

MAKINDE ADEKUNLE A.

MECHANICAL (DESIGN) ENGINEER (B.SC, M.SC.)

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PROFILE

A driven and hardworking Mechanical Design & Drafting Engineer with work experience in the Food & Beverage, Oil & gas, Manufacturing and Building industries. I have a passion for learning and personal development. Also with a habit of being industrious and dedicated to any ongoing project until its full actualization.

CERTIFICATIONS

PLUMBING DESIGN & DRAFTING (PGD)

- Institute: SMTECHNO Institute, Hyderabad, India
- Award: 2017

ELECTRICAL DESIGN & DRAFTING (PGD)

- Institute: SMTECHNO Institute, Hyderabad, India
- Award: 2017

HVAC DESIGN & DRAFTING (PGD)

- Institute: SMTECHNO Institute, Hyderabad, India
- Award: 2017

PROCESS ENGINEERING (PGD)

- Institute: Suvidya Institute of Technology (SIT), Mumbai, India
- Award: Distinction (May, 2012)

PIPING ENGINEERING & DESIGN B31.3 (PGD)

- Institute: institute of piping engineering & building services (IPEBS)
- Award: Distinction (July, 2012)

PLANT DESIGN MANAGEMENT SYSTEM (PDMS)

- Institute: Institute of Piping Engineering & Building Services (IPEBS)
- Award: Distinction (July, 2012)

PROCESS SIMULATION SOFTWARE (ASPEN HYSYS) (PGD)

- Institute: Dove Consult limited (December, 2007)
- Institute: MJTECH limited (December, 2010)

TECHNICAL SKILLS (SOFTWARE)

ANALYSIS
- HAP
- ASPEN HYSYS
- COMSOL
- DIALUX

DESIGN & DRAWINGS
- AutoCAD PLANT 3D, PDMS
- AutoCAD 2D & 3D
- PDMS
- REVIT Architecture

OTHERS
- Adobe Suite (Premiere Pro, Fireworks etc.)
- Joomla & Wordpress

REPORTING & PLANNING
- MS Excel
- MS Powerpoint
- Libre office

- MS Excel

EDUCATION

CHEMICAL ENGINEERING - MASTERS OF SCIENCE (M.SC)
- Merit, 2011
- University of Lagos, Lagos

CHEMICAL ENGINEERING - BACHELOR OF SCIENCE (B.SC)
- Second Class Upper (2.1), 2007
- University of Lagos, Lagos

WEST AFRICAN SENIOR SECONDARY SCHOOL CERTIFICATE, 2001
Babcock University High School, Ogun

JUNIOR SECONDARY SCHOOL CERTIFICATE, 1998
Babcock University High School, Ogun

WORK EXPERIENCE

PROMASIDOR NIGERIA LTD, ISOLO, LAGOS — 2018 - NOW

MECHANICAL DESIGNER & DRAUGHTSMAN

SUNVITA CEREAL PLANT

- Design of the entire Plumbing layout into the Factories Laboratories, toilet facility, cloak rooms and to desired machineries.
- Designed the entire waste water pipe routing and drainage system from the factory to main drainage lines around the factory.
- Design of GA drawing and elevations for the production plant using AutoCAD. The production process must be abided to and each machine are inter-related in a forward flow process. The machines were to be installed in a limited space. Thus the General arrangement drawing was done with utmost care with AutoCAD.

- Design of the Platform required for the running and installation of machines in the plant.

The Platforms were designed using square pipes (150 x 150mm) via AutoCAD.

- Design of horizontal and vertical conveyors to be manufactured by HiWAY. The conveyors are used to carry powder products from milling outlet to different Silos. The design required unique accuracy as the conveyors will not be able to be extended if found short at point of installation thus design was made using AutoCAD.
- Design and positioning of AHU's required for providing cooling for the plant

TWISCO BEVERAGE PLANT

- Design of Structural platform required for the positioning of machines in the TWISCO factory area using AutoCAD.
- Developed the BOM required for the fabrication of the structural platform.
- Preparation of the Plumbing water supply layout into the factory and water delivery piping into machines that required cool water for its operation.
- Supervision of the installation of all Structural platforms to be installed in the factory. Unique attention to detail was essential as any changes to the lengths or width of structures will directly affect the space required for machine installation and running.
- Preparation, design and drafting of the General arrangement (GA) for the machines in TWISCO factory using AutoCAD.
- Piping design and routing of Process water and Deduster pipe to desired locations in the TWISCO plant room using AutoCAD.
- Design of supports for pipes in each section of the factory.
- Assisted with the design and installation of SUNVITA Cereal production plant from conception to commissioning.

ONGA 3, 4 (5 & 6)– SEASONING CUBE

- Responsible for the design, machine arrangement & layout of the entire factories.
- Carried out the design & drafting of all Equipment required for the processing of raw materials to the final ONGA cube product using AutoCAD.
- Developed GA and Piping drawings for the entire Plant using AutoCAD.
- Assisted with the checks on the design and positioning of the machines.
- Crosschecking and supervision of the machine installations to be as per the documented GA drawing
- Frequent checks on the effects of modifications on site to the entire design of the production plant and also success of the project.

- Generation of KML coordinate files for the IKUN dairy farm using AutoCAD and Google Earth.

PIPING (PROCESS) DESIGN ENGINEER

- Working on piping, components and mechanical equipments drafting symbols
- Reading & interpretation of P&ID's, UFD's, PMS, PDS.
- Generating Line lists, Isometrics, GA drawings and Equipment layouts
- Preparation of Plant layout drawings and orthographic drawings for EVAP (Cowbell milk) factory.
- Design of preliminary piping layouts, and Issued for Construction Layouts for proposed Cowbell EVAP milk factory.
- Generating of different Isometric views for construction of piping spools useful in piping line fabrication in the shop.
- Effective and efficient piping routing in & piping layout design using PDMS or AutoCAD Plant 3D.
- Co-ordination with Civil department in the design of platforms for carrying process equipment and also positioning of supports for piping lines.
- Co-ordination with mechanical department in choosing the best material specification to be used for each line.

- Proactively finding solutions to each issues that arise in project meetings where the complete design layout is analyzed with all departmental heads present.
- Front End Engineering Design (FEED) for upcoming projects in Greenfield areas
- Development of Piping layout and isometric drawings using AutoCAD Plant 3D for EVAP Milk lines, Steam lines, Cooling water lines and Hot water lines.
- Monitoring & supervision of piping installations to make sure routes are in accordance with 3D drawings.
- Providing on-site engineering support during construction activities or modifications to sections of the Plant.
- Design of Process flow diagram (PFD) & Piping & Instrumentation Diagram (P&ID) for the EVAP Cowbell milk plant.
- Design of the PFD and P&ID for Cheese and Yoghurt manufacturing plants.
- Design of utility flow sheet for the entire Plants at Isolo, Lagos.

ARCHITECTURAL/MECHANICAL/ELECTRICAL & HVAC DESIGN ENGINEER

- Design of the Architectural & Civil layout for the buildings, new plants and offices.
- Using AutoCAD 2D to develop GA drawings of existing plants and new plants to ensure that operational safety procedures are adhered to and machines can be easily operated and maintained.
- Development of new GA layouts for new machines to be purchased into an existing plant. This ensures that the machines can be positioned precisely and the activities to be performed before arrival of the machine are implemented.
- Cooling load sizing using HAP (Hourly Analysis Program) HVAC design software
- Design Electrical layouts for lighting, sockets and AC's for new factories and offices to be constructed.
- Design of Plumbing layouts for new factories to be constructed.
- Drafting of Single Line Diagrams for existing electrical connection systems in the facility.

- Drafting and modification of existing layout for the whole plant at Isolo, Lagos
- Design of Platforms and drafting of the required working drawing for its fabrication.
- Design of steel structures such as staircases to access factories etc.

Projects:
- New Sunvita cereal factory.
- New Twisco beverage factory
- EVAP Cowbell milk factory
- New ONGA 3 & 4 factories
- New ONGA 5,6,7 & 8 factories
- ONGA Powder factories
- Coffee, Choco and Toptea factories

TEKNITECH ENGINEERING LTD **2015 - 2018**

PLUMBING/ELECTRICAL/HVAC DESIGN ENGINEER

- Design of the lighting layouts, socket & AC layouts for Residential buildings.
- Determination of No. of Lighting fixtures for rooms with in a building and lux intensity modeling using DIALUX.
- Sizing of Cable tray, UPS, Transformers and Diesel Generators for residential and estate projects.
- Circuit breaker sizing, Voltage drop and Short circuiting calculations.
- Electrical design & drafting (AutoCAD) to represent all lighting fixtures, sockets and AC's.
- Design & drafting of HVAC design layouts and systems using AutoCAD.
- Cooling load determination using MS Excel or HAP as per ASHRAE standards.
- Drafting of ducting layout using AutoCAD 2D.
- Clash detection among building services such as electrical lighting fixtures, Plumbing lines and so on using Revit MEP.
- Design of water requirements for various projects such as High-rise building, duplexes etc.
- Cold water and Hot water pipe sizing and requirements.
- Development of multiple Plumbing system design and highlighting cost benefits of each.
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- Design of Fire protection systems and sprinklers based on NFRA codes
- Water Balancing Calculation, WTP (Water Treatment Plant), STP (Sewage Treatment Plant), Green Building (Water Saving Calculation), Plumbing Designing for High Rise Building.
- Plumbing drafting using AutoCAD MEP.

NATIONAL AGENCY FOR SCIENCE & ENGINEERING INFRASTRUCTURE (NASENI), ABUJA, NIGERIA **2011 - 2015**

RESEARCH/DESIGN ENGINEER

- Using Pro-Engineer to design mechanical parts and components for shafts, machine parts.
- Using Pro-Engineer to assemble design machine parts into single units for parts fabrication with CNC machine
- Using Comsol Multiphysics software to test the designed machine parts behavior under various kinds of stresses, pressure and temperatures

OTHER COMPETENCIES	• Tech Savvy • Broad Minded • Erudite & Skillful Document Checking • Document Control and Filing