



PROJECT TRACK RECORD

Introduction SPT Offshore

We are the leading worldwide EPCI contractor for suction pile foundations and anchors for offshore Renewables and Oil & Gas.

Our scope covers full EPCI or partial scopes such as:
(pre-)FEED studies, detailed design, Suction pile supply,
Suction pile installation services, Transport and offshore installation.

Our projects are subdivided in the following categories:

*** Renewables**

- Substations and HVDC platforms
- Wind Turbine Generator and Met Mast Foundations
- Anchors for Floating Wind Turbines

*** Oil & Gas**

- Wellhead and Fixed Platforms
- Subsea Structures
- Moorings for floating facilities and anchors pipeline start-ups

*** Decommissioning**

Allseas startup pile Lingshui

Projectname: Allseas startup pile Lingshui
 Head Client: CNOOC / COOEC
 Client SPT: Allseas
 Location: South China Sea, Lingshui offshore field
 Waterdepth (m): 1560m
 Soil conditions: Clay
 Project properties: Suction pile OD 3.4m x 9.85m
 Scope of work: Installation verification, supply of suction start-up pile and suction equipment and provision of suction services .
 SPT Achievements: Pile was successfully multiple times installed and retrieved with the SPT deepwater suction pump SAPS-003 operated by a working class ROV.



YangXi Shapa SPF

Client: Guangzhou Salvage
 Year completed: 2020
 Location: South China Sea
 Scope of work:

- Project Management and Installation Engineering
- Review and verification of SP Detailed Design
- Supply of SAPS-007 suction equipment
- Offshore preparation and suction execution of 3 Suction Pile Jackets

 Project properties:

- 3x suction piles of 11.8-13m OD x 10.6-11.3m deep
- Jacket weight 1500t
- 3x8MW turbine

 Soil conditions: very soft to soft CLAY overlaying dense to very dense SAND, very soft to soft CLAY overlaying firm to stiff/very stiff silty CLAY
 Water depth: 28 m
 SPT achievements:

- net suction Installation of suction pile jacket foundation in 3.25 to 4.5 hrs
- verticality within 0.03 deg



Petrofac East Cendor

Client: Muhibbah Engineering (M) Bhd
 Year completed: 2020
 Location: Offshore Malaysia, Block East Cendor
 Scope of work:

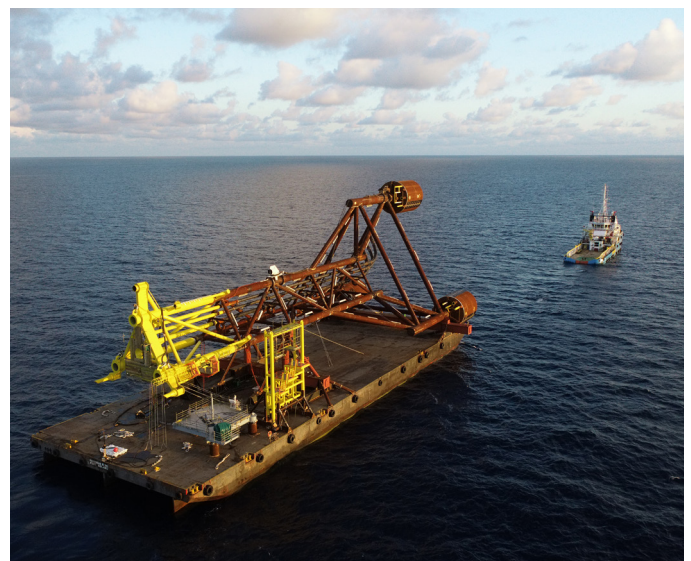
- Basic and detailed design suction pile foundation
- T&I engineering
- Transportation of jacket and boat-landing
- Offshore installation of jacket and boat-landing

 Project properties:

- 2x suction piles of 7m OD x 8m deep
- Jacket weight 1,200t

 Soil conditions: Firm to stiff clay
 Water depth: 64 m
 SPT achievements:

- Jacket verticality within 0.1 degrees
- Offshore pump installation (mitigation to COVID-restrictions)
- Successful installation of Jacket and Boat-landing



Ophir relocation

Client	Redtech Offshore (for Vestigo Petroleum Sdn Bhd)
Year completed	2019
Location	From Ophir (Block OM-315) to Jitang field, Malaysia.
Scope of work	<ul style="list-style-type: none"> Design and engineering for removal, transport and installation. Removal of WHP at Ophir location . Transit from Ophir to Jitang location (60 NM). Installation of WHP at Jitang location.
Project properties	<ul style="list-style-type: none"> 3x suction piles of 6m x 14m deep. WHP weight 1400 t (topsides and jacket).
Soil conditions	Very soft to stiff clay.
Water depth	74m (after local seabed excavation).
SPT achievements	<ul style="list-style-type: none"> One-piece relocation of WHP completed in only 3 days. Platform installed within tolerances (0.03 degrees vertical). Delivery of 'Fast-track' project within 4 months.



Suction Pile Cluster

Client	Chinese contractor
Year completed	2019
Location	South China Sea
Scope of work	<ul style="list-style-type: none"> Design, supply and installation of suction pile cluster pile, design and supply of project specific pump equipment, offshore suction services.
Project properties	2x 120t (dry weight) steel structure.
Soil conditions	Soft clay.
Water depth	1200 m
SPT achievements	<ul style="list-style-type: none"> On time delivery of 2 suction cluster piles. Successful suction installation operation.



Changhua offshore pile test

Client Per Aarsleff
 Year completed 2019
 Location Offshore Taiwan

- Scope of work
- Design and engineering, supply of project specific pump equipment, offshore suction services.
- Project properties
- Installation and removal of Pile Guide Frame with suction piles (2 locations).
- Soil conditions
- Sandy soils laminated with silt/clay.
- Water depth
- 40m
- SPT achievements
- Delivery of surface controlled pump system.
 - Average of only 5 hours per installation or removal.
 - Verticality of PGF well controlled via suction pumps.



Mooring piles Liu Hua

Client COOEC (China Offshore Oil Engineering Co.)
 Year completed 2019 (LOT1)
 Location Liu Hua field, 250 km southeast of Hong Kong in the South China Sea, China.

- Scope of work
- Project Management and Installation Engineering.
 - Review and verification of Mooring Piles Detailed Design.
 - Offshore preparation and suction execution with SAPS-008.
- Project properties
- 9x suction mooring piles of 5.5m OD x 15.9m deep
- Soil conditions
- Firm olive grey silty CLAY overlaying with approx. 2m soft to very soft grey silty CLAY.
- Water depth
- 420m.
- SPT achievements
- Successfully installed all Mooring Piles within 7 days. (For the individual mooring piles it took only 2.5 hours to reach the required penetration depth of 16m).



Seagreen test

Client Seagreen Wind Energy Ltd (SWELL)
 Year completed 2019
 Location Seagreen Alpha and Bravo Offshore Wind Sites, UK in Firth of Forth off the Scottish East coast.

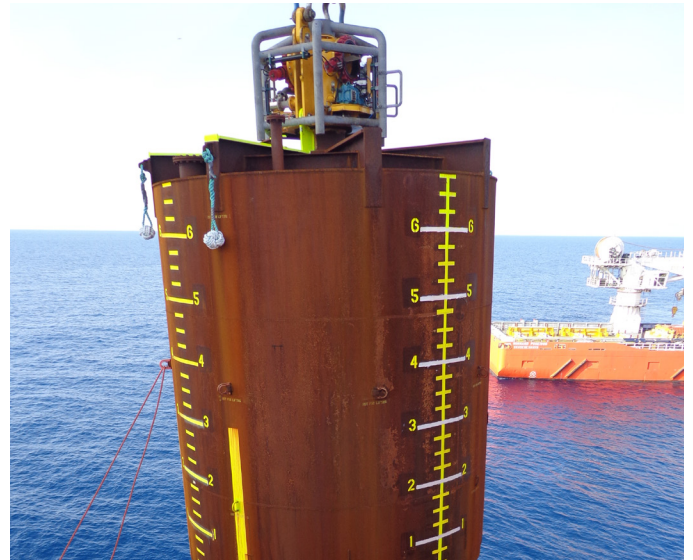
- Scope of work
- Project Management.
 - Geotechnical and Installation Engineering
 - T&I scope for a full scale suction bucket installation trials.
 - Issue of Geotechnical factual and interpretative Trial Campaign As-Built reports.
- Project properties
- 9.5m OD x 7.8m deep SP Test Bucket.
- Soil conditions
- Silty fine to medium SAND with subordinate silty CLAY and dense to very dense SAND, and extremely high strength sandy silty CLAY
- Water depth
- 40-60m.
- SPT achievements
- Successfully installed a test bucket at 29 no. test locations including 3 cycling tests and 2 landing on Seabed Tests within 21 days.



Allseas Noble Leviathan

Client Allseas
 Year completed 2019
 Location Offshore mediterrian

- Scope of work
- Project management and preparation of installation engineering document for 2 start-up piles. Provison of start-up pile and suction installation services.
- Project properties
- OD 3.4m x 9.85m and OD 6m x 6.75m.
 - Start -up forces maximum 45T.
- Soil conditions
- Soft clays.
- Water depth
- 1650m
- SPT achievements
- Two suction piles installed in January 2018 from the Allseas vessel Audacia with the SAPS-003 and removed a year later in January 2019 with the same spread again.



Summit FSRT

Client Geocean
 Year completed 2018
 Location Offshore Bangladesh

- Scope of work
- Review installation documents and suction installation services for 8 Mooring piles, one PLEM and one Landingpad.
- Project properties
- Mooring piles: OD 9m x 9.5/11m.
 - PLEM: OD 7.5m x 8m.
 - PAD: OD 6.35m x 5m.
- Soil conditions
- Overconsolidated clayey soils with an overlaying sand layer.
- Water depth
- 33m
- SPT achievements
- All suction piles installed to target penetration within 3.5 hrs with the SAPS-007 suction spread.



Moheskhali Floating LNG

Client Per Aarsleff
 Year completed 2019
 Location Offshore Taiwan

- Scope of work
- Design and engineering, supply of project specific pump equipment, offshore suction services.
- Project properties
- Installation and removal of Pile Guide Frame with suction piles (2 locations).
- Soil conditions
- Sandy soils laminated with silt/clay.
- Water depth
- 40m
- SPT achievements
- Delivery of srface controlled pump system.
 - Average of only 5 hours per installation or removal.
 - Verticality of PGF well controlled via suction pumps.



Aberdeen Offshore Windfarm

Client Boskalis Offshore
 Year completed 2018
 Location UK North Sea

- Scope of work
- Detailed design of 4 different suction pile jacket foundations.
 - Basic design of 2 different suction pile jackets.
 - Installation of 11 suction pile jacket foundations.
- Project properties
- 3x suction piles of 9.5m x 7.5m deep.
 - Jacket weight 1350t.
 - 9x 8.4 MW and 2x 8.8 MW Vestas WTG.
- Soil conditions
- loose to very dense sand overlaying soft to very stiff clay overlaying bedrock.
- Water depth
- 19m to 32m.
- SPT achievements
- Installation of suction bucket jacket foundation in 55 minutes to 3 hours.
 - Average on-site installation time of 15 hours.
 - Verticality 0.01 deg.



Dogger Bank Met Mast Removal

Client Ardent Global
 Year completed 2017
 Location UK Sector North Sea Dogger Bank

- Scope of work
- Engineering and subsea services for removal of two mono bucket met masts.
 - Detailed design and fabrication of mono bucket Interface frame.
- Project properties
- 2x mono buckets, each 15m OD x 7m deep.
 - mono buckets weight 370t each.
- Soil conditions
- Sand (East) and clay (West).
- Water depth
- 25m
- SPT achievements
- Design & fabrication custom interface frame.
 - High capacity pumps proven to be compatible for alternative suction pile interfaces.
 - Pressure-controlled operations with 0.1 bar accuracy by the SPT pumps.
 - After 4 years of service life, each bucket swiftly pressed out of seabed in only 3.5 hours.



Ophir Wellhead Platform

Client Redtech Offshore (for Vestigo Petroleum)
 Year completed 2017
 Location Block PM-315, Malaysia

- Scope of work
- Basic and detailed design suction pile foundation.
 - Basic design of jacket.
 - T&I engineering.
 - Transportation of jacket and topsides from Port Klang to PM-315 site.
 - Offshore installation of jacket and topsides.
- Project properties
- 3 x suction piles of 6m OD x 14m deep.
 - Topsides weight 350t.
 - Jacket weight 1,100t.
- Soil conditions
- Very soft to stiff clay.
- Water depth
- 73m.
- SPT achievements
- Complete offshore installation campaign within only 3 days.
 - Jacket installation within 24 hours.
 - Jacket vertically within 0.2 degrees.
 - Successful project execution within schedule and budget.



Statoil Dudgeon Substation

Client SLP Sembmarine
 Year completed 2016
 Location UK North Sea

- Scope of work
- Detailed design suction pile foundation.
 - Fabrication of suction pile foundation.
 - Installation of suction pile foundation.
- Project properties
- 4x suction piles of 9m OD x 6m deep.
 - Jacket weight 900t.
 - Topsides weight 2,000t.
- Soil conditions
- Dense sand to stiff clay.
- Water depth
- 23m
- SPT achievements
- Installation of suction pile foundation in 2.5 hours.
 - Verticality of 0.01 deg.



Aberdeen OWF suction bucket test

Client Boskalis Offshore Ltd.
 Year completed 2016
 Location Aberdeen Offshore Wind Farm, Schotland

Scope of work Phase 1: small scale bucket tests

- Convert SPT's start-up pile into a Small Scale Bucket (SSB).
- Add pressure sensors along the SSB shaft and water injection system at the pile tip.
- Perform suction installation and retrieval tests on seven (7) WTG locations.
- Analyze results to feed into suction bucket jacket foundation design.

Phase 2: full scale bucket tests

- Design and fabricate a full scale bucket (FSB) similar to the intendend WTG foundations.
- Add pressure sensors along the FSB shaft and waterinjection system at the pile tip.
- Perform suction installation and retrieval tests on eight (8) WTG locations.
- Analyze results to de-risk the suction bucket jacket foundation installation.

Project properties Phase 1:

- SAPS-003 remotely operated hydraulic suction pump unit and lifting tool.

Phase 2:

- SAPS-007 remotely operated electrical suction pump unit

Soil conditions • Sand and clay.

Water depth • 21 - 35m

SPT achievements • Modification of DNV correlation factors for in-situ soil conditions.
 • Confirm applicability of mitigating measures.



PEMEX Ayatsil PLEM

Client Swiber
 Year completed 2016
 Location Gulf of Mexico

Scope of work • Installation of the suction pile foundation.

Project properties • 4x suction piles of 4.5m OD x 4.5m deep.
 • Structure weight of 170t.

Soil conditions • Medium dense sand and soft clay.

Water depth • 110m

SPT achievements • Suction pile foundation installation in only 45 minutes



PEMEX Bridge Support Structure

Client Nuvoil
 Year completed 2016
 Location Sonda de Campeche, Gulf of Mexico

- Scope of work
- Installation suction pile foundation.
- Project properties
- 3x suction piles of 5m OD x 15.3m deep.
 - Jacket weight 300t.
 - Bridge weight 300t.
- Soil conditions
- Soft clay and medium dense sand.
- Water depth
- 43m
- SPT achievements
- Installation of suction pile foundation in 2 hours.
 - Verticality of 0.01 deg.



Allseas Pioneering Spirit Test Frame

Client Allseas
 Year completed 2016
 Location K13, Dutch North Sea

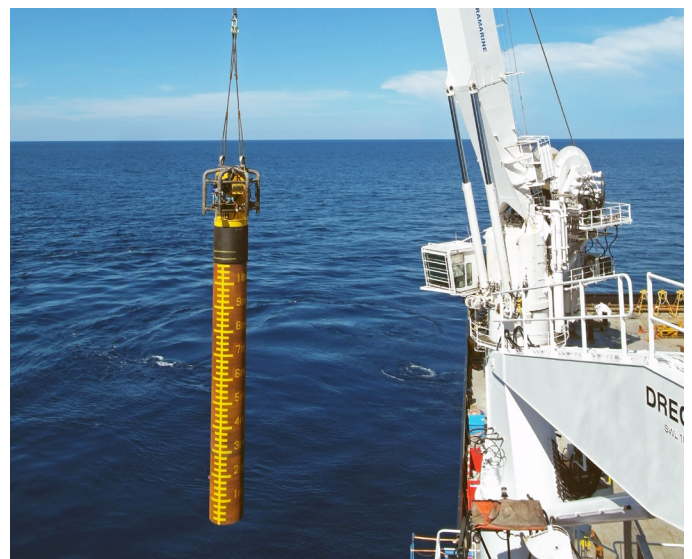
- Scope of work
- Detailed design suction pile foundation.
 - Fabrication suction pile foundation.
 - Installation suction pile foundation.
- Project properties
- 4x suction piles 9m OD x 8.5m deep.
 - Jacket weight 1,600t.
 - Ballast tanks, including ballast water weight 4,300t.
- Soil conditions
- Dense to very dense sand.
- Water depth
- 27m



Shell Malikai

Client Technip
 Year completed 2015
 Location Sabah, Malaysia

- Scope of work
- Detailed design and fabrication of suction pile interface and hatches.
 - Installation of 14 no. turning bollard suction piles.
 - Installation of 2 no. pipeline restraint suction piles.
- Project properties
- 14x turning bollard suction piles of 1.5m OD x 13m deep.
 - 2x pipeline restraint suction piles 5m OD x 15.5m deep.
- Soil conditions
- Soft clay
- Water depth
- 500m
- SPT achievements
- Average complete suction pile installation of only 5 hours per pile.



BP Foinhaven

Client Subsea7
 Year completed 2015
 Location UK North Sea

- Scope of work
- Installation and removal services.
 - Rental of suction pile.
- Project properties
- 1x suction pile 3.4m OD x 6.25m deep.
- Soil conditions
- Very soft to firm clay.
- Water depth
- 500m



Shell BC-10

Client Allseas
 Year completed 2015
 Location Campos Basin, Brasil

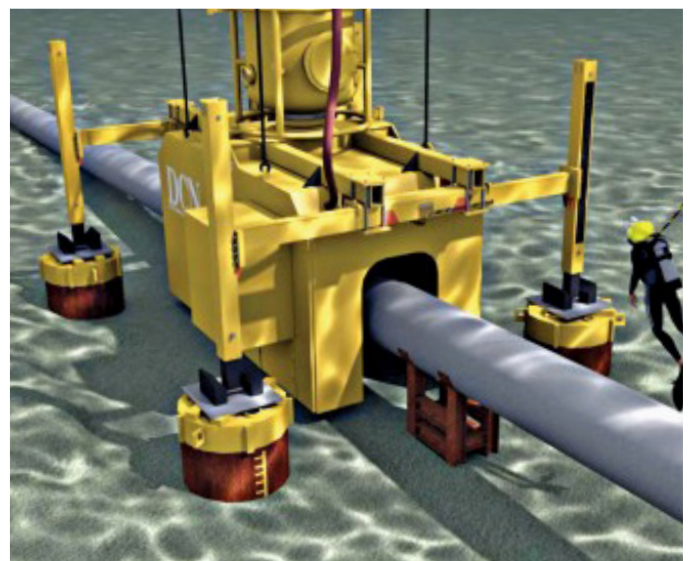
- Scope of work
- Suction pile installation and removal engineering.
 - Installation and removal services.
- Project properties
- 1x suction pile 6m OD x 6.8m deep.
- Soil conditions
- Soft clay.
- Water depth
- 1,675m



Support suction Piles for PGN Repair

Client DCN
 Year completed 2015
 Location Indonesia, offshore Jakarta

- Scope of work
- Management and installation engineering.
 - Detailed design of four (4) suction pile foundations.
 - Suction installation services.
- Project properties
- 5 x suction piles of 1.4 m OD x 6m deep; 1 test pile and 4 foundation piles.
- Soil conditions
- Soft clay.
- Water depth
- 25 m
- SPT achievements
- Installation of test pile for verification of soil characteristics.
 - Installation and removal of four (4) foundation piles.
 - Each foundation pile installed in less than 15 minutes.
- Project achievement
- Certificate of Great Achievement by PGN Indonesia.



Wintershall L6-B Minimum Facility

Client Scaldis Salvage and Marine Contractors NV
 Year completed 2014
 Location North Sea Dutch sector block L6

- Scope of work
- Concept design of platform transport & installation.
 - Design and engineering of the suction piles.
 - Installation of suction piles.
- Project properties
- 3x suction piles of 10m OD x 10m deep.
 - Topsides weight 100t.
 - Jacket including suction piles weight 1,000t.
- Soil conditions
- Layered sandy & silty soils with clay bands.
- Water depth
- 35m
- SPT achievements
- Mobilization, installation and demobilization in only three days.
 - Verticality within 0.01 deg.
 - First of its kind one piece transportation and installation.



DONG Borkum Riffgrund Wind Turbine

Client DONG
 Year completed 2014
 Location German North Sea

- Scope of work
- Installation Engineering.
 - Offshore installation of suction bucket jacket.
- Project properties
- 3x suction piles of 8m OD x 8m deep.
 - Jacket 600t.
 - 3.6 MW SIEMENS Wind Turbine.
- Soil conditions
- Dense Sands.
- Water depth
- 25m
- SPT achievements
- First wind turbine jacket founded on suction piles installed worldwide.
 - Approval of German BSH.
 - Successful installation through anti-scour preinstalled filter layer.



PEMEX Line 3 & 11

Client Swiber
 Year completed 2014
 Location Gulf of Mexico

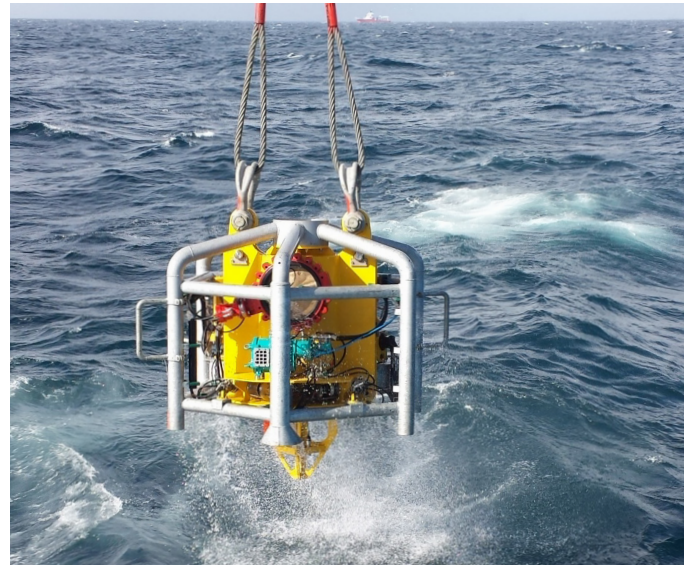
- Scope of work
- Installation and removal engineering.
 - Rental of start-up suction pile.
 - Installation and removal services.
- Project properties
- 1x suction pile 3.4m OD x 9m deep.
- Soil conditions
- Very soft to soft clays.
- Water depth
- 120m



Statoil Asgard Field Development

Client Allseas
 Year completed 2013
 Location Norwegian North Sea

- Scope of work
- Installation and removal engineering.
 - Suction pile design verification.
 - Installation and removal services.
- Project properties
- 1x suction pile 6m OD x 6.8m deep.
- Soil conditions
- Silty clay.
- Water depth
- 300m



Gaz de France Q13-A Platform

Client Seaway Heavy Lifting
 Year completed 2013
 Location North Sea, Dutch Sector

- Scope of work
- Detailed design suction pile foundation.
 - Installation of suction pile foundation.
- Project properties
- 4x suction piles of 7.0m x 7.4m deep.
 - Jacket weight 1300t.
 - Topsides weight 1700.
- Soil conditions
- Dense to very dense sand.
- Water depth
- 20m
- SPT achievements
- Installation of suction bucket foundation in 2.5 hours.
 - Vertically within 0.65 deg.
 - Installed over an existing well.



Global Tech 1 Transformer Substation

Client Keppel Verolme
 Year completed 2013
 Location North Sea German Bight

- Scope of work
- Preparation and review of platform T&I procedures.
 - Geotechnical design suction piles.
 - Installation engineering for installation of suction piles.
 - Provision of construction crew on vessel.
 - Installation of suction piles.
- Project properties
- 4 x suction piles of 11m OD x 9.5m deep.
 - Topsides weight 4,850t.
 - Substructure including suction piles weight 3,900t.
- Soil conditions
- Dense sands.
- Water depth
- 40m
- SPT achievements
- First suction pile foundation in the German sector approved by BSH.



Wintershall Multi Purpose Platform (3x)

Client Wintershall
 Year completed 2013, 2001, 2000, 1997
 Location North Sea Dutch sector P2 and P6

- Scope of work
- Installation of the suction pile foundations for 3 MPPs.
 - Relocation of 3 MPPs in 2000, 2001, 2013.
- Project properties
- 4x suction piles of 9m OD x 9m deep.
 - Topsides weight of 2,200t.
 - Substructure including suction pile weight 1,000t.
- Soil conditions
- Sandy and occasional clayey soils.
- Water depth
- 25m-30m
- SPT achievements
- All 3 platforms relocated without port call.
 - Relocation (de-installation and re-installation) of each platform in only 3 days.



CLP Met Mast

Client COOEC
 Year completed 2012
 Location Hong Kong, South China Sea

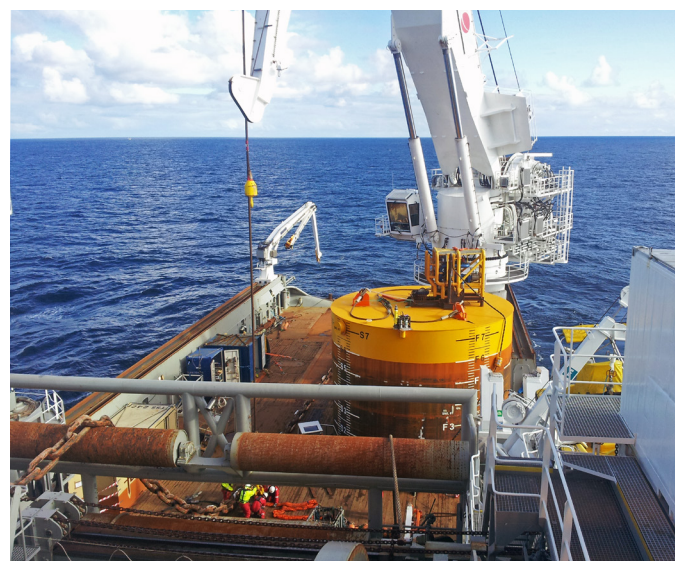
- Scope of work
- Detailed design suction pile foundation.
 - Installation of SIP1 suction pile foundation.
- Project properties
- 3x suction piles of 7m OD x 12m deep.
- Soil conditions
- Soft clay and medium dense sand.
- Water depth
- 30m
- SPT achievements
- Verticality of the structure within 0.12 deg.
 - Installation of suction pile foundation in 1 hour.



EON Huntington FPSO

Client Sevan Marine
 Year completed 2012
 Location UK Central North Sea

- Scope of work
- Installation engineering for loadout, handling and installation of suction pile mooring.
 - Provision of construction crew on vessel.
 - Installation of suction pile.
- Project properties
- 12x suction pile of 9m OD x 7.5m deep.
 - 250m chain section.
- Soil conditions
- Stiff clays.
- Water depth
- 90m
- SPT achievements
- 6 weeks project preparation time.



Noble Hadeira Oil Offloading Buoy

Client Micoperi
 Year completed 2012
 Location Mediterranean

- Scope of work
- Installation engineering for installation of suction piles.
 - Installation of suction piles.
- Project properties
- 8x suction pile 9m OD x 11.5 - 18.5m deep.
- Soil conditions
- Soft to medium stiff clays.
- Water depth
- 80m



Noble Tamar Development

Client Allseas Marine Contractors
 Year completed 2011
 Location Mediterranean

- Scope of work
- Suction pile installation engineering.
 - Rental of suction piles.
 - Installation and removal of suction piles.
- Project properties
- 2x rental suction piles of 3.4m OD x 12m deep.
 - Suction pile weight 25t each.
- Soil conditions
- Soft clays.
- Water depth
- 1,700m
- SPT achievements
- Deepest suction pile installed by SPT Offshore.
 - Quick installation in critical vessel time of the Allseas Audacia.



Athena FPSO

Client Bibby Offshore
 Year completed 2011
 Location UK Central North Sea

- Scope of work
- Suction pile installation engineering.
 - Suction pile installation services.
- Project properties
- 5x suction pile 5m OD x 13.5m deep.
 - 3x suction pile 6.5m OD x 11m deep.
 - 1x suction pile 5m OD x 11m deep.
- Soil conditions
- Sandy and clayey soils.
- Water depth
- 140m



Shell Riser Access Tower

Client ALE Heavylift
 Year completed 2011
 Location K15 Dutch North Sea

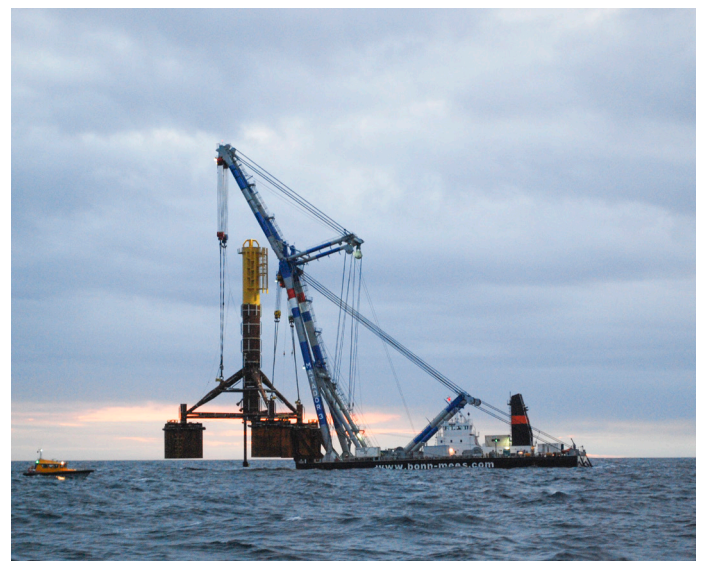
- Scope of work
- Suction pile installation engineering.
 - Suction pile installations services.
 - ROV services.
 - Positioning services.
- Project properties
- 4x suction piles 7.5m OD x 7m deep.
 - Monopod and topsides weight 350mT.
- Soil conditions
- Sands.
- Water depth
- 30m



Ithaca Energy Jacky

Client HSM Offshore
 Year completed 2008-2009
 Location UK North Sea, Beatrice area

- Scope of work
- Detailed design suction pile foundation.
 - Fabrication of suction piles.
 - Installation of SIP1 tripod suction pile foundation.
- Project properties
- 3x suction piles of 10m OD x 7.5m deep.
 - Topsides weight 800t.
 - Substructure including suction piles weight 1,150t.
- Soil conditions
- Sand with cobbles.
- Water depth
- 45m
- SPT achievements
- EPCI schedule of 9 months met.
 - Jacket docked over an existing well.



Centrica F3-FA

Client Heerema Fabrication Group
 Year completed 2010
 Location Dutch sector North Sea F3-FA field

- Scope of work
- Transport from Flushing to F3FA site & offshore installation SIP2 self installing platform.
 - Detailed design suction piles.
 - Fabrication of suction piles.
 - Detailed design grillage and seafastening.
 - Fabrication of seafastening beams.
 - Fabrication of deck cantilever beams.
 - Marine design and model testing at test basin MARIN.
- Project properties
- 4 x suction piles of 15m OD x 13m deep.
 - Topsides weight 4,500t.
 - Substructure including suction piles weight 5,500t.
 - Grillage 600t and seafastening 100t.
- Soil conditions
- Dense to very dense sands.
- Water depth
- 41m
- SPT achievements
- Re-usable concept for short life of field of 7 years.
 - 18 months EPCI contract schedule.
 - Offshore installation in only 52 hours.
 - Concept insensitive to weather downtime and weight growth.



GFI Bualang Field Development FPSO mooring

Client EMAS
 Year completed 2007-2008
 Location Gulf of Thailand

- Scope of work
- Design of suction pile cluster.
 - Installation of suction pile cluster.
- Project properties
- 1x suction pile cluster with 3x suction piles of 4.2m OD x 4.5m deep.
 - 300t connection.
- Soil conditions
- Soft to stiff clays.
- Water depth
- 30m



ENI Rosetta

Client Saipem
 Year completed 2008
 Location Mediterranean, Egypt

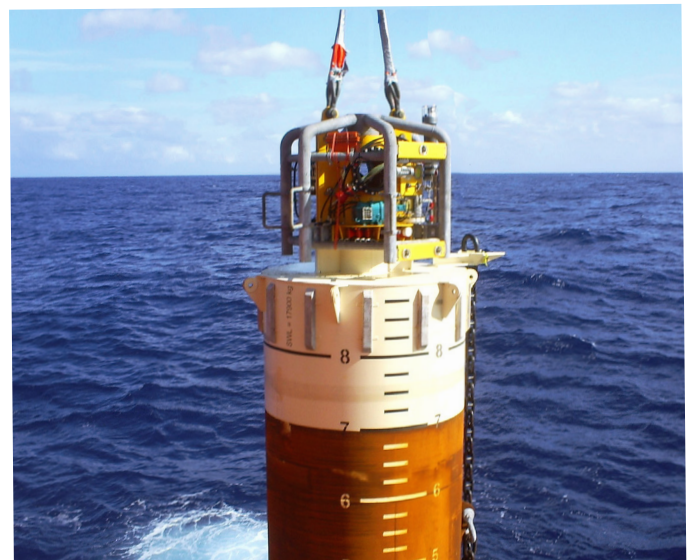
- Scope of work
- Rental of suction pile installation spread for installation of foundation of manifold protection structure.
- Project properties
- 4x triangular suction compartments of 5m deep x 5m depth x 3.5m height.
 - Structure weight of 135t.
- Soil conditions
- Soft clays.
- Water depth
- 100m



Chevron Frade Field Subsea Development

Client Subsea7
 Year completed 2007-2008
 Location Brazil

- Scope of work
- Detailed design of suction piles for the mooring of subsea risers.
 - Fabrication of suction piles in Brazil.
 - Installation of suction piles using ultra deepwater suction pump SAPS-003.
- Project properties
- 22 suction piles of 3m OD x 6m to 9m deep.
- Soil conditions
- Soft clays.
- Water depth
- 1,100m
- SPT achievements
- Average complete suction pile installation of only 7 hours per pile.
 - Full survey and positioning equipment integrated in pump.



British Guyana Bridge Pontoon Mooring

Client Bosch Rexroth
 Year completed 2007
 Location Berbice River, Guyana

- Scope of work
- Detailed design of Suction Embedded Anchors (SEA).
 - Fabrication and supply of SEA.
 - Installation of SEA.
- Project properties
- 80 no. 100t UHC SEA.
- Soil conditions
- Soft to very stiff clays.
- Water depth
- 3 – 12m



Talisman Malaysia Bunga Raya

Client Talisman
 Year completed 2006
 Location Malaysia

- Scope of work
- Design of monopods and suction pile foundations.
 - Marine design and transport and installation engineering.
 - Installation of 2 SIMs.
- Project properties
- Suction piles of 7m OD x 8m deep.
 - Monopod weight 150t.
 - Topsides weight 1,500t on two monopod.
- Soil conditions
- Clayey soils.
- Water depth
- 55m
- SPT achievements
- Cost efficient and low impact platform extension founded on 2 suction pile based monopods.
 - EPCI schedule in 4 months met.
 - No driving required next to an operational platform.



PetroCanada de Ruyter Development

Client Smit
 Year completed 2006
 Location Dutch sector of the North Sea

- Scope of work
- Installation of GBS suction skirt foundation.
 - Installation of cluster suction pile foundation.
- Project properties
- 4x suction piles of 7.5m OD x 5.8m deep.
 - TMLS oil offloading structure weight of 240t.
- Soil conditions
- Silty sands.
- Water depth
- 25m



Amerada Hess Ceiba Subsea Development

Client Subsea7
 Year completed 2003-2006
 Location Equatorial Guinea, West Africa

- Scope of work
- Detailed design of suction pile cluster foundation.
 - Fabrication and installation of suction pile cluster foundations.
- Project properties
- 25x suction pile foundations of 3x suction piles of 1.5m to 2.5m OD x 6m to 8m depth.
- Soil conditions
- Soft clays
- Water depth
- 700 – 900m.
- SPT achievements
- Verticality of all suction pile foundations within 0.5 deg.



Talisman Bunga Raya Subsea Jacket

Client Talisman
 Year completed 2003
 Location Offshore Malaysia

- Scope of work
- Design of suction pile foundation.
 - Marine design verification.
 - Installation procedures.
 - Installation of free floating jacket suction pile foundation.
- Project properties
- 4x suction pile 8.5m OD x 9m deep.
 - Jacket weight 1,700t.
- Soil conditions
- Firm clays.
- Water depth
- 53m
- SPT achievements
- Application of SPT Offshore's patented technology 'buoyancy in suction piles', making a platform wet tow feasible.



ConocoPhillips Calder

Client Genesis Oil & Gas Consultants
 Year completed 2002
 Location East Irish Sea, UKCS

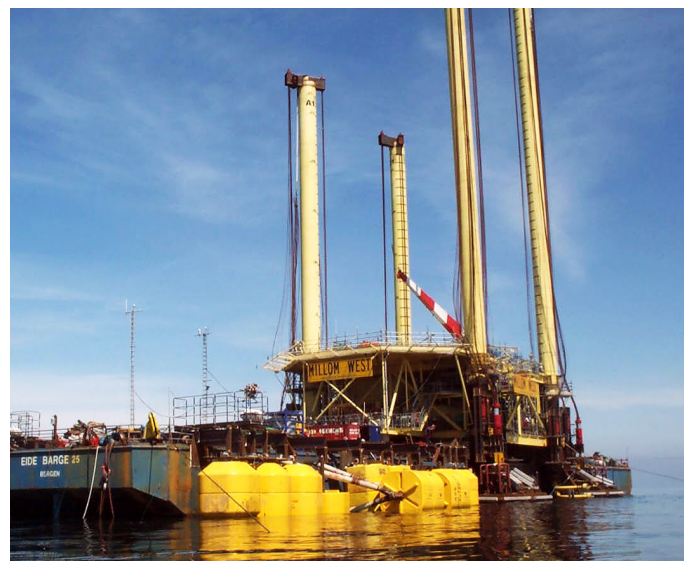
- Scope of work
- Design of suction pile foundation.
 - Fabrication of 4 suction piles.
 - Marine design and preparation of transport and installation procedures.
 - Transportation and installation of complete SIP2 platform.
- Project properties
- 4x suction piles of 9m OD x 5.75m length.
 - Topsides weight of 700t.
 - Substructure including suction pile weight 1,200t.
- Soil conditions
- Loose to very dense sands.
- Water depth
- 30m + 9m tide
- SPT achievements
- EPCI schedule of 9 months met.
 - Installation of suction piles in gravel layered soil.



ConocoPhillips Millom West

Client Genesis Oil & Gas Consultants
 Year completed 2000
 Location East Irish Sea

- Scope of work
- Suction pile foundation design.
 - Marine design and T&I procedures.
 - Suction pile installation services.
- Project properties
- 4x suction piles of 7m OD x 9m deep.
 - Topsides weight: 400 mT.
 - Substructure including suction piles weight: 1,100 mT.
- Soil conditions
- Loose to very dense sands.
- Water depth
- 29m



Chevron North Nemba Flare Jacket

Client Subsea7
Year completed 1999
Location West Africa Angola

- Scope of work
- Design of suction pile foundation.
 - Fabrication of suction piles.
 - Suction pile installation services.
- Project properties
- 3x suction pile 5m OD x 5.5m deep.
 - Jacket weight 650t.
- Soil conditions
- Soft clays.
- Water depth
- 120m
- SPT achievements
- Jacket installation in 24 hours, including wet upending, set down and suction pile installation.
 - Verticality of the structure within 0.25 deg.

