3. Detailed installation procedures, analysis and drawings 4. Offshore Installation 5. Offshore management and engineering support by DEEPBLUE personnel 	2014
NAE – BUMI ARMADA	ETAN FPSO	BUMIARMADA	Nigeria	1800 m	 FEED study for an FPSO comprising of: Field lay-out review and development Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water Preliminary riser and umbilical analysis, coupled analysis with mooring system Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation Specifications for mooring systems, components, vessel equipment and dependant structures and equipment 	2014



PETROBRAS – BUMI ARMADA	LIBRA FPSO	BUMIARMADA	- Brazil	2400 m	 FEED study for an FPSO comprising of: Field lay-out review and development Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water Riser and umbilical analysis, coupled analysis with mooring system Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. Specifications for mooring systems, components, vessel equipment and dependant structures and equipment 	2014
M3NERGY	Perintis FPSO	M3NERGY	Malaysia	20 m	 Detailed Mooring analysis for vessel lay-up Specifications of mooring system Offshore Installation requirements 	2014
BUMI ARMADA	Cluster 7 FPSO	BUMIARMADA	India	150 m	 Technical consultant for the Offshore Installation of the C7-FPSO Providing management resources, Offshore Construction Manager, Technical support, Client representative, Marine Warranty Surveyor Offshore management and engineering support by DEEPBLUE personnel 	2014
РТТЕР	Bongkot	PTTEP	Thailand	70 m	 Review of chain thickness report Calculating and establishing the chain remain Life from a strength point of view Calculating and establishing the chain remain Life from a fatigue point of view Procedures for changing out chain segments Approval from Class Society for the change out proposed 	2014
РТТЕР	FSO-2	PTTEP	Thailand	80 m	 Review of the different alternatives for the condensate production without an FSO Review of production platform requirements Design and engineering of SPM CALM Buoy system Subsea flow assurance of the production from the different fields 	2014

Detailed Design & Engineering / FEED



РТТЕР	FSO-2	PTTEP	Thailand	80 m	 Offshore measurement and review of vessel status OPEX and CAPEX estimation of the life extension Developing different alternatives with respect to the possible scenarios for life extension 	2013 - 2014
ENI – BUMI ARMADA	OCTP FPSO	BUMIARMADA	Ghana	900 m	 Field lay-out review and development. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water Preliminary riser and umbilical analysis, coupled analysis with mooring system Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation Specifications for mooring systems, components, vessel equipment and dependant structures and equipment 	2013 - 2014
TULLOW	KUDU FPU		Namibia	160 m	 Field lay-out review and development Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water Preliminary riser and umbilical analysis, coupled analysis with mooring system Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. Specifications for mooring systems, components, vessel equipment and dependant structures and equipment 	2013
РТТЕР	FSO-2	PTTEP	Thailand	80 m	 Technical support to PTTEP with the change out of existing risers. Offshore Installation support personnel. Review of Installation Company procedures and engineering. Offshore management and engineering support by DEEPBLUE personnel 	2013
COASTAL ENERGY	Storage Tanker for Kapal Field	E N E R G Y	Malaysia	70 m	 Detailed design and engineering of mooring system Detailed design and engineering of Side-by-Side offloading, simulation of SBS 	2013

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PETRONAS – TECHNIP	Bukit Tua FPSO	PETRONAS PETRONAS	- Indonesia	70 m	 Supply of mooring and riser engineering personnel Mooring analysis, mooring fatigue analysis Riser analysis, riser design Design and engineering of mooring and riser systems on board the FPSO Design and engineering of Marine systems Design and engineering of the offshore installation for mooring and risers Preparation of Detailed Specifications for all mooring, risers, subsea and marine systems 	2012 - 2013
WOODSIDE / APACHE	Balnaves	woodside Apache	• Australia	135 m	 Design and engineering and simulation of Hydrodynamic behaviour of the RTM tower Simulation and analysis of RTM tower during tow, and installation. Design and simulation of the different mooring lines during installation, connection and operations Design and simulation of the different flexible risers during installation, connection and operations 	2012 - 2013
LUNDIN – BUREAU VERITAS	IKDAM FPSO	B U R E A U V E R I T A S	Malaysia	70 m	 Mooring analysis Field lay-out options review HSE and operational analysis of the concepts Commercial and Technical review of the concepts 	2012
РТТЕР	FSO-3	PTTEP	Thailand	70 m	 Feasibility study and pre-FEED for the development of a new FSO and integration with the existing field architecture. Mooring analysis and requirements for FSO, CALM buoy Flexible riser analysis 	2012
BUMI ARMADA NAVIGATION	UDANG Installation	BUMIARMADA	Indonesia	150	 Mooring system installation FPSO hook-up Riser installation Installation commissioning Offshore management and engineering support by DEEPBLUE personnel 	2012

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SSP OFFSHORE	SSP Floater & SCR's	SSP Offshore Inc.	USA	500 m	 Hydrodynamic analysis of SPAR & Floater SCR analysis for SPAR & Floater 	2012
BMT ASIA PACIFIC	LNG Terminal	BMT Asia Pacific	PNG	50 m	 Hydrodynamic analysis of CALM buoy & riser. Preliminary analysis of CALM system with risers and moorings and vessel 	2012
BWO	Brazilian FSO		Brazil	800 m	 Riser engineering & analysis Subsea pipeline engineering and analysis PLEM design & geo-tech analysis Offshore installation 	2011
ONGC	D-1 FPSO	ओएनजीसी ्र्र्रू ONGC	India	150 m	 Riser systems and subsea Mooring system, offshore installation Naval architecture, hull, vessel, structural systems All marines systems on board the FPSO, marine engineering 	2011 - 2012
KCA DEUTAG	Tender Barge	KCADEUTAG	Singapore	~	 Hydrodynamic analysis and stability engineering Crane upgrade & structural engineering Naval architecture 	2011 - 2012
COASTAL ENERGY	Songkhla	E NÆRGY	Thailand	20 m	 Field lay-out, mooring design and analysis, SURF design and analysis, offshore installation. Hydrodynamic analysis of vessels Continuous EPIC support for the for the different. Songkhla FSOs 	2011 _ 2012
BUMI ARMADA NAVIGATION	SEPAT FPSO	BUMIARMADA	Malaysia	70 m	 Design and engineering, analysis and procedures for Offshore Installation of mooring and risers and FPSO. Provision of management personnel for the mooring installation, FSO hook-up SURF installation, and riser hook-up. Execution of the complete offshore Installation. Offshore management and engineering support by DEEPBLUE personnel 	2011
РТТЕР	Bongkot FSO-2	PTTEP	Thailand	70 m	 Riser and hose analysis and engineering. Review and evaluation of tender documents. Offshore management and engineering support by DEEPBLUE personnel 	2011



KEI – TJS	Sepanjang FSO	Kangean Energy Indonesia	Indonesia	45 m	 Design and engineer of mooring system and riser system for the FSO Offshore installation engineering and provision of support personnel for the offshore phase 	2010 _ 2011
ONGC-DPS	D-1 FPSO	ओएनजीसी प्रि ONGC	India	150 m	 Mooring systems, riser systems, subsea components, offshore installation FSO structural, marine and naval architectural requirements. Preparation of technical specification and RFQs for the above in order to issue for BID to EPIC Contractor 	2010
CHEVRON – EDG	FSO Vietnam Block B Gas Project FEED Study	Chevron	Vietnam	150 m	 Mooring systems, riser systems, subsea components, offshore installation FSO structural, marine and naval architectural requirements. All marine systems, IG, cargo, ballast, HVAC, LQ, ER, electrical, mechanical et Preparation of technical specification and RFQs for the above in order to issue for BID to EPIC Contractor 	2010
ONGC – DPS	D-1 FPSO FEED Study	औएनजीसी प्रि ONGC	India	150 m	 Mooring systems, riser systems, subsea components, field lay-out FSO structural, marine and naval architectural requirements Preliminary installation method statements Preparation of Technical Specification and RFQs for the above in order to issue for BID to EPIC Contractor 	2010
PETROFAC – DPS	FPSO FEED Study Cendor II	Petrofac	Malaysia	80 m	 Mooring systems, Riser Systems, Subsea components FSO structural, marine and Naval Architectural requirements All Marine systems, IG, Cargo, ballast, HVAC, LQ, ER, Electrical, mechanical etc Preparation of Technical Specification and RFQs for the above in order to issue for BID to EPIC Contractor 	2009 - 2010
COASTAL ENERGY	Songkhla FSO	COASTAL E N & R G Y	Thailand	20 m	 Design of new and review of existing system with respect to mooring, risers, offshore and subsea arrangement Mooring analysis and design Offloading analysis and design Riser analysis and design Hose analysis and design Vessel mooring requirements and Installation requirements 	2009 - 2010

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GALOC PETROLEUM COMPANY	FPSO	GPC Galac Production Company	Philippines	600 m	 Mooring system, Riser and SURF Offshore Installation 	2009 - 2010
MISTUBISHI OIL	Sepanjang FSO	MTSUBISHI	Indonesia	45 m	1. Review on behalf of Client the detailed design of mooring and risers, review of subcontractors	2009
KANGEAN ENERGY INDONESIA	Temporary Sepanjang FSO	Kangean Energy Indonesia	Indonesia	45 m	1. Design, delivery and installation of mooring system and support during operational phase	2009
QATAR PETROLEUM	BH & MM Field	المعرفين ال المعرفين المعرفين الم	Qatar	0 – 50 m	1. Feasibility study for the change out of umbilicals for 60+ platforms	2009
QATAR PETROLEUM	Halul Field	قطر لارم ول	Qatar	0 – 50 m	1. Hydrodynamic engineering for electric cable	2009
HALLIN MARINE	SPEX – Malaysia	∼ Hallin	Philippines	500 m	1. Naval architectural support to the implementation of a hydraulic gangway on DP-2 vessel for offshore operations	2009
PROSAFE PRODUCTIONS	POLVO FPSO	Prosafe Production	Brazil	800 m	1. Offloading mooring analysis for moored FPSO POLVO	2008
PROSAFE PRODUCTIONS	ABO FPSO	Prosafe Production	Nigeria	600 m	1. Mooring analysis for the extension of the riser system and its installation	2008
PVEP DAI HUNG	Dai Hung Phase 2	ang yang ang ang ang ang ang ang ang ang ang	Vietnam	120 m	1. Estimation analysis and review of offshore installation EPIC contract	2008
LARSEN OIL & GAS	FPSO X	LARSEN DIL & GAS	Singapore	200 m	1. Design responsibility for field lay-out riser configuration, subsea systems, mooring systems, and offshore works	2008
MODEC - JVPC	Turret FSO, Subsea Equipment	MODEC	Vietnam	60 m	 Offshore installation for detailed engineering & design FSO hook-up, PLEM, riser installation. Preparation of all procedures of the offshore installation 	2007 - 2008

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