

PROJECTS TRACK RECORD for Flexibles, flowlines, risers & Hoses

CLIENT	PROJECT	COUNTRY	CLASS SOCIETY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
James Fischer / Kris Energy	Apsara Field	Cambodia	ABS	80 m	<ol style="list-style-type: none"> 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 		2020
Yokohama Rubber Co	CALM Buoy Hoses	Japan	~	100 m	<ol style="list-style-type: none"> CALM Buoy system hose design Complete Subsea Hose dynamic analysis and design FSO Complete floating Hose analysis 		2020
LNG EASY	MFP	Myanmar	ABS	10 m	<ol style="list-style-type: none"> 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
Yokohama	MVT	Vietnam	ABS	70 m	<ol style="list-style-type: none"> 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
EAT	SEPAT-C	Malaysia	LR	70 m	<ol style="list-style-type: none"> Complete SURF EPIC contract of the Temporary Storage Tanker (TST). Design of the Flowline and riser system for a Temporary Storage Tanker (TST) for condensate storage. Design of the subsea flowline, riser and hose system for condensate transfer from Mobile Offshore Production Unit (MOPU) to the TST. SURF Commissioning procedures and requirements 		2019
Hyundai (HOB) SOA	CALM Buoy	Korea	ABS	34 m	<ol style="list-style-type: none"> Hydrodynamic analysis of CALM Buoy Complete Mooring analysis, design and engineering Riser analysis, design and engineering Detailed Installation Procedures 		2019

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HESS Exploration & Production	FSO	Malaysia	ABS	56 m	<ol style="list-style-type: none"> 1. DEEPBLUE was appointed as the overall Technical and Managerial consultant for the engineering of the offshore installation. 2. DB Personnel was appointed as the overall HESS Transport & Installation Management, in order to manage the different subcontractors from a technical and managerial point of view on-shore and during the offshore campaign for the FSO, mooring and SURF Installation. 3. SURF Commissioning procedures and requirements 		2019
CAFHI	Jet-fuel offloading terminal	Singapore	ABS	15 m	<ol style="list-style-type: none"> 1. Design and engineering of the mooring system for several size tankers for the offloading of cargo. 2. Design and engineering of the Hose and SURF system for the offloading of the cargo at the terminal. 		2018
HESS Exploration & Production	FSO	Malaysia	ABS	56 m	<ol style="list-style-type: none"> 1. DEEPBLUE was appointed as the overall Technical and Managerial consultant for the engineering of the offshore installation, mooring and SURF. 2. DB Personnel was appointed as the overall HESS Transport & Installation Management, in order to manage the different subcontractors from a technical and managerial point of view on-shore and during the offshore campaign for the FSO, mooring and SURF Installation. 		2018
HESS Exploration & Production	Temporary Storage Tanker	Malaysia	ABS	56 m	<ol style="list-style-type: none"> 1. Complete EPIC contract of the Temporary Storage Tanker. 2. Design of the mooring system for a Temporary Storage Tanker (TST) for condensate storage. 3. Design of the subsea flowline, riser and hose system for condensate transfer from Central Processing Platform (CPP) to the TST. 4. Upgrading of 6-point mooring system to 8-point mooring system to increase the operability. 5. Structural modifications to install 2 chain stoppers and 1 QRH at the stern of the TST. 6. Installation engineering for the tanker, mooring and SURF. 7. EPIC of the Offshore installation of the tanker, mooring system and SURF. 8. Offshore TST changeout of 6-point moored tanker with a new 8-point moored tanker. 9. Design engineering and offshore procedures for offloading of condensate. 10. SURF Commissioning procedures and requirements 		2017-2018

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LNG Link	FSRU	Indonesia	-	4 to 10 m	Feasibility and FEED study at multiple locations for <ol style="list-style-type: none"> 1. Mooring system 2. SURF and Hose system 3. Budgets and project execution. 		2017
UAE Company	FPSO	UAE	DNV	80 m	<ol style="list-style-type: none"> 1. Engineering and design of Offshore anchor installation for Client 2. Engineering personnel present Offshore during anchor installation 		2016-2017
Woodside / Sapura Kencana	Balnaves RTM	Australia	LR	140 m	Decommissioning Engineering. Detailed analysis and procedures for the removal and disconnecting of the Riser Tower Mooring system and its components: <ol style="list-style-type: none"> 1. Detailed analysis and engineering of mooring system removal. 2. Detailed analysis and engineering of riser system removal. 3. Detailed analysis and engineering of Tower lowering from vertical to horizontal position. 4. Tow analysis and procedures of the RTM 5. Structural review of the system during offshore de-commissioning. 6. Analysis and simulation of ballasting and de-ballasting sequence off-shore. 7. Offshore support engineering personnel. 		2016
UAE Company	FPSO	UAE	DNV	80 m	EPIC for the following: <ol style="list-style-type: none"> 1. Mooring system, anchors, winches 2. SURF, Risers and umbilical 3. Detailed design of under deck strengthening for all non-process related topsides and marine equipment 4. Design of riser & Umbilical porches, floating hose porches 5. General Naval Architecture 6. Marine systems engineering and design 7. Offshore Installation support, engineering and procedures for mooring and SURF. 8. SURF Commissioning procedures and requirements 		2015-2016

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CLIENT	PROJECT	COUNTRY	CLASS SOCIETY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
Confidential	FSO, subsea system and semi-submersible	India	ABS	60 m	Expert witness to the Arbitral Tribunal in Delhi, India for all technical matters comprising: <ol style="list-style-type: none"> 1. Mooring System. 2. Subsea System. 3. Offshore Installation. 4. Offshore Operations. 5. Emergency operations. 6. Analysis and simulations of System failure and vessel behaviour. 7. Preparation of Affidavits for the Arbitral Tribunal and representation in court. 		2015
ING – Bank	FPSO OSX-2 Decommissioning and lay-up	Indonesia	ABS	15 m	Decommissioning and lay-up for the mooring system, design & engineering: <ol style="list-style-type: none"> 1. Decommissioning of the mooring system 2. Detailed mooring analysis for vessel lay-up. 3. Structural strength analysis of the FPSO and jetty bollards. 4. Offshore installation drawings. 5. Acted as owner representative. 		2015
BC Petroleum	EPV Balai Mutiara	Malaysia	ABS	70 m	Engineering design and Consultant for the EPV Upgrade for SURF, mooring and installation: <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis. 3. Riser analysis, SURF design and Installation engineering. 4. Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. 5. Specifications for mooring systems, components, vessel equipment, offloading hoses, winches and dependant structures and equipment. 6. Offshore installation analysis, procedures, methodology, requirements and specifications. 7. Review of Company produced engineering packages and detailed design. 8. Review of Company subcontractors work and proposals. 9. Marine warranty surveyor, review of 3rd party engineering. 10. 		2014 - 2015

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CLIENT	PROJECT	COUNTRY	CLASS SOCIETY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
COBALT	Cameia	West Africa	ABS	2800 m	<p>SURF, mooring and installation detailed engineering for an FPSO comprising of:</p> <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water. 3. Mooring analysis for turret and spread-moored 4. Riser and umbilical analysis, coupled analysis with mooring system, for the different options. 5. Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. 6. Specifications for mooring systems, components, vessel equipment and dependant structures and equipment. 7. Offshore Installation analysis, procedures, methodology, requirements and specifications. 		2014
NAE – Bumi Armada	ETAN FPSO	Nigeria	ABS	1800 m	<p>FEED study for an FPSO comprising of:</p> <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water. 3. Riser and umbilical analysis, coupled analysis with mooring system. 4. Design and engineering of vessel structural modifications requirements for mooring, risers, SURF and the offshore installation. 5. Specifications for mooring systems, components, vessel equipment and dependant structures and equipment. 		2014
PETROBRAS – Bumi Armada	LIBRA FPSO	Brazil	ABS	2400 m	<p>FEED study for an FPSO comprising of:</p> <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water. 3. Riser and umbilical analysis, coupled analysis with mooring system. 4. Design and engineering of vessel structural modifications requirements for mooring, risers, SURF and the offshore installation. 5. Specifications for mooring systems, components, vessel equipment and dependant structures and equipment. 		2014

Offshore Installation

Detailed Design & Engineering /
FEED

Offshore renewables

Expert Witness - MWS and 3rd
Party Independent Review

Decommissioning

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Bumi Armada	Cluster 7 FPSO	India	ABS	150 m	Offshore installation: <ol style="list-style-type: none"> 1. Technical consultant for the Offshore Installation of the C7-FPSO 2. Providing management resources, Offshore Construction Manager, Technical support, Client representative, Marine Warranty Surveyor. 3. Offshore management and engineering support by DEEPBLUE personnel 		2014
PTTEP	FSO-2	Thailand	ABS	80 m	Field development detailed design: <ol style="list-style-type: none"> 1. Review of the different alternatives for the condensate production without an FSO. 2. Review of production platform requirements. 3. Design and engineering of SPM CALM Buoy system. 4. Subsea flow assurance of the production from the different fields, SURF. 		2014
ENI – Bumi Armada	OCTP FPSO	Ghana	ABS	900 m	FEED study for an FPSO comprising: <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water. 3. Riser and umbilical analysis, coupled analysis with mooring system. 4. Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. 5. Specifications for SURF, mooring systems, components, vessel equipment and dependant structures and equipment. 		2013 - 2014
Tullow	KUDU FPU	Namibia	DNV	160 m	FEED study for an FPU comprising: <ol style="list-style-type: none"> 1. Field lay-out review and development. 2. Mooring analysis, mooring fatigue, tandem analysis, use of synthetic moorings for deep water. 3. Riser and umbilical analysis, coupled analysis with mooring system. 4. Design and engineering of vessel structural modifications requirements for mooring, risers, and the offshore installation. 5. Specifications for mooring systems, SURF, components, vessel equipment and dependant structures and equipment. 		2013

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PTTEP	FSO-2	Thailand	ABS	80 m	Offshore riser installation: <ol style="list-style-type: none"> 1. Technical support to PTTEP with the change out of existing risers. 2. Offshore Installation support personnel. 3. Review of Installation Company procedures and engineering. 4. Offshore management and engineering support by DEEPBLUE personnel 		2013
PETRONAS – TECHNIP	Bukit Tua FPSO	Indonesia	ABS	70 m	Mooring and SURF: <ol style="list-style-type: none"> 1. Supply of mooring and riser engineering personnel. 2. Mooring analysis, mooring fatigue analysis. 3. Riser analysis, riser design. 4. Design and engineering of mooring and riser systems on board the FPSO. 5. Design and engineering of Marine systems. 6. Design and engineering of the offshore installation for mooring and risers. 7. Preparation of Detailed Specifications for all mooring, risers, subsea and marine systems. 		2012 - 2013
Woodside / Apache	Balnaves	Australia	LR	135 m	Mooring, SURF, naval architecture, offshore installation: <ol style="list-style-type: none"> 1. Design and engineering and simulation of Hydrodynamic behaviour of the RTM tower. 2. Simulation and analysis of RTM tower during tow, and installation. 3. Design and simulation of the different mooring lines during installation, connection and operations. 4. Design and simulation of the different flexible risers during installation, connection and operations. 		2012 - 2013
Lundin – Bureau Veritas	IKDAM FPSO	Malaysia	DNV	70 m	Feasibility study and concept selection for mooring systems, SURF, and field lay-out of the IKDAM FPSO: <ol style="list-style-type: none"> 1. Mooring analysis. 2. Field lay-out options review. 3. HSE and operational analysis of the concepts. 4. Commercial and Technical review of the concepts. 		2012

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PTTEP	FSO-3	Thailand	ABS	70 m	Study of future production requirements, mooring, SURF, installation: <ol style="list-style-type: none"> 1. Feasibility study and pre-FEED for the development of a new FSO and integration with the existing field architecture. 2. Mooring analysis and requirements for FSO, CALM buoy. 3. Flexible riser analysis 		2012
Bumi Armada Navigation	UDANG Installation	Indonesia	ABS	150	Offshore installation engineering and provision of support personnel for the offshore phases: <ol style="list-style-type: none"> 1. Mooring system installation. 2. FPSO hook-up. 3. Riser installation, SURF installation. 4. Installation commissioning. 5. Offshore management and engineering support by DEEPBLUE personnel 		2012
SSP Offshore	SSP Floater & SCR's	USA	API	500 m	Hydrodynamic and riser study: <ol style="list-style-type: none"> 1. Hydrodynamic analysis of SPAR & Floater 2. SCR analysis for SPAR & Floater 		2012
BMT Asia Pacific	LNG Terminal	PNG	ABS	50 m	SURF and CALM buoy: <ol style="list-style-type: none"> 1. Hydrodynamic analysis of CALM buoy & riser. 2. Preliminary analysis of CALM system with risers and moorings and vessel. 		2012
BWO	Brazilian FSO	Brazil	DNV	800 m	FEED for mooring, SURF, vessels, installation: <ol style="list-style-type: none"> 1. Riser engineering & analysis 2. Subsea pipeline engineering and analysis 3. PLEM design & geo-tech analysis 4. Offshore installation 		2011
ONGC	D-1 FPSO	India	ABS	150 m	Overall technical manager on behalf of ONGC for: <ol style="list-style-type: none"> 1. Riser systems and subsea, SURF 2. Mooring system, offshore installation. 3. Naval architecture, hull, vessel, structural systems. 4. All marines systems on board the FPSO, marine engineering. 		2011 - 2012

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Bumi Armada	SEPAT FPSO	Malaysia	ABS	70 m	Offshore installation, mooring & SURF: 1. Design and engineering, analysis and procedures for Offshore Installation of mooring and risers and FPSO. 2. Provision of management personnel for the mooring installation, FSO hook-up SURF installation, and riser hook-up. 3. Execution of the complete offshore Installation. 4. Offshore management and engineering support by DEEPBLUE personnel		2011
PTTEP	Bongkot FSO-2	Thailand	ABS	70 m	Offshore riser installation. Technical engineering and commercial support for: 1. Riser and hose analysis and engineering. 2. Review and evaluation of tender documents. 3. Offshore management and engineering support by DEEPBLUE personnel		2011
KEI – TJS	Sepanjang FSO	Indonesia	ABS	45 m	Mooring, SURF, installation, naval architecture: 1. Design and engineer of mooring system and riser system for the FSO. 2. Offshore installation engineering and provision of support personnel for the offshore phase.		2010 - 2011
ONGC-DPS	D-1 FPSO	India	ABS	150 m	FEED study for: 1. Mooring systems, riser systems, subsea components, offshore installation. 2. FSO structural, marine and naval architectural requirements. 3. 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	Vietnam	ABS	150 m	Detailed design and FEED study for: 1. Mooring systems, riser systems, subsea components, offshore installation. 2. FSO structural, marine and naval architectural requirements. 3. All marine systems, IG, cargo, ballast, HVAC, LQ, ER, electrical, mechanical etc. 4. Preparation of technical specification and RFQs for the above in order to issue for BID to EPIC Contractor.		2010

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ONGC – DPS	D-1 FPSO FEED Study	India	ABS	150 m	Conceptual design and FEED for: <ol style="list-style-type: none"> 1. Mooring systems, riser systems, subsea components, field lay-out. 2. FSO structural, marine and naval architectural requirements. 3. Preliminary installation method statements. 4. 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	Malaysia	ABS	80 m	FEED study for: <ol style="list-style-type: none"> 1. Mooring systems, Riser Systems, Subsea components 2. FSO structural, marine and Naval Architectural requirements 3. All Marine systems, IG, Cargo, ballast, HVAC, LQ, ER, Electrical, mechanical etc. 4. Preparation of Technical Specification and RFQs for the above in order to issue for BID to EPIC Contractor. 		2009 – 2010
Coastal Energy	Songkhla FSO	Thailand	ABS	20 m	Mooring, SURF, field lay-out: <ol style="list-style-type: none"> 1. Design of new and review of existing system with respect to mooring, risers, offshore and subsea arrangement. 2. Mooring analysis and design. 3. Offloading analysis and design. 4. Riser analysis and design. 5. Hose analysis and design. 6. Vessel mooring requirements and Installation requirements. 		2009 – 2010
Hallin Marine	Jasmin Field Offshore Installation	Thailand	ABS	60 m	Complete offshore Installation design, engineering, analysis, procedures, HSE etc. for: <ol style="list-style-type: none"> 1. Subsea PLEM installation 2. Turret Mooring FSO Hook-up 3. Riser, SURF FSO Hook-up 4. Offshore management and engineering support by DEEPBLUE personnel 		2006