

ENGINEERING | PROCUREMENT | CONSTRUCTION

#### AN INDIGIENOUS COMPANY WITH A DIFFERENCE





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## ABOUT HARMONIE ENGINEERING

he company name "HARMONIE" represents our business philosophy - to offer peace of mind to our clients through the delivery of safe, cost effective, efficient design and construction solutions on all projects.

Harmonie Engineering is a leading indigenous company providing engineering, procurement and construction services to clients in the Oil and Gas, Real Estate, Manufacturing, Banking and Maritime sector. We provide best-in-class services by taking advantage of best practices across the industry. Through our turnkey capabilities and extensive network of strategic technical partnerships and alliances, strong presence in Nigeria, we are better placed to respond quickly and efficiently to our clients' needs.

Harmonie Engineering has a culture of innovation and entrepreneurial management, which brings effective & efficient services to our customers, through communicative teamwork, combined with efficient business and information technology systems. Our technical expertise, partnerships with world-class companies, customer focus, on-time delivery, quality of service, professionalism gives us our unique image. Our people are our most valuable assets, We believe in enhancing the careers of our employees by ensuring that their welfare is cared for and making them feel that they are a valued part of an employee owned company. Our pursuit for excellence underlines the fundamental philosophy at Harmonie Engineering Ltd.

Detailed planning and critical analysis along with a continuous commitment to technical excellence are central to our client service proposition.

Whilst we are pleased with our growth, our goal is to ensure that we are the best at what we do. We are committed to delivering services which provide constructible, robust and practical design solutions. As we look to the future we will continue to invest in the talent and services that our clients need to achieve their goals.







# **OUR ADVANTAGE**

### **PHILOSOPHY**

We have developed an enviable reputation in engineering, procurement and construction.

Communication is an essential value for Harmonie Engineering. At the beginning of a project, engineers discuss the overall design criteria and design philosophy of a specific project to ensure safe conditions, save time and reduce costs during construction.

We have a team of experienced engineers with vast knowledge of traditional design and construction techniques with the ability to create innovative and safe buildable solutions which fulfill client and architectural vision.

#### **APPROACH**

From buildings and bridges to highways and oil and gas structures, our design projects present their own unique demands and challenges. we meet them all with an approach geared to the one thing they have in common: the need to produce the right result. We begin every project with intensive research and response sessions listening and learning, determining the right result. we work to exacting specifications, bringing the best resources to every aspect of the job, set benchmarks and timelines, execute on time and on budget. our quality control and review protocols are uncompromising.

Our engineers, designers, drafters and staff know that following our right-result approach is the only path to real leadership in our profession.

We sharpen our skills with continuing education in our core disciplines. we innovate from experience. We are not interested in keeping pace. Our way is to set the pace. we pursue an overriding commitment to surpass our clients expectations.

#### **VALUES**

- Excellence
- Client Satisfaction
- Integrity
- Innovation
- Respect

#### WHY CHOOSE US

- Quality and cost efficiency
- Timely Delivery
- Reliability
- latest technology and software
- Technical capacity to handle complex engineering projects

OUR VISION
To be the preferred
EPC contractor in
Nigeria
and beyond









## **SERVICES OVERVIEW**

#### **Engineering Designs**

We provide a wide variety of engineering, planning and environmental services for your municipal, commercial, residential, oil and gas projects such as. Engineering studies which may include, according to the type of project: Process, pressure vessels, rotating equipment, instrumentation, electrical facilities, piping, civil works, cost control and scheduling.



#### **Building Construction**

We undertake construction of residential, commercial and industrial building projects.



#### **Fabrication**

We fabricate structures such as: tanks, pipe racks, pipe supports, platforms, shelters.



#### Line Pipes, Structural Steel & OCTG

We supply line pipes of various diameter. Structural Steel such as Beams, Plates, Tubulars and Casings. We are in partnership with a number of internationally recognized and approved mills.



#### **Procurement & Supply Chain Management**

We procure oil field equipment and materials. We have established strong relationships with a huge array of Original Equipment Manufacturers (OEMs) as well as buying houses worldwide.



#### **Surface Protection & Inspection services**

We are involved in all activities relating to surface preparation, cleaning, coating and environmental protection. We work with all types of metals, including carbon steel, stainless steel, alloy steels, aluminum and brass, in thickness from sheet metal to plate. We have expertise in both traditional abrasive and high pressure hydro blasting.





#### **Geotechnical and Surveying Services**

Our geotechnical engineering services support all phases of a project, from preliminary design through completion of the building process, including Making judgments and advising owners on the structural and economic feasibility of a project from the standpoint of subsurface conditions and determining the physical and engineering characteristics of the soil/rock and their probable behavior under stress, interpreting this data and recommending design parameters.



#### **Manpower Supply**

Efficient manpower is the key to success for every organization. Harmonie provides a combination of global perspective with deep knowledge of our local market to deliver a unique experience in the supply of highly skilled technical manpower to the upstream sector.







## **ENGINEERING**

We provide a wide variety of engineering, planning and environmental services for your municipal, commercial, residential, oil and Gas projects such as: Oil and gas Infrastructure Design

- Structural Design of Buildings (High, medium and low rise), workshop facilities, Hydroelectric Facilities and plants.
- Highway Engineering road design, Bridges
  Roadway Improvement Design
- Sanitary Sewer Design
- Water Distribution Design
- Storm water Management Design
- Septic System Design

The engineering studies will include all or part of the following:

#### **Basic Engineering Design (BED) covering:**

- Conceptual process studies (material balances, process flow sheets,) and preliminary plot plan.
- Preliminary Piping and Instrument Diagrams.
- Definition and sizing of main equipment resulting in process specifications.
   Specification of effluents.
- Definition of control and safety devices.
  And, generally speaking, all the basic studies required supporting a Basic Engineering Design Package (BEDP) containing all data needed by a competent contractor to perform the Detail Engineering.
- These basic engineering studies may consist of consolidating a Process Package initiated by an external process licensor.





#### Oil And Gas Infrastructure Design:

- Structural Design of Buildings (High, medium and low rise), workshop facilities, Hydroelectric Facilities and plants.
- Highway Engineering road design, Bridges.
- Roadway improvement Design
- Sanitary Sewer Design
- Water Distribution Design
- Stormwater Management Design
- Septic System Design

#### Front End Engineering Design (FEED) covering:

- Mechanical data sheets of the main equipment, starting from the process specifications issued during the BED and incorporating the specific requirements of codes and standards to be applied to the project in question.
- Thermal rating of heat exchangers.
- Preparation of tender packages for the main equipment.
- Development of process and utility Piping and Instrument Diagrams released for detail engineering.
- Development of detailed plot plans and hazardous areas.
- Elaboration of the main piping, instrument, electrical and civil works layouts.
- And, generally speaking, all the studies to be performed before ordering the main equipment.

#### **Detail Engineering, covering:**

- Purchasing of equipment, main and bulk.
- Thermal rating of heat exchangers.
- Development of Piping and Instrument Diagrams released for construction.
- Development of detailed piping drawings, including isometrics and stress calculations.
- Development of detailed drawings related to instrumentation, electrical facilities and civil works.
- Management of vendor drawings.
- Cost and schedule control.
- Start-up procedures.





# **BUILDING**

We deliver on building projects ranging from residential to commercial and industrial building.









## CONSTRUCTION AND FABRICATION

Our Construction and Fabrication strategic business unit engages in the following services such as:

- HP, LP Separators, and surge vessels
- Flare systems
- Interconnection of new facilities with existing systems
- Tank Gauging
- Fabrication of Steel Structures, piping, Tanks.
- Procurement, Installation and Commissioning of Caterpillar gas and diesel generators
- Construction of Flow lines in Land and Swamp Areas
- Supply, Installation and Commissioning of Reciprocating, Centrifugal Pumps and Compressors
- Civil Foundation Pile foundations & RC foundations

- Construction of helipad and Fabrication of Helideck.
- Construction of switchgear room and Control Building.
- Installation of earthing system on tanks
- Electrical and instrumentation works
- Hydro testing
- Calibration of tanks
- Installation of Fire Fighting System and Upgrade
- Installation of Fire & Gas Detection System (F&G)
- Installation and Commissioning of PD Metering Facilities
- Installation and pre-commissioning of Turbo compressors / Turbo generators - Solar / GE Nuovo Pignone
- Blasting and painting
- Pressure testing of hook up arm
- Installation of flow line markers



































## LINE PIPES, STRUCTURAL STEEL & OCTG

We supply line pipes of various diameter. Structural Steel such as Beams, Plates, Tubulars and Casings. We are in partnership with a number of internationally recognized and approved mills. We supply large bore welded pipe in ERW, LSAW, HFI and Spiral DSAW, in varying qualities and grades as high as X80.

#### **OUR PRODUCTS INCLUDE**

- Seamless Line Pipes
- Welded Line Pipes (including ERW,DSAW, LSAW & HFI
- Drill Pipes
- Seamless OCTG
- Premium Connections
- Structural Steel
- Beams
- Plates
- Stainless Steel Pipes
- Tubulars and Casings
- Fittings & Flanges (including Elbows, Tees, Caps & Reducers)

All materials are to international standards such as ASTM, ASME, API, ENand DIN. Equivalent DIN and other international grades can also be supplied.

#### **VALVES**

Harmonie is positioned as a major supplier of all types of valves for all major projects procurement needs covering

ball valves, gate valves, SDV, check valves, butterfly valves, globe valve, cryogenic valves, custom made valves for oil and gas.



#### **FITTINGS/FLANGES**

Butt-weld Elbows, Tees, Reducers, Caps to ASME B16.9 and 16.28 Forged Fittings to ASME B16.11

Weld Neck, Long Weld Neck, Socket Weld, Blind, Slip On, Orifice Flanges in all pressure ratings, with Raised Face,

Flat Face or Ring Type Joint as required to ASME B16.5 & 16.47 Specifications: ASTM, BS, NF, EN/DIN and special customer requirements Materials: Carbon/Low temperature, Alloy, Stainless, Copper-nickel alloys

Manufacturing process: Forged, Wrought, Welded, and Fabricated. We provide Equipment & Material specification



#### **ROTATING EQUIPMENT (PUMPS AND COMPRESSORS)**

High Pressure Reciprocating Pumps High-speed centrifugal pumps Dosing pumps High-speed compressors





## **PROCUREMENT & SUPPLY CHAIN MANAGEMENT**

Harmonie Engineering is an original equipment manufacturers' distributor for a variety of world-class oil industry products and equipment and offer post installation, after sales service with provision for in country stock holding/inventory for prompt delivery of critical service spares. We have the reach and means to procure materials from around the globe through a wide supplier/stockists network worldwide.

Here is a list of products and services we are able to offer from strong alliances with reputable international companies:

#### **CONTROL COMPONENTS INC. (CCI):**

CCI is a global leaders in the design and manufacture of severe service control and isolation valves for the severe service applications of the power, oil and gas and nuclear industries.

Their product ranges from Control Valves, Balance of Plant Valves, Automation, Silencers etc.

#### **JIULI PIPES:**

Jiuli is a leading manufacturer of stainless steel pipes and tubes including Nickel Alloys, Super Duplex and Titanium. During the past 20 years they have been providing superior piping and tubing solutions for major IOC's worldwide such as Chevron, Shell, Exxon Mobil, BP, GE, Saipem to mention a few. They also operate comprehensive testing facilities, with a matching quality management system to satisfy customer's expectations.

#### HENGYANG VALLIN STEEL TUBE CO. LTD.

It is one of the large scale seamless steel tube & pipe manufacturers in the world and the second biggest seamless steel tube & pipe producer in China. HYST is a seamless steel tube & pipe manufacturer with 50 years history, whose main products are OCTG, pressure vessel and mechanical vessel with various kinds and sizes under OD720MM based on hot roll, clod drawn and anti-corrosion technology.

#### TK CORPORATION:

TK Corporation is the biggest worldwide manufacturer of Butt Weld Fittings in Carbon Steel/ Stainless steel for Oil, Gas, Petrochemical, Water & Power Industry and General purpose.

#### **XIAMEN LANDEE INDUSTRIES CO. LTD.**

Based in China and in operation since 1994. Xiamen Landee Industries provides an extensive range of Pipe, Valves, Flanges, Pipe Fittings, Fasteners, Gaskets and other spare parts for industrial use.

# ZHEJIANG FEIPU EXPLOSION-PROOF LECTRIC CO. LTD.

An explosion-proof electrical appliances production company base in Yueqing City China with advanced production and testing equipment and industry production license. Not only in ZHEJIANG FEIPU EXPLOSION -PROOF ELECTRIC CO. LTD. ISO9001-2000 certified, their products are certified by National Explosion-proof Product Quality Testign Center China and their product quality is also insured by Chinese people's insurance company.

#### SPENCER COATING UK LTD.

Manufacturers of Coating Systems for applications on Concrete, steel, alloys, and other substrates. Spencer Coating is the biggest independent paint manufacturer in UK supplying coating systems to General Industries, Oil and Gas, Petrochemical, Marine, Pipe Coating, Fabrication and Decorative Market. Perfect Facilities Limited is in the process of purchasing their Aberdeen factory and transporint it to Nigeria to start the manufacture of Spencer and Transocean coating systems in Nigeria under license to comply with local content law.

We supply the above materials from LES ENERGY.







## NDT INSPECTION & OFFSHORE SURFACE PROTECTION

#### **SURFACE PROTECTION & INSPECTION SERVICES**

We are involved in all activities relating to surface preparation, cleaning, coating and environmental protection. We work with all types of metals, including carbon steel, stainless steel, alloy steels, aluminium and brass, in thickness from sheet metal to plate. We have expertise in both traditional abrasive and high pressure hydro blasting.

#### **NDT INSPECTION**

- Total Tool Management
- Electromagnetic Inspection
- Ultrasonic inspection
- Tubular storage
- Tubular tracking & inventory control
- Internal / external coating
- Hard Banding
- Refacing
- API, ANSI, IPI

#### **TANK COATING**

Coating is one of the most sophisticated and challenging jobs in the oil and Gas industry.

it requires precision and perfect coordination. Experience is therefore of the utmost importance. Our unique experience involving projects coated professionally, on schedule and without

any major problems or complaints - forms a sound basis for our clients' confidence.

#### **OFFSHORE SURFACE PROTECTION**

To preserve their value as assets, offshore facilities require competent, cost-effective and longlasting surface protection on a regular basis. Coatings and paint systems applied by Harmonie guarantee long term functionality, even for areas subjected to a high degree of wear and tear. Our clients' confidence in us lies in the philosophy that we follow in our work: compliance with quality standards and the use of dependable control systems, long years of experience.











# GEOTECHNICAL AND SURVEYING SERVICES

Before owners can build highways, dams, buildings and other structures, they need a geotechnical evaluation to help determine how the characteristics of the soil conditions on the site will react under the stress caused by the weight of the structure. we provide such evaluation.

Our geotechnical engineering services support all phases of a project, from preliminary design through completion of the building process, including:

- Making judgments and advising owners on the structural and economic feasibility of a project from the standpoint of subsurface conditions.
- Determining the physical and engineering characteristics of the soil/rock and their probable behavior under stress, interpreting this data and recommending design parameters.
- Observing conditions during construction and recommending, when necessary, modifications to the design project.









## MANPOWER SUPPLY

Efficient manpower is the key to success for every organization. Harmonie provides a combination of global perspective with deep knowledge of our local market to deliver a unique experience in the supply of highly skilled technical manpower to the upstream sector.

Harmonie specializes in the recruitment of highly skilled technical personnel to Oil & Gas companies in Nigeria. We have a team of recruitment experts who are skilled at matching a client's specific requirement with a suitable candidate. We only submit details of candidates when we are convinced that their skills, reference and profile meet our clients set criteria. We also check to be sure that the candidate is available and keen on taking the job. We have an up-to-date data bank of active job seekers with genuine reference marks to fill highly technical positions from the conceptual stage of a project to operations and maintenance stage.

#### **OUR MANPOWER SERVICES**

- Manpower Recruitment
- Manpower Services
- Visas, work permits, quotas
- Payroll/Remuneration
- · Site orientation and preparation



We have a team of recruitment experts who are skilled at matching a client's specific requirement with a suitable candidate



## **QHSE MANAGEMENT POLICY**

We recognise that everyone's interest is best served when health and safety become an integral part of our operations, not necessarily because it is required, but because we want to.

Harmonie QHSE Policy encompasses quality, Health, safety and environmental management based on the following principles stated in our policy.

#### **QUALITY**

Our Total Quality Management System is a permanent feature of life at Harmonie, with all employees at all levels ensuring that their activities are in line with our Quality policy.

#### **HEALTH & SAFETY MANAGEMENT**

Harmonie Engineering is committed to achieve the highest Health, Safety & Environment standards throughout all its business activities and operates for their continuous improvement.

In order to fulfil this commitment, Harmonie Engineering has developed and implemented an HSE Management System that provides Guidance to all Harmonie Engineering employees, and that is based on the following objectives:

- Considering Health, Safety and Environment issues a priority of all the business activities
- Compliance with relevant national & international legislation and standards
- Safeguarding the health and safety of its employees and of those who may be affected by its operations
- Minimisation of the environmental adverse impacts which could be caused by its activities

#### **ENVIRONMENTAL MANAGEMENT**

Our high level of environmental awareness ensures a pleasant working environment and good relations with our neighbours. At Harmonie, emphasis is on intensive effort towards sustainable development and environmental management.

#### **CORPORATE SOCIAL RESPONSIBILITY**

At Harmonie, we believe that Corporate Social Responsibility (CSR) is a prerequisite to the long term sustainability of our organization. Much of our CSR activities are centered on education, healthcare and public infrastructure development.

To contribute and impact on the communities in which we operate and beyond, in the most positive way possible is our goal.









# **PROJECTS**

OIL & GAS PROJECTS			
S/N	CLIENT	PROJECT DESCRIPTION	LOCATION
1	NEW CROSS EXPLORATION & PRODUCTION LTD.	DREDGING & PILLING AT SANBARTH INJECTION MANIFOLD FOR EKULAMA LACT UNIT INSTALLATION	RIVERS STATE
2	PANOCEAN OIL NIG. LTD.	CONSTRUCTION OF EQUIPMENT FOUNDATIONS AND OTHER CIVIL CONSTRUCTION WORKS FOR WET GAS RECEIVING FACILITY.	DELTA STATE
3	DESICON ENGINEERING LIMITED	FABRICATION AND INSTALLATION OF MESH FENCE AT UYO	AKWA IBOM STATE
4	NEW CROSS EXPLORATION & PRODUCTION LTD.	GEOTECHNICAL INVESTIGATION AT AWOBA FLOW STATION INJECTION MANIFOLD	RIVERS STATE
5	NEW CROSS EXPLORATION & PRODUCTION LTD.	GEOTECHNICAL INVESTIGATION AT SANBERTH INJECTION MANIFOLD FOR EKULUMA 1 &2 LACT UNIT INSTALLATION	RIVERS STATE
6	BUA INTERNATIONAL LIMITED	INSTALLATION OF MICROPILES AND REPLACEMENT OF SLAB	RIVERS STATE
7	HERITAGE ENERGY OPERATIONAL SERVICES LIMITED	RENOVATION OF OML 30 UGHELLI PRODUCTION CENTRE WAREHOUSE - 24 AND DIESEL TANK REPLACEMENT	DELTA STATE
8	Millenium Oil and Gas company Ltd.	CONSTRUCTION OF PLATFORM IN R.C. to RECEIVE EARLY PRODUCTION FACILITIES AT UMUORIE ISIMIRI, ABIA STATE CONSTRUCTION OF ACCESS ROAD, DRAINS, PERIMETER FENCE, SOAK AWAY PIT, WATER SKIMMER PIT, DRAIN PIT, EXTERNAL LIGHTING POLES, PIPE SUPPORTS AND FLARE PIT.	ABIA STATE
9	SEPLAT	CONSTRUCTION OF BUNDWALL, PUMP SHELTER FOUNDATION AND SHELTER, GENERATOR FOUNDATION AND SHELTER, FIRE WATER TANK FOUNDATION FOR THE AMUKPE BUFFER STORAGE TANK	DELTA STATE
10	NAOC	INSPECTION SERVICES (UT, ECHO SOUNDING, STRUCTURAL ASSESSMENT) ON OBIOFU BRIDGE IN NDONI	RIVERS STATE
11	LES ENERGY	CONSTRUCTION OF PFL STORE BUILDING	RIVERS STATE
12	NAOC	INSPECTION SERVICES (UT, ECHO SOUNDING, STRUCTURAL ASSESSMENT) ON KWALE BRIDGE IN KWALE	RIVERS STATE
13	NPDC	ENGINEERING DESIGN OF ERIEMU AND FORCADOS LACT UNIT MANIFOLD STATION	DELTA STATE
14	NPDR	PIPE SUPPORT DESIGN FOR RUMUJI PIGGING MANIFOLD	RIVERS STATE
15	PRIME EXPLORATION/RIVERSAFE SOLUTIONS	PILING WORK FOR ANCHORAGE OF OIL LOADING VESSEL AT ASARAMA	RIVERS STATE
16	SPDC	ENGINEERING DESIGN OF CONTROL ROOM, GUARD HOUSE, PUMP HOUSE, MANIFOLD BUILDING, FLASH GAS COMPRESSOR BUILDING, WORKSHOP AND OFFICE BUILDING AT OKOLOMA GAS PROJECT	DELTA STATE
17	CHEVRON	ENGINEERING DESIGN OF 60M TELECOM TOWER	DELTA STATE





# **PROJECT GALLERY**

































































## **CORPORATE ADDRESS:**

Plot 10 De Masters Ave. Off Nelson Mandela Road, Rumuodomaya, Port Harcourt, Rivers State.

#### **FABRICATION YARD:**

Plot 20 Aluu-Rukpokwu Road, Port Harcourt, Rivers State.

#### **CONTACT:**

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