103625-ICX-1MOS-E-2004 Senior DCS / I&C Engineer

Holds a B. Sc. in Industrial Electronics & Control Engineering and has over 15 years hands-on experience working in I&C field. His experience includes Commissioning, Maintenance, Troubleshooting and Modification for DCS, Gas turbine, Automation and Control Systems.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 01/11/1981

Gender : Male
Marital Status : Married
Residence : Cairo

EDUCATION

B. Sc. in Industrial Electronics & Control Engineering, Menoufia University,

2004

LANGUAGES

Arabic : Native Language English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From 2017 till now

Employer : <u>EGYPTROL</u>, SIEMENS AG Subcontractor

Project: Beni Suef Power Plant

Job title : Senior DCS / Instrumentation & Control Engineer

Dates : From Oct. 2016 till 2017

Employer : Elsweedy Electric (PSP)

Project : ATTAQA Power Plant, Suez

Job title : Senior DCS / Instrumentation & Control Engineer

Job Description : Working as Warranty, Punch List Commissioning Engineer.

Dates : From Jul. 2010 till Jul. 2016

Employer : Arabian Bemco Company – Jeddah (KSA)

BEMCO was formed in 1968 and has developed into a world-class EPC Turnkey Contractor in Industrial and Power Projects including Cogeneration, Combined Cycle and Steam Power Plants. Under this expansion, BEMCO has undertaken the largest and most challenging turnkey projects in Saudi Arabia and the region using various state of the art technologies.

Projects

- Power Plant No.10, Riyadh KSA (BOP in PP10 combined cycle (40 GE GTs, 40 NEM HRSGs, and 10 GE STs)) (from Nov. 2015 till Jul. 2016)
- Power Plant No.12, Riyadh KSA (8 Gas turbines 7F-5 and B.O.P (DCS YOKOGAWA)) (from Jul. 2014 till Oct. 2015)
- Qurrayat Power Plant, Qurrayat KSA (2 Gas turbines 7E) (from Mar. 2013 till Oct. 2013)
- Power Plant No.9, Riyadh KSA (40 Gas turbines 7E and B.O.P (DCS MVIe)) (from Feb. 2011 till Feb. 2013)
- Power Plant No.10, Riyadh KSA (from Jul. 2010 till Jan. 2011)

Job title

Senior DCS / Instrumentation & Control Engineer

Job Description

- Gas turbine 7E & 7F:
 - Pre-commissioning / commissioning for gas turbine.
 - Sharing and support for construction activities.
 - Prepare and Supervise the Safety interlock test for gas turbine.
 - Interface with vendors to prepare materials and equipment purchase specifications for client recommendations.
 - Hot loop check & Function check for all turbine systems (as fuel oil supply systems, Lube oil system, Hydraulic system, cooling system, Fire Fighting System and water wash system).
 - Co-ordinate between all parts for commissioning activities.
 - Review technical submittals Auxiliaries of the gas turbines.
 - Prepare reports and studies that present technical information in a clear and concise manner to meet client requirements.
 - Perform independent reviews of work performed by others including calculations and drawing preparation.
 - Assisting technical staff with field activities including site inspections, equipment commissioning and start-up, equipment performance testing, monitoring and other field works.
 - Review and comment on I&C construction documents and drawings.
 - Responsible for rectify turbine warranty items by troubleshooting the system and its components

DCS:

- DCS MVIe panels energization and SAT.
- Review and modify for logic to be matching with design and process requirements.
- Commissioning / start-up / troubleshooting for B.O.P as (ASL unloading & ASL Tanks & medium and low voltage SWGRs, Transformers with DCS) in simple cycle and as (HRSG (NEM), Feed water System, Condensate System, Steam and Bypass System, Vacuum System and ejectors System, HRSG Drains System, Steam Turbine Drains System, Plant Drains System) in combine cycle.
- Commissioning / maintenance for control valves & on-off valves (Pneumatic, MOV ...) DREHMO, AUMA, FISHER, KOSO etc.
- Supervising and commissioning for Automatic Generation Control (AGC) project to connect pp9 (using MARK Vie) with main control

of Riyadh ECC (using ABB RTU), hardware installation, review and modify software design (40 gas turbines to be monitor and controlled in set point from ECC).

- Commissioning for Interface between different PLC systems with DCS (Schneider, Siemens... etc. with DCS) using Modbus.
- Review and modify the logic, commissioning and modifying for (electrical circuit, control circuit, motors and components testing) for extension of water treatment plant with Foxboro control system:
 - Commissioning for RO unit.
 - Commissioning for DM plant.
- Hot loop check & Function check.
- Design and commissioning the Interface between Foxboro DCS for old gas turbines block and GE DCS system for new gas turbines blocks to transfer data together using Modbus communication PP09.
- Responsible for rectify DCS (MK Vie) warranty items by troubleshooting the system and ist components.
- Commission, designing and modification for control & power circuit for several pumps.
- Study for many technical proposal of DCS.
- Loop check for all parts of power plant (as Switch gear unit, Heaters units, Auxiliary switch gear, Transformer protection circuit, etc...), testing for all signals of DCS system (inputs & outputs).
- Function check for many parts of power plant (as Switch gear unit, Heaters units, Auxiliary switch gear, Transformer OLTC, etc...) and making required modifications on the circuit.
- Attending on punch list, check, modify and troubleshooting for many parts of power plant by using MARK Vie & electrical drawing to be controlled with DCS:
 - (13.8KV SWGR, 4.16KV SWGR, 480V SWGR) auto/manual hot transfer for main breakers, open/close command and status of outgoing breakers.
 - 52S, 52U, 52G Breakers.

Dates : From Oct. 2013 till Apr. 2014

Employer : Rabigh Arabian Water & Electricity Company – Rabigh (KSA)

Rabigh Arabian Water & Electricity Company (RAWEC) is the special purpose company created to develop, own and operate the Rabigh IWSPP. The project is the utilities provider (power, water and steam) within the Rabigh complex, the integrated refinery and petrochemical complex being developed by the joint venture of Saudi Aramco and Sumitomo chemical of Japan.

Project: RAWEC, Rabigh – KSA

Job title : Technical Support Instrumentation & Control Engineer (On Contract)

Job Description: • Reviewing & preparation of Preventive Maintenance Plan.

 Preparation of technical procedure for corrective and preventive maintenance for I&C section.

Witness of work procedure to ensure that it is matching with the system.

Technical support and training for I&C team.

Dates : From Jun. 2005 till Jul. 2010

Employer : GALVA METAL (Kandil Industrial Group)

GALVA METAL is a private company operating within the materials sector focusing on diversified metals & mining. GALVA METAL is based in Cairo, Egypt and was established on January, 1997. The main markets of GALVA METAL include North America, South America, Western Europe, Eastern Furance Factors Asia, South South Fact, Africa, Occapia, etc.

Europe, Eastern Asia, Southeast Asia, Mid East, Africa, Oceania, etc.

Job title : Electrical / Instrumentation Maintenance Engineer

Job Description : • Provide technical support to the factory for maintenance, operation and troubleshooting Instrumentation and Low Voltage Electrical systems including PLC's (use PLC's and electrical drawing in troubleshooting).

• Preparing daily and monthly report of all Electrical stoppage.

- Develop and improve Instrument and Control systems and conduct root cause stoppage analysis to improve reliability and decrease the stoppage of the production lines and machines.
- Prepare and supervise the execution of the preventive maintenance programs.
- Installation and start-up for new devices and upgrades.
- Assist in training and coaching technicians and personnel involved with preventive maintenance and repairs.
- Spares balance investigation and inventory control for all instruments' spare parts.
- Work cross functionally with various plant departments personnel and outside vendors.

Field of experience:

- Senior DCS / Instrumentation & Control Engineer with good experience and ability for work in fast track projects and also long term projects.
- Excellent troubleshooting, fault detecting and analytical skills.
- Sound knowledge of programming & troubleshooting using PLC & DCS:
 - Siemens T3000.
 - Siemens S7-400 PLC.
 - TOSHIBA BCS4000 & PCS6000.
 - Toshiba T3h PLC.
 - Mitsubishi PLC.
 - Allen Bradley rslogix 500 PLC.
 - GE Toolbox MVI, MVIe.
- Operation, maintenance, application programming, adding new points and modify graphics on SCADA system including generating trends & reports, configuring alarms:
 - WINCC.
 - Cimplicity.
 - Fix32.
- Establishing communication between PLC, HMI & SCADA using RS-485, Ethernet, and Modbus & Profibus protocol for real time monitoring of plant process.
- Configuring and faults diagnosis of DCS, PLC, SCADA, RTU Communication.
- Sound knowledge of maintenance & troubleshooting of AC drives & DC converters:
 - Siemens AC Micro master Drives (5.5 KW)
 - Siemens DC Simoreg Drives (20-90 KW).

- Toshiba common converter (AC/DC) TOSVERT –PS30E.
- Toshiba inverters (1400-1900 KW).
- Allen Bradley Drives.
- Well versed with panel wiring diagrams and able to read & interpret P&ID diagrams, cable schedules and other instrumentation logic diagrams.
- Proficient in maintenance of pressure, flow, level measurement devices, RTD, thermocouple & other measurement devices.
- Maintenance and calibration of the control valves (Pneumatic, MOV ...).
- Designing, Implementing and Commissioning of new control loops as per site requirements.
- Review of control philosophy, P&I diagrams, cause & effect, diagrams, instruments list, flow chart.
- Preparing master data sheet for PM schedule; ensuring safe and efficient performing of CM.
- Technical Support for the instrumentation team.
- Spares balance investigation and inventory control for all instruments' spare parts.