

Holds a B. Sc. in Mechanical Engineering and has about 6 years hands-on experience working in construction, design, HVAC and piping.

PERSONAL DATA

Nationality : Egyptian
Gender : Male

EDUCATION

: B. Sc. in Mechanical Engineering, Alexandria University, 2011

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: Solid Works: 3D CAD Modelling, assembly, sheet metal drawing and stress analysis
: AutoCAD: 2D drafting and assembly
: Elite: CHVAC & duct sizer
: Matlab: Programming and simulation
: 3Dvia composer: 3D visualization and animation

TRAINING COURSES AND CERTIFICATIONS

: Summer trainings at:

- GASCO reduction and distribution station (Aug. 2010).
- Sidi Krir Power Station (Jul. 2010).
- SIDPEC, vibration analysis department (Aug. 2009).
- Diesel Equipment Engineering Company (Jul. 2008).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2016 till now
Employer : TAQAT – Mesalla
Job title : Senior Mechanical Fabrication Engineer
(Static equipment & Pipeline setups & solar thermal insulated tanks and heat exchangers)

- Job Description** :
- Design & Engineering and fabrication of Static / Heat Transfer Equipment, Pipeline setups, pressure vessels, tanks, shell and tube, double jacket, multi-tube heat exchangers and other miscellaneous items in the field of industrial applications and the field of solar thermal or Solar water heating applications.
 - Proficient in the review of vendor drawings and piping isometric drawings in accordance with Project Specifications, International Code and Standards (ASME, API & TEMA) to Prepare the required workshop drawings, and bill of material for fabrication of static equipment and Pipeline setups throughout different plant units.
 - Pre-fabrication inspection of pipes, caps, static equipment parts and fittings in the fabrication shop as per standards, codes and process standard specifications.
 - Setup pipeline assemblies and static equipment to be ready for welding, check piping alignment, check pipe route.
 - Fabrication, welding and erection of pipeline setups and static equipment as per isometric and plan drawings for the various types of materials.
 - Provide technical assistance to field superintendents concerning assemblies' procedure and welding activities, Ensure welding methods and all welding filler materials are controlled as per standard and required specifications.
 - Monitor pressure test (hydro, pneumatic, and service test) of pipelines and pressure vessels according to the piping class, test limits and required pressure.
 - Perform different insulation work of pipeline setups and tanks like Polyurethane foam.
 - Cost estimation include: raw Material cost, consumable material cost, working hours needed for each job, fabrication processes cost, manpower cost, installation, testing and commissioning cost.
 - Producing a "cost per point improvement" analysis of the improvement proposed for cost reduction of some products like solar water heating tanks.

Dates : From Oct. 2014 till Aug. 2016

Employer : MASCO – Saudi Arabia

Project : Power Plants and Substations Projects

Job title : Mechanical Project Engineer (Firefighting & HVAC & Piping)

- Job Description** :
- Performing and reviewing Contractors submittals (bill of quantities (BOQ), layouts, and Shop drawings, Equipment Data Sheet, Inspection & Test Plan and Installation Operation & Maintenance Manual) related to the discipline and ensure its compliance with concept design, contract requirements and submit to consultant & client for relevant authorities' approvals.
 - Manage site inspections of equipment, material & executed works with consultants as per approved drawings, material and work schedule to get approvals for RMIs and RFIs.
 - Perform installations of firefighting systems for tanks farm (cooling & foam), transformer deluge system, building sprinkler system and FM-200 system and hose cabinet system.
 - Review design of FM-200 system and execute testing & Commissioning include Pneumatic test & Flow test & Liquid level Indicator test and

Integrity Test.

- Review design and testing of the entire firefighting systems of the crude oil tanks in the power plant stations include fire water tank, fire pump station, number of foam bladder tanks for the protection of the crude oil tanks, and perform Foam self-expansion test.
- Performing design calculations for HVAC system including Heat Load, Package unit capacity, Duct sizing calculations, External static pressure calculations, ventilation calculations, Chiller capacity, Pipe sizing calculation, Air Handling unit capacity, Pressure drop calculations for chilled water system using ASHRAE standards and latest available software like ELITE program.
- Execute HVAC testing & commissioning with third party to complete the air & water balancing of all HVAC systems in entire project up to the level of consultant approval.
- Detailed study of specifications & Scope of Work & Applicable standards for HVAC and firefighting systems like ASHRAE, SMACNA, ASME, ASTM, NFPA.
- Perform the relevant As-Built drawings with Coordination between MEP Services & civil construction at site.

Dates : From Mar. 2013 till Sep. 2014
Employer : Hi-roll technology & Spiretronic, LLC – Egypt
Job title : Mechanical Design Engineer
Job Description :

- Complete design and fabrication of sheet metal works of conveyor systems and HVAC ducts.
- Sheet metal design using Solid Works and sheet metal fabrication using: CNC Plasma, laser cutting, bending, rolling and welding machines - Also determine manufacturing processes which need manual and CNC machining using: turning and milling machines.
- Clarify concept Design by 3D modelling, Reverse engineering and Generation of 2D and 3D drawings to be ready for fabrication and applicable for manufacturing processes.
- Preparing design manuals and engineering catalogues, stating design configurations, technical solutions, products specifications, detailed assembly drawings, bill of materials and part lists to be a reference to the concerned departments.
- Producing detailed design calculations, simulation work, prototyping, and testing and product finalization.

Dates : From Aug. 2011 till Feb. 2013
Employer : Alexandria Construction Company (Talaat Mostafa)
Project : Construction of waste water treatment station and main pump station "Lot-1 El-Amryia" - Alexandria
Job title : Mechanical Site Engineer (piping & mechanical installation)
Job Description :

- Excavation and de-watering work.
- Review piping design include P&ID and isometric piping charts to arrange piping material "pipes" and fittings of each line with procurement
- Reviewing with piping foreman the erection of isometrics till submitting lines to the client.
- Arranging for welding inspection include visual inspection, RT and UT.

- Selection and installation of water pumps.
- Supervision Plant layout/Controlling piping team work with other discipline activities for Conceptual & Detail design work.
- Coordination within Piping design team & QC team on technical issues.
- Prepare Job method statement & procedure as per Client Specification, Piping standards and Design Instructions Dedicated to the projects.