

CALM BUOY PROJECTS TRACK RECORD

CLIENT	PROJECT	COUNTRY	CLASS SOCIETY	WATERDEPTH	DESCRIPTION OF PROJECT	TYPE	YEAR
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
NOC	FSO & CALM Buoy	Qatar	ABS	70 m	<ol style="list-style-type: none"> FEED STUDY for mooring systems options, CALM BUOY, spread moored , turret Technical commercial review of solutions Design of mooring system, mooring analysis 		2020
Yokohama Rubber Comp.	MVS	Vietnam	ABS	90 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
NOC	FSO & CALM Buoy	Qatar	ABS	70 m	<ol style="list-style-type: none"> FEED level 1 STUDY for the mooring systems and vessel conversion requirements Chain stoppers and mooring systems, CALM BUOY, spread moored and turret options. Thruster and their requirements and analysis Structural reinforcements on vessel Naval Architecture for conversion 		2019
Amaniaga	CALM Buoy	Malaysia	ABS	30 m	<ol style="list-style-type: none"> Detailed Mooring Analysis, including Fatigue for CALM Buoy Review of requirements for upgrade of buoy. Procedures for installation 		2019
Amaniaga	CALM Buoy	Malaysia	ABS	30 m	<ol style="list-style-type: none"> 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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SOA / Hyundai (HOB)	CALM Buoy	Korea	ABS	34 m	<ol style="list-style-type: none"> Hydrodynamic analysis of CALM Buoy Complete Mooring analysis, design and engineering, fatigue assessment etc. Riser analysis, design and engineering Detailed Installation Procedures 		2019
PTTEP	FSO-2	Thailand	ABS	80 m	Field development detailed design: <ol style="list-style-type: none"> 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
PTTEP	FSO-3	Thailand	ABS	70 m	Study of future production requirements, mooring, SURF, installation: <ol style="list-style-type: none"> 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
BMT Asia Pacific	LNG Terminal	PNG	ABS	50 m	SURF and CALM buoy: <ol style="list-style-type: none"> Hydrodynamic analysis of CALM buoy & riser. 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"> Riser engineering & analysis for CVALM BUOY Subsea pipeline engineering and analysis PLEM design & geo-tech analysis Offshore installation 		2011
PTTEP	Bongkot FSO-2	Thailand	ABS	70 m	Offshore riser installation. Technical engineering and commercial support for: <ol style="list-style-type: none"> Riser and hose analysis and engineering. Review and evaluation of tender documents. Offshore management and engineering support by DEEPBLUE personnel 		2011

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Galoc Petroleum Company	FPSO	Philippines	DNV	600 m	Review of client's subcontractors design and engineering 1. Mooring system, 2. Riser and SURF 3. Offshore Installation		2009 – 2010