

101274-ICX-1CDMOS-E-2011
Lead Design Engineer – Automation & Control

Holds a B. Sc. in Electrical Power & Machines Engineering and has over 9 years of professional experience in Power Plants industries with multi discipline aspects such as tendering phase, detailed Engineering, Construction and Commissioning.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 04/09/1988
Gender : Male
Marital Status : Married
Residence : Damietta

EDUCATION

: B. Sc. in Electrical Power & Machines Engineering, Helwan University, 2011
: Damietta Secondary Military School, 2005

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: C++ Basics
: PLC Basics
: Microcontroller Advanced Level
: AutoCAD 2016

TRAINING COURSES AND CERTIFICATIONS

: OV365 Power and Water Cybersecurity Suite (2022).
: OV010 WIN Ovation Windows Operator (2022).
: OV215 Ovation Software Applications (2021).
: AutoCAD 2016 2D Course (2017 - 2018).
: Microcontroller Course advanced level using assembly language and Micro C (2010 - 2011).
: English course (2 level conversations) (2012 - 2013).
: Soft skills course (handling difficult people) (2012 - 2013).
: Summer Training in Helwan University (2007).

- : Training in Spinning and Weaving Factory in Damietta (2008).
- : Training in Iron and Steel Factory in Helwan (2009).
- : Training in Power Station South of Damietta (Kafr Saad Power Plant) (2009).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Oct. 2019 till now
Employer : Elsewedy Electric PSP
Project : Layyah Combined Cycle Power Plant (1056MW)
Job title : Lead Design Engineer – Automation & Control
Job Description :

- Design basic engineering documents according to the project contract (Design criteria, control architecture, technical specification).
- Basic and detailed design for project Control/DCS cables and termination details.
- Review and assessing supplier's documents if it meets the required specifications and commenting if any (Wiring diagrams, P&IDs, SLDs, electrical schemes, general arrangement, control narratives,).
- Managing my team and defining their tasks and duties.
- Preparing and sending the RFQs to suppliers in addition to Technical evaluation for suppliers/Vendors.
- Participating in FAT and SAT and commissioning activities.
- Revise and modifying the DCS control Logic, Database and HMI if required at site.

Dates : From Oct. 2017 till Jun. 2018
Employer : Power Automation Team (PAT) - Local Business partner for Emerson Process Management
Project : New West Damietta Combined Cycle
Job title : Senior DCS & Commissioning Engineer / I&C Engineer
Job Description :

- Calibration & Installation for various instruments and technical experience about different type of Pressure, Level, Flow, Temperature, ...etc.
- Pre-commissioning and functional test of process loop by Interpretation of loop drawing, Instrument cabling & terminations details.
- Commissioning tests for Pneumatic valves, Transmitter, Thermocouples and MOV such as Auma Actuators, Hora, Elfora ...etc.
- Working as a DCS Engineer from Operator workstation (GE Mark VI) with field engineer.
- To assist construction departments by defining of priority systems according with overall construction and pre-commissioning & commissioning planning and schedule. Participate in constructability analyses in order to meet project schedule.
- Commissioning on Energized LV & MV switchgear with Operator Workstation and troubleshooting problems with Schneider Electric Team.
- Update of P&ID's with as built and submission to engineering department.
- Perform the Cold Loop / Hot Loop test for all signals from local field location to DCS Monitors (GE Mark VI) Workstation after powering up DCS system in all plant such as Heat Recovery Steam Generator

(HRSG), Air Cooled Closed (ACC), Demineralization water (WD), Steam Turbine Generator (STG), Pipe Rack, Diverter Damper and Generator Circuit Breaker (GCB) etc.

- Dates** : From Jun. 2014 till Sep. 2016
- Employer** : Emerson Process Management – EPM (Contract via EPMK)
- Project** : Yanbu II Power & Water Project (MARAFIQ)
- Job title** : DCS & System Engineer
- Job Description** :
- Reading and understanding SAMA drawing designs used in (Doosan Heavy Industries & Construction) and apply it on DCS system.
 - Implementing logic enhancement for equipment's such as Boiler, condensate polishing plant, steam turbine, Boiler feed water pumps, condensate extraction pumps, multi effect desalination plant and for higher level control such as automatic plant start-up/shutdown or unit master control.
 - Good knowledge with Emerson safety instrument system (SIS) and Emerson Emergency Shutdown (ESD) system (Database, Logic and Graphics).
 - Working for communication between DCS side and STG side by using OPC Data Access Server (Configuration, Logic & Graphics).
 - Working for communication between DCS side and MCM side by using OPC Data Access Server (Logic & Graphics).
 - Working for communication between DCS side and ENMC (Electrical Switch gear) side by using OPC Data Access Server (Logic & Graphics).
 - Working for creating the Logic and graphic for RS-485 communications with MCC & MCM side.
 - Solve the problem for graphic, logic, data base & Network.
 - Prepare the Database for all devices and prepare the Protocols for all devices and for the I/O loop check.
 - Support the client on O&M operations during power up and commissioning.
 - Support the contractors in the installation, Calibration and operation of plant construction. Gas turbine, BOP, Steam turbine & Water plant.
 - Performing loop check, logic check, Cause & Effect check and Control Narrative checks.
 - Performing Factory Acceptance Test and Site Acceptance Test and Prepares simulations, test scenario, test documentation.
 - Facilitating the Operator by Generation of New graphics with Innovative ideas that reduce the operator time of work during critical Plant Conditions.
 - Conversant with Preparation, Verification, Identification and Implementation of the technical queries in loop diagrams, datasheets, instrument index, I/O Schedules, inter-connection diagram, Marshaling cabinet & Junction box wiring diagram, P&ID's, Hook-up diagrams for all DCS, FGS and ESD system.
 - Performing Serial / Mod bus communication test.
 - Troubleshooting the total integrated system (ESD / DCS + PLC) and its I/O modules.
 - Troubleshooting of main and redundant Profibus / Modbus communication between Remote Terminal Unit buildings / Local Equipment Rooms and the Control room.

Dates : From Aug. 2013 till Jun. 2014
Employer : Emerson Process Management – EPM
Projects : AL JOUF Power Plant / AL QURYAT Power Plant – Saudi Arabia
Job title : Online Technical Support & System Engineer
Job Description :

- Online Technical Support with AL JOUF / AL QURYAT in Site Engineer.
- Ovation 3.5 Controller Update.
- Ovation Safety Instrument System Overview.

Control System Exposure:

- DCS and Safety System:
 - Emerson Process Management – Ovation 3.1.2, Ovation 3.5, Ovation 3.8.
 - GE – Mark IV.
 - MPW DCS – Netmation System.
 - Emerson-Ovation ESD System (Emergency Shutdown).
- Fire and Gas System:
 - Emerson Safety Instrument System (SIS).
- Monitoring System:
 - Atlas Copco.
 - ENMC – electrical switchgear.
 - Ovation-Global Performance Advisor.
 - Central Heating Ventilation and Air-Conditioning (HVAC) System.
 - Emerson - MCM systems.
 - Emerson - Management Information System (MIS).