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Company Introduction

Who we are:
- Crestech is an Engineering Design & Project Management Company based in Lagos delivering world class services to the Nigerian Oil & Gas Industry.

What we do:
- Crestech provide services for offshore and onshore oil production facilities which includes: Conceptual Design, Front End Engineering Design (FEED), Detailed Engineering Design (DED), Construction follow-on engineering and Project Management
- In accordance with provisions of the Nigerian Oil and gas Industry Content Development act of 2010 (NOGICD), Crestech Engineering Limited has demonstrated sustainable capabilities.
Company Introduction

Where we are:

Ivie House, 4/6 Ajose Adeogun Street, Victoria Island, Lagos.

Engineering dedicated floors:

1,400 m² open space
Up to 200 workstations
15 offices
Company Introduction

Foreign Companies Alliance Agreements

The following working agreements have been entered into between Crestech Engineering Limited and some foreign engineering companies:

► Collaboration agreement between Technip Offshore Nigeria limited and Crestech Engineering Limited

► Frame Agreement for provision of engineering and consultancy services by and between Genesis Oil and Gas Consultants Ltd and Crestech Engineering Limited

► Strategic Alliance Agreement between Crestech and Penspen Limited

► Cooperation Agreement between Crestech and Sofresid S.A
Company Introduction

Field of Activities

Our field of activities comprises of conceptual/feasibility study, Front End Engineering Design (FEED), Detailed Engineering Design and Project Management Services for greenfield and brownfield facilities in the Oil and Gas industry, including:

► Offshore fixed and floating facilities
  • Production, wellhead, gathering, pumping, separation, compression platforms
  • Floating production facilities (FPSOs, FSOs, Off-loading Buoys)
  • Subsea (deep water) facilities: pipelines and risers, PLEM, suction piles, etc.

► Onshore facilities
  • Upstream facilities, wellhead, gathering centers, processing plant, pipelines, etc.
  • Terminals, Depots, Storage facilities, Flow-lines
  • Tanker loading and unloading facilities
  • Refineries, Downstream plants
  • Natural gas treatment plants
  • Petrochemicals & Fertilizers
  • Buildings & Facilities
Capabilities & Experience

Engineering Capabilities

► Crestech offices are fully equipped with up to date Engineering Facilities and an array of specialist engineering software applications.

► Crestech has the following skill centres in the Lagos office:
  • Project Management
  • Project Controls and Planning
  • Process / Safety Engineering
  • Civil / Structural Engineering
  • Piping / Pipeline Engineering
  • Mechanical Engineering
  • Electrical Engineering
  • Instrumentation and Telecoms Engineering
  • 3D CAD Modelling & Review (PDMS, PDS, INVENTOR, NAVISWORKS)
Capabilities & Experience

QA/QC & HSE

Crestech operates with standard quality, health, safety and environmental management systems, and is committed to providing a safe working environment for it’s employees, clients and visitors.

► This is achieved by enforcing it’s policy statements on HSE, Quality, Environment, Community Relations, and Drug & Alcohol Use.

► Crestech is accredited to the following international standards:

  • ISO 9001: 2008 - Quality Management System (certified by Bureau Veritas)
  • ISO14001: 2004 - Environmental Management System (certified by Bureau Veritas)
  • OHSAS 18001: 2007 - Occupational, Health and Safety Management System (certified by Bureau Veritas)
Capabilities & Experience

Project Capabilities

Crestech has successfully executed the following types of projects:

- FPSO FEED & Detailed Design
- Conceptual Studies for Onshore & Offshore Oil and Gas Facilities
- Debottlenecking Studies for Onshore Oil and Gas Facilities
- Deepwater OLT Buoy Detailed Design
- Subsea Umbilical Detailed Design (Secondment to Technip Umbilicals)
- Fixed Platforms Topsides and Jackets FEED, Detailed Design and Follow-On Engineering.
- Conceptual Studies, FEED and Detailed Design for Buildings, Workshop & Other Facilities
- Onshore Gas Pipeline FEED & Detailed Engineering
Capabilities & Experience

Current / Past Clients

- Total
- ExxonMobil
- Chevron
- LNG Nigeria Limited
- Shell
- Genesis
- Sahara Group
- Seplat
- Technip
- Dorman Long Engineering Limited
- National Oilwell Varco
- Agip
- Chimons
- Morpol Engineering Services LTD.
- Crestech
Project References

Project Experience – Some Completed Projects

Key Past Completed Projects

• Ikike Wellhead Platform FEED Verification (TOTAL) - 52,100 hrs
  - FEED optimisation for 12-Slot Wellhead Platform and design of tie-ins to host platform

• Erha North Phase 2 FPSO Topside Modification (ExxonMobil) - 70,000 hrs
  - Detailed Engineering for brown field modifications of the existing FPSO topside facilities as part of development of additional subsea wells

• OFON Phase 2 Wellhead Platforms/Bridges Detailed Design (TOTAL) - 166,000 hrs

• EGINA FPSO FEED - as part of Consortium (TOTAL) - 136,000 hrs
  - Overall project and interface management, system definition, process and safety design of two modules and pipe rack

• OAGM FEED and Detailed Design (CHEVRON) - 115,000 hrs
  - Gas gathering for 6 offshore platforms and associated onshore facilities.
Project References

Project Experience – Some Completed Projects (Cont’d)

Key Past Completed Projects

- EGP3B FEED and Detailed Design (CHEVRON) - 140,000 hrs
  - Design of Gas Gathering Compression Platform (GGCP) and Modification of 9 offshore production platforms for gas gathering for the CNL flare-out campaign

- Installation Engineering Design of Deepwater Subsea Jumpers (several) - 5,000 hrs
  - Design of production, water injection and multiphase jumpers for subsea flow lines as part of FPSO subsea tie-backs.

- Brass LNG Upstream Project (AGIP) - 31,700 hrs
  - FEED for 2 flow stations modification and 6 new onshore gas pipelines

- EGINA Buoy OLT Detailed Design (TOTAL) - 53,000 hrs
  - Engineering design of CALM Buoy, 3D Modelling and procurement support to EPC Contractor

- OFON Phase 2 Follow-on Engineering (TOTAL) - 16,000 hrs
  - Follow-on engineering during fabrication phase to two wellhead platforms topsides and jackets
Recently Completed Projects (2015 - 2017)

- Egina Umbilicals (DUCO) Detailed Design (TOTAL) - 40,000 hrs
  - In-country project and interface management, STI design, procedure and specifications preparation.

- Liquid Treatment Facility (LTF) Phase 1 Project – Detail Design (SEPLAT) - 6,084 hrs
  - Design, routing of piping, tubing and cables connecting the process equipment and utilities of the new LTF Phase 1 Facilities.

- Sapele Flowstation Debottlenecking Study (SEPLAT) - 2,581 hrs
  - Determination of the maximum production capacity achievable from the existing facility, bottlenecks identification, and provision of the process design for the upgrade (Executed along with Genesis Oil & Gas, Houston, USA).

- Piping Modification Works at OB-OB Gas Plant – Detailed Design (MORPOL/NAOC) - 2,778 hrs
  - Detailed Engineering Design for piping modification works to enable provision of alternative gas supply to Indorama Eleme Fertilizer and Chemicals Limited from Ob-Ob Gas Plant.

- Provision of Volumetric Flow Control System – Detailed Design (MORPOL/NGPTC) - 2,270 hrs
  - Engineering design of volumetric flow control system for Omotosho and Ihovbor metering stations.
Project References

TOTAL E&P - OFON PHASE 2

EXXONMOBIL - ERHA NORTH PHASE 2

TOTAL E&P - EGINA OFFLOADING BUOY

TECHNIP – UMBILICAL FOR EGINA FPSO

CresTech
Project References

SEPLAT - LIQUID TREATMENT FACILITY PHASE 1 PROJECT

SEPLAT - SAPELE FLOW STATION DEBOTTLENECKING STUDY
### Project References

#### Details of Key Past Projects (Cont’d)

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Client Name</th>
<th>Detailed Scope of Work performed by Tenderer</th>
<th>Start / Completion year or in progress</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven (7) Critical Gas Development Projects (7CGDP)</td>
<td>NNPC</td>
<td>Provision of Project Management Consultancy Services for four (4) of the 7CGDP for NNPC.</td>
<td>2018 - In progress</td>
<td>Project Management Consultants</td>
</tr>
<tr>
<td>EGINA Offloading Buoy – Detailed Engineering Design</td>
<td>Total E &amp; P</td>
<td>Detailed Engineering Design for the CALM Buoy- including Process &amp; Safety, Piping, Structural, Mechanical, E&amp; I. Autodesk Inventor 3D Modelling.</td>
<td>2013 - 2016</td>
<td>Engineering Subcontractor to NOV Nigeria Oil &amp; Gas Ltd, the EPC Contractor</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours:</strong> 52,900</td>
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<tr>
<td>Umbilicals for EGINA FPSO - Detailed Engineering Design</td>
<td>TOTAL</td>
<td>In-country project and interface management, STI design, procedure and specifications preparation.</td>
<td>2013 - 2016</td>
<td>Engineering Subcontractor to Technip</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours:</strong> 40,000</td>
<td></td>
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</tr>
<tr>
<td>IKIKE Project Optimization Phase 2</td>
<td>Total E &amp; P</td>
<td>FEED Optimisation for Ikike wellhead platform, Amenam Tie-ins design, multidisciplinary FEED verification and design and 3D CAD computer modelling using PDMS etc.</td>
<td>2013 - 2014</td>
<td>Main Contractor</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours:</strong> 58,671</td>
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<tr>
<td>NLNG Bonny Vocational Centre Expansion Project -</td>
<td>Nigeria LNG Limited</td>
<td>Detailed Engineering Design for BVC Facilities; Classrooms, Workshops, Canteen and Office Buildings.</td>
<td>2013 - 2014</td>
<td>Main Contractor</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours:</strong> 24,744</td>
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<tr>
<td>Bonga South West Project - FEED</td>
<td>SNEPCO</td>
<td>Topside Mechanical Static Design, Mechanical Piping Data Sheets, Instrumentation (PACO) Design Data Sheet, Process &amp; Utilities to support ITT documents for Shell Bonga South West FEED.</td>
<td>2013</td>
<td>Main Contractor</td>
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<tr>
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<td></td>
<td>**Engineering Hours:**10,000</td>
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## Details of Key Past Projects (Cont’d)

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<th>Start / Completion year or in progress</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erha North Phase 2 – Detailed Engineering Design</td>
<td>ExxonMobil</td>
<td>Detailed Engineering for brown field modifications of the existing FPSO Topside Facilities and Subsea system. New Production, Water injection and Gas Lift Lines, New Riser Base Gas Lift Module, new Pig Launcher/Receiver, new TUTAs, Chemical Injection Skids &amp; HPU.</td>
<td>2012 - 2014</td>
<td>Engineering Subcontractor to Subsea 7, the EPC Contractor</td>
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<td></td>
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<td><strong>Engineering Hours: 70,000</strong></td>
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<tr>
<td>OFON Phase 2 Project – Detailed Engineering Design</td>
<td>Total E &amp; P</td>
<td>Detailed Engineering Design of two wellhead platforms and two interconnecting bridges</td>
<td>2011 - 2012</td>
<td>Engineering Subcontractor to Nigerdock, the EPC Contractor</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours: 166,000</strong></td>
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<tr>
<td>Onshore Asset Gas Management Project</td>
<td>CHEVRON</td>
<td>Detailed design, Procurement Support, Construction &amp; Commissioning for 6 onshore platforms (Dibi, Olero, Abiteye, Makaraba, Utonana and Opuekeba); FEED also executed by us (Crestville) in Dec, 2007</td>
<td>2008 - 2009</td>
<td>Main Contractor</td>
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<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours: 80,000</strong></td>
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<tr>
<td>Escravos Gas Project</td>
<td>CHEVRON</td>
<td>Brownfield Detailed Engineering Design involving the modification of 9 offshore production platforms for gas gathering for the CNL flare-out campaign; Covering conceptual studies, basic engineering and detailed design; Overall scope shared with Technip USA</td>
<td>2006 - 2008</td>
<td>Main Contractor</td>
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<td></td>
<td></td>
<td><strong>Engineering Hours: 140,000</strong></td>
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<tr>
<td>Brass LNG Upstream Project (FEED)</td>
<td>NAOC</td>
<td>FEED for 2 flow stations modification and 6 new gas pipelines; The flow stations are Clough Creek and Kwale Gas Plant</td>
<td>2006 - 2007</td>
<td>Engineering Subcontractor to GENESIS Oil &amp; Gas</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Engineering Hours: 31,700</strong></td>
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</tbody>
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