



Sustainable Solutions for the  
Oil & Gas Industry

## About us

Fortune Engineering & Energy Services LLC is a specialized engineering company actively engaged in Conceptual Design, Feasibility Study, Front End Engineering & Design (FEED), Engineering, Procurement, Construction and Commissioning (EPCC) of Process, Mechanical, Piping, Electrical, Instrumentation, Control, Automation and Telecom Systems with a highly successful track record. The significant contribution to the Oil and Gas industry in terms of quality and speed has made this organization a highly professional service provider to the regional and international Oil & Gas (Onshore & Offshore), Petrochemical, and Alternate Energy sectors.

With our JV partners and representative offices in India, Saudi Arabia, Malaysia, and Singapore, we are competitive enough to handle bids and proposals for design, detail engineering and operation related projects. Our specialized multifaceted team comprising process design, construction & commissioning, operation & maintenance activities has carved a niche for us in the oil and gas sector. Our workshop facility for fabrication is capable of handling large projects including manufacture of process skids, topside modules, flow stations, control panels and control systems, Chemical injection skids, Metering skids/LACT units, Flushing skids and other integration/automation assemblies.

With our expertise we provide a wide range of engineering and project management skills to serve our clients in developing new facilities, as well as effectively applying innovative, sustainable and efficient technologies to upgrade and expand the existing facilities. We relish the international reputation of delivering every project and service we undertake with high standards of quality, commitment, reliability, and timeliness.

Our successful track records range from major projects for oil & gas onshore to offshore oil and gas including Process & Mechanical Topsides, FPSO, FSRU, FLNG FSO, Jack-up and Semi-submersible drilling rigs, Fixed Platforms and Wind Farms with the highest quality, and to agreed schedules.

Our pride in having completed several pioneering projects for many major clients worldwide keeps us motivated. We have managed to emerge as one of the best engineering and energy solution providers worldwide, since our inception in 2006.

## Markets

Our presence in the market is defined by our commitment to Efficiency, Sustainability and Customer Satisfaction. With our exclusive experience and multi-disciplined team, our market scope is wide, to provide a strong and focused based quality service.


Our team, with a comprehensive, in-depth knowledge of processes, technologies, and resource availability will benefit any customer in search of Excellence. Our extensive experience in markets worldwide, empowers us to take a macro approach, apply best practices and synergies on the projects, serving our clients efficiently and effectively.

### THE MARKETS WE SERVE INCLUDE:

#### **Oil and Gas Exploration & Production**

- ♣ Onshore - Wellhead & completion, Production & Processing Plants, GOSP
- ♣ Offshore - Fixed Platforms & Topsides, Process & Mechanical Topsides, FPSO, FSO FSRU, FLNG FSO, Jack-up and Semi-submersible drilling rigs.

#### **Oil and Gas Pipelines & Transportation, Terminals and Refining**

-  **Energy Management** - Our independent energy audits can help businesses in optimizing power consumption. A key feature in our energy management approach is the ability to focus on the business benefits from environmental reductions to increased production. Our key services include producing energy balance, identifying strategies for energy consumption reduction, process optimization opportunities (quick wins) and improving energy awareness of personnel.











## Custom Process Systems

We offer customized process package solutions for the Oil and Gas Industry.

### GAS TREATMENT AND CONDITIONING

- MEG/TEG Dehydration
- CO<sub>2</sub> & H<sub>2</sub>S Removal & Disposal
- Dew Point Control
- LPG Plant
- Fuel Gas Conditioning

### WATER INJECTION SYSTEMS

- Strainers, Coarse & Fine Filters
- Water De-oxygenation Systems

### CRUDE OIL SEPARATION

- Test & Production Separator
- Desalter and Dehydrator
- Oily Water Separator
- FWKO Unit
- Oil Skimmer

### OTHER PRODUCTION FACILITY EQUIPMENT

- Slug Catcher
- Gas Scrubber
- Filter Separators/Coalescer
- Cyclone Separator
- Vane Pack Separator
- Indirect Water Bath Heater

### PRODUCED WATER TREATMENT

- Hydro-cyclone
- Compact Floatation Units
- Desanding Units
- Media Filters

### OTHER PACKAGES

- Fiscal Metering - liquid and gas
- Chemical Injection System
- HIPPS System
- Wellhead Control Panels
- System Integration



Customized Solutions



## Capability



### Custom Process Systems (Cont'd...)

Our team has a wealth of experience in providing modularized packages pre-wired and FAT tested in a controlled workshop environment prior to shipment with the following additional benefits:

- ✦ Reduced site construction time and associated costs
- ✦ No delays due to adverse weather conditions during the site construction phase.

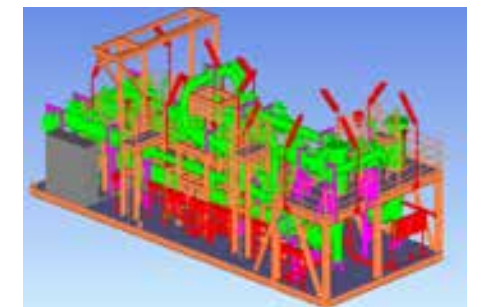
We use the latest simulation software to ensure the accuracy of our in-house designs and this expertise is further enhanced by our partnerships with recognized licensors of process technologies.

We have the experience and technical expertise to develop the process from the Client given inlet specifications to meet the required performance criteria. We offer process guarantee for the system we supply.

Our team uses the latest technologies for detailed engineering with particular consideration given to ensure the safety and operability of the plant.

Our package facilities are located within the UAE and is equipped with the following.

- ✦ Covered/uncovered fabrication and assembly area.
- ✦ Covered blast and paint shop
- ✦ Plate rolling machine
- ✦ On site heat treatment furnace
- ✦ On site hydro test bay



## Customized Solutions



## Capability



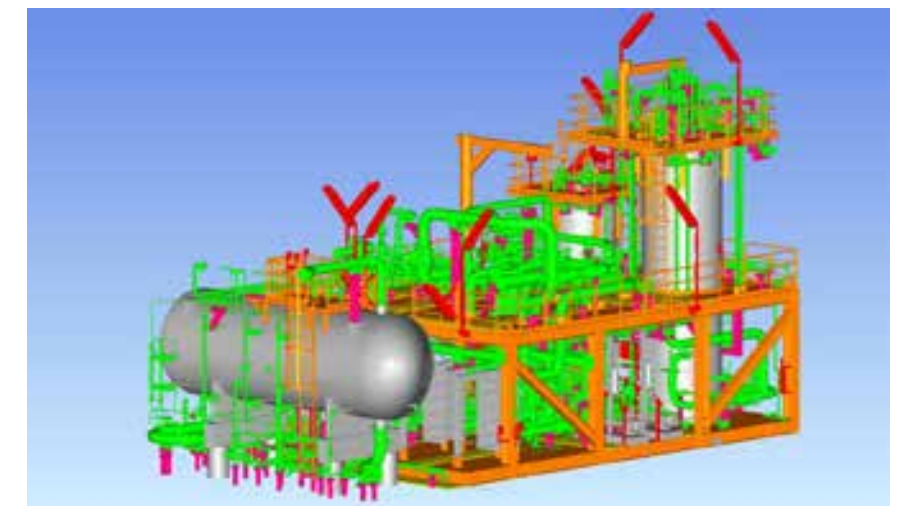
## Engineering

We offer multi-disciplined engineering design services for a wide range projects. We adopt a full lifecycle 'Total Installed Cost' approach to design and project implementation, to enhance project value without compromising safety, quality or schedule. Over the period of time we have grown and shaped engineering to such an extent that today are widely recognized as one of the pioneers in the global engineering space. By utilizing 3D modeling and intelligent design systems, we maximize the benefits of data integration throughout the engineering, fabrication and construction phases of our projects. We can offer a full range of engineering services that complement our construction capabilities on Mechanical works, piping works and Cross country pipelines both Onshore & Offshore for a total solution to our Clients.

Our engineering delivery model is underpinned by extensive own highly qualified engineering resources and a global network of high value engineering centres.

- ✦ Concept Evaluation
- ✦ Project Feasibility Studies
- ✦ Basis of Design
- ✦ Front End Engineering Design (FEED)
- ✦ Detailed Design
- ✦ Specialised Process Engineering Design
- ✦ Engineering, Procurement, Construction Management (EPCM)
- ✦ Project Management Consultancy (PMC) Services
- ✦ Process Optimisation and Debottlenecking
- ✦ Brownfield Engineering

We use advanced technology and over a decade of engineering and construction expertise to deliver a full suite of engineering services across the entire asset and feasibility studies through to design, delivery and long term production operations and optimization. Our engineers design with a Constructability and Maintainability perspective to maximize safety, cost, quality and productivity outcomes during the construction and operations phases of a project.



## Engineering on Human Factors





## Capability



### EPC

On EPC range, we offer the following specialized services and provide a complete range of engineering, procurement, construction, project management and commissioning for the following.

- ✦ Gathering & Distribution Piping Networks – Onshore & Offshore
- ✦ Mechanical & Piping Installations – Onshore & Offshore
- ✦ Compressor, Regulator, Metering & Pump Stations
- ✦ Tank Farms & Terminals
- ✦ Refineries & Gas Treatment Facilities
- ✦ Petrochemical Facilities

We have extensive experience in EPC, covering the spectrum from preliminary planning to completion and handover. Throughout history, offering total solutions had played an important role in our success and growth. We offer a comprehensive project approach that encompasses all phases of the EPC work cycle from small projects to multi-million contracts. Combined with our own strong construction team, we are able to provide a broad range of services related to EPC.

Our technologically advanced tools & tackles give the capability to accurately update and reproduce the information on a complex EPC project. Our multi discipline staffs are comprised of highly technical and competent personnel having experience in EPC projects with a goal to provide quality and efficient services to our clients.



Challenges all the way



## Capability



## Electrical, Instrumentation & Control Systems

We have built our capability to take on any critical and challenging tasks related to the markets we serve:

- ✦ Instrument Engineering/Systems Engineering Services
- ✦ Design & implementation of Process Control System (PCS), Process Optimization System, Emergency Shutdown System (ESD), Integrated Control & Safety Systems (ICSS)
- ✦ HAZOP, HAZID, QRA & SIL Studies - Evaluation/Verification
- ✦ Design & integration of High Integrity Pressure Protection package (HIPPS) package
- ✦ Design & supply of Liquid and Gas Fiscal Metering Packages/LACT units
- ✦ Fire & Gas and Loss Prevention Studies – providing optimum coverage for plant areas for detection & suppression
- ✦ Control Room & Control Systems Hot Cut-over
- ✦ Sizing, Selection & Supply of Field Instrumentation, Control Valves, Regulators and Relief valves
- ✦ Valve automation and actuation-SSVs, shutdown valves, motor operated valves
- ✦ Design and Supply of Radio and Telecommunication systems (PAGA, VSAT, GMDSS, CCTV, PABX, FO Patch panels)
- ✦ Design to meet International Standards and Regulatory Requirements

Our Expertise and experience in Electrical & Power systems can make even the complex requirements look simple:

- ✦ Electrical system design for process plants
- ✦ Power system analysis (using ETAP/EDSA)
- ✦ Short Circuit Studies, Harmonic Analysis and Solutions
- ✦ Load balancing and related studies
- ✦ Heat Trace Systems - Design, Supply and Installation
- ✦ Cathodic Protection System – Design, Supply and Installation
- ✦ Hazardous Area Classification and Installation to meet International Standards

Fit for purpose solutions



## Capability



## Engineered E&I Packages

We offer the following fully engineered packages...

- ✦ ICSS/PLC/DCS/F&G/SCADA/BMS System
- ✦ Pipeline Integrity Management system (PIMS)/Leak Detection
- ✦ Turbo Machinery Control & Protection System
- ✦ HIPPS packages including SIL validation (Complete system including the shutdown valves, PLC logic solver and the sensors using SIL certified engineers)
- ✦ Electrical MV/LV Switchgear
- ✦ Telecom packages (CCTV/PAGA/VSAT/GMDSS)
- ✦ Customized/Containerized control rooms and switchgear rooms
- ✦ Power Generator Packages as per client requirement
- ✦ Power Management System
- ✦ Liquid and Gas Metering Skids/LACT units
- ✦ Solar power systems
- ✦ Chemical Injection Skids
- ✦ Heat Trace package
- ✦ Gaseous Fire Suppression (FM200, FE13, Novec, Inergen etc.)
- ✦ Wellhead Control Panels



Taking full responsibility



## Capability



### Solar Power System (SPS)

#### KEY STRENGTHS:

- Technical Expertise available in-house.
- Executed Solar Power System Projects for Oil and Gas Industries with in-house design, procurement and construction & commissioning.
- Structural Support Design Capabilities - adjustable cold formed Solar support structure meeting the strength & serviceability requirements.
- Expertise in Off-grid / Hybrid, Solar Street light, Roof top PV Grid-Tie System for residential, commercial and oil and gas application.
- Inclination & orientation of modules - Orientation (altitude or direction) of solar panels is possible to achieve more absorption and efficiency.

#### SOME ADVANTAGES OF USING SPS:

- Low payback period.
- Guaranteed Performance - includes a 20 to 25 years warranty (also known as a performance guarantee) with the solar panels. The industry standard guarantees 80% performance after 25 years.
- Save the Environment - Low Carbon Emission.

#### TECHNICAL DETAILS:

- Software tool is used to estimate the solar electricity production of a photovoltaic (PV) system.
- Battery size, voltage and capacity - As per IEEE 485-2010 - Recommended Practice for Sizing Lead-Acid Batteries for Stationary Applications.
- Estimation of consumption of electrical appliances during a whole day.
- Optional hourly consumption estimation.
- IEC Cable Sizer - As per IEC- 60364 / IEC - 60287.





Highly skilled crew at your service

Capability



## Operations Excellence

Our highly skilled technical in-house resources comprising engineers, supervisors, technicians, construction & maintenance crew with certified test equipment and other facilities, is capable of executing the installation, commissioning and maintenance assignments in the markets we serve.

- Process Optimization
- Plant Troubleshooting services
- Process Debottlenecking
- Field Engineering Services – Field Data Capture and verification, Cause & Effect, Function Checks
- Life Extension & Asset Integrity studies
- Fatigue Analysis and Vibration monitoring
- Field Installation & Integration Services
- Pre-commissioning and Commissioning
- Drawings As-Built services (P&ID's and other drawings)
- Construction Management & Construction Supervision
- Provision of skilled manpower such as Commissioning Managers, Commissioning Engineers/Technicians, DCS/ESD and ICSS Commissioning engineers, and other Commissioning Crew



Rely on our expertise and 'believe it's done'





FEASIBILITY STUDIES, FRONT-END ENGINEERING & DESIGN (FEED)	CRUDE OIL SEPARATION
ENGINEERING, PROCUREMENT, CONSTRUCTION & COMMISSIONING (EPCC)	GAS TREATMENT AND CONDITIONING
CUSTOM PROCESS SYSTEMS	HIGH INTEGRITY PRESSURE PROTECTION SYS- TEM (HIPPS) - ONSHORE AND OFFSHORE
ENERGY AUDITS & PROCESS OPTIMISATION	PRODUCED WATER TREATMENT
PLANT OPERATIONS	LIFE EXTENSION & ASSET INTEGRITY STUDIES
HAZOP, HAZID, HSEIA, FMEA, COMAH STUDIES AND QRA	CHEMICAL INJECTION SKIDS
SIL STUDIES - EVALUATION/VERIFICATION	WELLHEAD CONTROL PANELS
ICSS/ PLC/ DCS/ESD/ F&G/ SCADA/ BMS SYSTEMS	WATER INJECTION SYSTEMS
CONTROL ROOM HOT CUT-OVER	INSTRUMENT CALIBRATION SERVICES
F&G DETECTION AND SUPPRESSION SYSTEMS	TELECOM SYSTEMS (SATCOM, VSAT, PAGA)
POWER STUDIES & POWER MANAGEMENT SYSTEM	PRODUCTION FACILITY EQUIPMENT
LIQUID AND GAS METERING SKIDS	PROCESS PLANT OPERATIONS
TECHNICAL MANPOWER OUTSOURCING	MV/LV POWER GENERATION AND DISTRIBUTION SYSTEM



# FORTUNE ENGINEERING & ENERGY SERVICES LLC

**Office # 207-210, Al Zarouni Business Centre, Al Barsha 1  
Sheikh Zayed Road, Dubai, United Arab Emirates**

**PO Box: 454504  
Tel: +971 4 395 1444 | Fax: +971 4 395 7144**

Office # 1103-1104, Building 726  
Sheikh Rashid Bin Saeed Street  
Abu Dhabi, United Arab Emirates

PO Box: 38436  
Tel: +971 2 447 7862 | Fax: +971 2 447 7863

Office # B 59, Oilfields Supply Centre  
Jebel Ali Free Zone  
Dubai, United Arab Emirates

Tel: +971 4 881 3744 | Fax: +971 4 881 7344

B3, Ocean Crest Haven, 21-23, New Market Road  
Oniru, Lagos, Nigeria

Tel: +234 803 717 0831 | +234 81 891 55555

73 Ubi Road 1, #09-55 Oxley BizHub  
Singapore 408733

Tel: +65 67482924 | Fax: +65 63842321

No. 19, Aviation Road, Airport Residential Area  
PO Box CT : 10814, Cantonments, Accra, Ghana

Tel: +233 307 038 332 | +233 242 183 225



UAE



Saudi Arabia



Nigeria



Singapore



Ghana



E-Mail: [info@fortuneenergyservices.com](mailto:info@fortuneenergyservices.com)  
Website: [www.fortuneenergyservices.com](http://www.fortuneenergyservices.com)