

100292-MEC-16CHMSVY-E-2014

Mechanical Construction & Piping Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 6 years experience in construction and maintenance of industrial field power plants, operation of static and rotating equipment, electromechanical site work (HVAC, FIRE FIGHTING) and maintenance of petrochemical equipment.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 10/07/1992
Gender : Male
Marital Status : Married
Residence : Cairo

EDUCATION

: B. Sc. in Mechanical Power Engineering, Menoufia University, 2014

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Piping and pipe lines online and free study course:
 - Piping Components, welding process and pipe supports.
 - Piping drawing (block flow diagram, P&ID, line list, valve list and piping isometric).
 - Piping symbols (fitting, flanges and special items).
 - Piping arrangement (flexibility, pumps, turbine piping and pipe fabrication).
 - Piping work (material work, storing, erection and cleaning).
 - Hydro test and chemical cleaning process.
- : Complete Advanced (HVAC) design chilled Water system for A.H.U, F.C.U, Pipe Lines, Air:
 - Ducts, Chillers, Fans, Pumps and Hap for load estimation, excel for data collection.
 - DX system and how to make selection and installation.
 - Design of chiller system, duct sizing and selection of air handling units.

- : Complete Firefighting Pipe System design, Hydraulic calculations, Firehouse, Pump selection and Gas System (from Apr. 2016 till Jul. 2016).
- : Complete 100 hours in Revit, Design HVAC, firefighting and plumbing projects, Load estimation, duct sizing, shop drawings, energy analysis, piping system, pipe sizing.
- : Complete 100 hours in plumbing, Water Supply System, Sewer Drainage System, Chemical Waste Drainage System and Storm (Rain) Water Drainage System.
- : Word, Excel and Power Point.
- : Petrogulf Misr for extracting and processing oil - oil and gas field (training) (2012, 2013):
 - Dealing with various types of extracting oil pumps and knowing how to fix its faults.
 - Knowing how to process the crude oil in the processing plant.
 - Awareness of processing plant steps and its equipment (heat exchanger, processing pipe line, operating pumps).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Apr. 2017 till now
- Employer** : ORASCOM CONSTRUCTION INDUSTRIES
- Project** : New Capital Power Plant Combined Cycle 4800MW has 8 Heat Recovery Steam Generator (HRSG), 4 air Cooling Condenser (ACC), 4 STG and 8 GTG & WTP
- Job title** : Mechanical Construction & Piping Engineer
- Job Description** :
- Construction / Piping Site Engineer in charge of HRSG (BEP), BOP piping, steam turbine, piping erection and fabrication of two blocks (20 & 40) 4 HRSG, 200 Man Power, 84000 DAI INCH, piping large and small bore, 4,000 pipe supports, MTO, BOQ, technical support, coordinator, reporting, man power estimation, insures welding procedures, Test packages preparation, Hydro test, Reinstatement, punch list, man power mobilization and demobilization, insure quality and safety.
 - Reviewing all systems isometrics, P&ID, valve list, BOQ of material, 3D view, isometric view of systems and steel structure drawings before starting erection.
 - Distributing system isometrics to piping foremen and supervisors and insure that they are following the drawing during erection.
 - Arranging the man power, work tools, site equipment and materials handovering to the site and scaffolding on steel.
 - Report to the Piping Discipline Head, the main functions of the role will be to execute designing and drafting activities.
 - Execute the assigned design and drafting activities following the instructions given by the Area Piping Engineer in accordance with the quality system in force within the Discipline, job requirements, and time schedule.
 - Develop Plot plan and Equipment layouts under the supervision and following the instructions of Area Piping Engineer according to the established Technical Work Practices.
 - Develop 2D Piping General Arrangement Drawings under the supervision and following the instructions of Area Piping Engineer according to the established Technical Work Practices.

- Develop 3D model based on the study layouts under the supervision and following the instructions of Area Piping Engineer according to the established Technical Work Practices.
- Prepare Isometric sketches for all Stress critical lines with the possible support locations and assist the stress engineer to carry out stress analysis.
- Assist, Remodel and Update the model based on the Internal, Client reviews, latest Supplier information and Isometric checking comments and maintain the clash free model.
- Perform all assigned work to agreed standards for safety, health environment and demonstrate a commitment to attaining high levels of HSE (Health, Safety & Environment) performance.
- Participate in and advice on all design activities and initiatives, including provision of training, inductions and documentation review.
- Verify that all designs are to required standards and that the objectives of the project are met.
- Verify that the works is completed to the agreed schedule.
- Complete erection of piping in pipe racks, HRSG secondary steel, steam turbine building and pump connections.
- Sharing with technical office in making as-built drawing, additional work quotation and solving piping clashes.
- Following progress in area and increasing erection productivity to achieve planned time schedule.
- Indicating the priorities of systems to complete erection according to pre-commissioning dates.
- Making final walk-down on the test packages with piping supervisors according to ISO drawings and P&ID before inspection from the consultant to get the test package release for Test (RFT).
- Closing systems by coordinating Test Packages in areas.
- Lead construction group in area to close punch list, and Q.C notifications according to standard codes.
- Making Re-instatement and closing (B) items in punch list after Hydro-test.
- Following consultant punch items during pre-commissioning till make pipe system under commissioning.
- Coordination on site with other sub-contractors.
- Making general walk down on systems from P&ID, ISO drawings, valve list, line list ...etc.
- Manpower mobilization and demobilization within human resources management requirements.
- Made an overall plane for all pipe lines to make planning and scheduling and following progress on it.
- Worked with many types of piping materials (Carbon St., St. Steel, Alloy steel and Galvanized carbon St. Lines).
- Insure work according to WPS special for alloy steel "pre-heating and post weld Heat treatment procedure".
- Making record for hydro-test activities for critical and non-critical systems included in power plant station as (main steam, feed water system, auxiliary steam, Closed Cooling Water, condensate steam systemsetc.).
- Making record for chemical cleaning process for critical and non-critical

systems.

- Attend all ccc walk down with client supervisor and closing these items to handover each module to them.
- Commissioning activities:
 - Attend all the systems walk down with the commissioning team.
 - Preparing the cold cooling systems and condensate polishing system for the flushing and making the restoration after finishing it.
 - Preparing the steam systems, feed water system, vacuum drain system, HRSG drain system, fuel gas preheating system and HRSG Lp, IP, HP system for the chemical cleaning and making the restoration after finishing it.
 - Following schedule and indicating priorities in outage work to start the operation.
 - Arranging the pneumatic test and air blowing for the service systems and sampling system.
 - Making all the required for all the system to start the steam blowing process (temporary bypass piping, target plate, piping inspection, pump operation, closed cooling system operation).
 - Awareness of steam blowing steps and how to solve the problems during it, supporting the commissioning team, fixing all the problems happening and expect it.
 - Arranging the outage work after steam blowing and doing it in the scheduled time to start the hot commissioning for the steam turbine.
 - Attend the steam turbine operating to reach the power to grade and starting of the synchronization process and electrical test for the steam turbine.
 - Awareness of the expected problems happening during the operation and finding fast and effective solution to it.
 - Maintenance of valves, pipe lines, pumps, compressors, steam and gas turbine.
 - Commissioning permit to start work and knowing how to isolate lines, pump and skid to start the work.
- Static & Rotating activities:
 - Leveling, axis, pre-alignment and final alignment for most pumps included in Power plant station as (Feed Water, Closed Cooling Water, Service Water Pumps,etc.).
 - Installing most types of valves and arrange it for chemical cleaning, hydro test and steam blowing stages.
 - Checking the free stress parallelism of the lines connected to the pump as per pump manual.
 - Supervision of gas compressors installing and operation.
 - Ensuring the flange's bolts torqueing as per manuals.
 - Checking the pump first rotation and install its accessories (gauges, heat sensors and oil glasses).
 - Awareness of pump maintenance, how to save it during operation, awareness of pump troubles and how to fix it
 - Checking the pump cooling if it effect or not before go on operation.

Dates	:	From Jan. 2015 till Apr. 2017
Employer	:	EGICO CONSTRUCTION
Projects	:	6 October Police Officer Club, Saraya Mall
Job title	:	ELECTROMECHANICAL (HVAC & FIREFIGHTING) ENGINEER
Job Description	:	<ul style="list-style-type: none"> • Reviewing the drawing from the consultant and compare it with the shop drawing to insure terms of contract. • Arranging the man power and subcontractor working in the site in each scope. • Distributing the drawing to the worker and explain it with them before starting the installation. • Checking the air condition machines, connecting accessories, duct materials and insulation materials to ensure that it follows the required quality standards. • Following the man power erection and make sure that they performs the drawing as per quality standard. • Following progress in site and increasing work productivity to achieve planned time schedule. • Installation of more than 3 types of HVAC systems (split, package, central and chiller) and design it in AutoCAD and Revit. • Making the smoke test and lighting test to HVAC ducts to ensure insulation quality. • Ventilation fans selection as per required and install it. • Awareness of VRV systems and how to install and design it. • FIREFIGHTING activities: <ul style="list-style-type: none"> - Checking the firefighting equipment, pipes, splinters, alarms, feed pumps, co2 cylinders, valves, fire hose cabinet and fire hydrant to ensure that it follows the required quality standards. - Knowing Codes & Standards for Firefighting design & installation, Manual Firefighting Systems, Automatic Firefighting Systems, Hydraulic Calculation using FIRE ELITE SOFTWARE, Fire pumps types & Selection. - Installation of more than 3 types of firefighting systems (splinters piping system, gas systems, manual systems). And design it. - Making the hydro test for firefighting system to check piping and pump operating at 1.25 of operating pressure. - Reviewing the quotations, submittals and approvals. - Installing of external fire protection network .including wet and dry firehydrants, water tank and fire pump stations. • Plumbing activities: <ul style="list-style-type: none"> - Design and execution of hot and cold domestic water supply system. - Individual/central water heating system (electric, solar, steam). - Awareness of waste water, soil water and storm water drainage systems. - Installing of domestic water tank , domestic pump stations and drainage lift station. - Installing of irrigation water tanks and pump station. - Preparing weekly and monthly progress reports. - Following all subcontracts work and make sure that follow our work

plan.

- Dates** : From Jul. 2014 till Jan. 2015
- Employer** : EVERGROW for specialized fertilizers
- Job title** : Mechanical Maintenance & Construction Engineer
- Job Description** :
- Dealing with various types of pumps and compressors such as centrifugal pumps (Maintenance and lubrication process).
 - Arranging the Preventive maintenance for the machines.
 - Dealing with hydraulic motors and knowing how to fix it.
 - Pump installation, alignment, fixing most of working faults, changing damaged parts and lubrication process.
 - Working as Construction Site Engineer for a new factory (piping erection, pump installation, equipment installation, steel structure and electromechanical works).
- Field of experience** :
- Has been working as Mechanical Piping and Construction Engineer in several Companies that working in Fabrication and erection of pipelines, steel Structure and install static and rotating equipment during construction, pre-commissioning, commissioning, punch list phase and maintenance works.
 - Experience in the field of maintenance of machines, pumps and motors that serving petrochemical production, I have the knowledge of most of equipment problems and how to fix it and the awareness of preventive maintenance and how to save the machines, pumps and motors during work.
 - Responsible for the electromechanical work in many sites, design and execution air conditioning system (load estimation, unit selection, duct sizing), design and execution firefighting systems (pipe sizing, pump selection, tank design, Sprinkler Piping System, ...).
 - Achievements:
 - Working within about 5 nationalities & 1000 man-powers that improve the communication skills.
 - 3 million man-hours safely work within an IIF environment.
 - Commissioning permit to start work (PTSW) training from Siemens.
 - Commissioning phase awareness.
 - Recognized and awarded for excellent plan and execution of the project scope within safely environment.