# 106881-ICX-18CDGMOS-E-2005

Lead E/I&C-A Engineer

Holds a B. Sc. in Electrical Power Engineering and has about 14 years hands-on experience working in I&C / Automation field.

## PERSONAL DATA

Nationality : Egyptian Birth Date : 28/03/1984

Gender : Male

Marital Status : Married

Residence : Giza, Cairo

## **EDUCATION**

: B. Sc. in Electrical Power Engineering, Cairo University, 2005

## LANGUAGES

Arabic : Native Language

English : Very Good

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Power Point), Internet

: AutoCAD : MS Visio

# TRAINING COURSES AND CERTIFICATIONS

: Balanced Score Cards (Performance Management Methodology).

: Risk management.

: Attended many technical training courses and seminars on frequently used products from Siemens, ABB, Schneider, Rittal, Mitsubishi, Rockwell, Prosoft, Wika, E&H, Rosemount, Phoenix, Grundfos, Prominent...etc.

: Training at the NECC – National Energy Control Center – Egyptian Electricity Transmission Co.

Training on BSC (Balanced Score Card) approach at AHC (2014).

: Training on WinCC professional V7.3 by Siemens Saudi Arabia (2015).

: Had a presentation on design programs (Intergraph, Aveva).

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Aug. 2015 till Feb. 2019
Employer : WETICO Saudi BERKFELD Co.

Projects : • QCCP Power Station Combined Cycle (Water and Waste Water

Treatment) - Process RO & Demineralization WTP 77 m3/hr

PP13 & PP14 Power Plant (Water Recycle Treatment) - Process RO

Oil modular skids. Saudi Aramco

RO skids, Tecnicas Reunidas/Saudi Aramco

Job title : Lead E/I&C-A Engineer

Dates : From Feb. 2013 till Jul. 2015 Employer : WETICO Saudi BERKFELD Co.

Projects : • Qurayyah Power Station (Water and Waste Water Treatment) - 3

streams Process RO & Demineralization WTP 95 m3/hr

 PP10CC Power Station Combined Cycle (Water and Waste Water Treatment) - 3 streams Process RO & Demineralization WTP 130 m3/hr

• ARAR Power Station (Water and Waste Water Treatment) - Process RO

& Demineralization WTP 35 m3/day

Job title : Senior E/I&C-A Engineer

Dates : From Dec. 2010 till Sep. 2012

**Employer**: Veolia Water Systems

Projects : • Senbelaween Potable WTP - NOPWASD 68000 m3/day

Qassaseen MBBR 20000 m3/day

• Halwani Brothers - WWTP

Marsa Matrouh RO Plant 20000 m3/day

Pepsi Bottles wash water recovery five plants 22 m3/hr

Chipsy recycle filtration plant 15 m3/hr

• Giza North & Banha Power Station (Water and Waste Water Treatment)

- Process Demineralization (proposal)

• Italica Filtration Plant

Galaxy Demineralization Plant 10 m3/day

Alex Sugar Demineralization Plant 10 m3/day

Alex Sugar STP 120 m3/day

• Asec Water Treatment

Mars Factory MBR 120 m3/day

Menya BWRO 2000 m3/day

Job title : E/I&C-A Engineer

Dates : From Jun. 2008 till Sep. 2010
Employer : METITO water treatment

Projects : • In Egypt:

- Petrofac Salam Gas Trains 3 & 4 RO plant 168 m3/d Brackish

water

- EI-Tour STP plant

Morgana Azur Touristic Village RO plant 500 m3/d

Concord Salam MRP plant Sharm El-Sheikh

- Best of France MBBR plant
- Hilton Marsa Alam RO plant
- Titanic Resort STP plant
- Nubaria Power Station (Water and Waste Water Treatment) -Process: Demineralization
- Grand Museum Demineralization Water Plant
- Fairmont filtration plant
- AUC New Campus Development Boiler plant
- Military West Zone RO plant 1200 m3/d
- El Zafer WarShip RO plant
- EI-Tebbin Power Station 2x350MW GAS OIL FIRED UNITS (Water and Waste Water Treatment) - Process: Demineralization 2 streams x 65 m3/h
- Sidi Krir Power Station 2x250MW (Water and Waste Water Treatment) - Process: Sodium Hypo generation and Demineralization water production
- Cairo West Power Station Ext. 2x350MW (Water and Waste Water Treatment) - Process: Demineralization
- El-Tebbin condensate polisher power plant
- El-Atf Power Station 750MW (Water and Waste Water Treatment) -Process: Demineralization
- In Libya:
  - Tripoli RO plant 240 m3/day
  - ES Sider Terminal water Treatment Plant 5000 m3/day
  - Zat El Emad RO plant

Job title : Automation Engineer

Job Description : Pre-commissioning, Commissioning and Start-up for the above mentioned

projects, including loop checks, trouble shooting, and software application

programs design (PLC and SCADA).

Dates : From Jan. 2008 till May 2008

Employer : UE

Projects : • Fakkous Potable water treatment plant 600 l/s

Arabia gas station

Job title : Automation Engineer

Dates : From Jul. 2005 till Dec. 2007

**Employer** : ETE (GRUNDFOS Pumps Agent) / EAST Automation

Job title : Electrical & Sales Technical Support Engineer

Field of experience:

- Power Plants, Water treatment plants (Filtration, Demineralization through CEDI, Demineralization through Ion exchange, RO Desalination, Potable water, Waste Water Treatment conventional & SBR, MBR, MBBR, Bioreactor).
- SAUDI ARAMCO Projects:
  - Oil modular skids (Executed first Aramco project awarded to WETICO).
  - RO skids, Main contractor: Técnicas Reunidas.

Engineering: subject include: Study the project, ensure project scope is clear (DOR for joint venture projects if any), Design check & Budget check, prepare technical submittals, contact suppliers, Improvement of projects profitability. Preparing full package submittal of basic & detailed design (NMR601, NMR 602) [P&ID, Instrument index, GA, Electrical Layout, Load Lists, SLD, LCPs, LPBs, Cable Schedule & sizing, Cable Data sheets, Cable Termination, Cable Routing, Instrument List, Instruments data sheets. Instruments Location Plan or layout. I/O List. MODBUS mapping, PLC panel outline drawing, PLC panel Wiring diagram, Loop Diagram, Instruments Hooking up, junction boxes, SVCs, Control philosophy, Control Narrative, Electrical installation drawing, Lighting fixtures, layout drawing, Grounding layout, Logic Diagram, Interlock Diagram, PLC-PC configuration, Installation drawing and material, review panel builder MCC detained drawing, prepare PLC-HMI application programs, takeover FAT & SAT.. (having experience with Exproof material such as instruments, junction boxes, cable glands, RTU, choke valve, MPFM, switch rack, control valves) Design complying with standards ISA, IEC, NEMA), Follow-up document approval cycle.

### Managerial Skills:

- Possess deep & through understanding of system design, integration, fabrication, installation, FAT, SAT, commissioning, start-up handover to the client due to past strong Engineering experience.
- Identify division of responsibilities, deliverables, scope of the project.
- Identify resources needed to execute the project vs potential of the team and company capabilities, forecast & analyze project profitability vs cost.
- Manage, motivate & inspire the team to the maximum potential.
- Ensure that project file is complete (contract, agreements, risks, delivery schedule, team structure, contact persons, deliverables, submittals & datasheets, approvals, handover...etc.) as per the process and procedure.
- Manage day to day operations with the client and internally.
- Effectively communicate with the team and higher managers.
- Distribute the work between project members and resolve issues between the team members.
- Manage manhours and expenses of the projects.
- Coordinate with the procurement team to meet the project budget and push suppliers & negotiate prices, payment terms and conditions whenever required.
- Open channels with new suppliers.
- Hold meetings regularly with the project team and discuss the progress.
- Conduct meetings with the client, deliver presentations, suggest alternative solutions & Facilitate team and client if required.
- Identify the company capabilities and reduce risks exposure based on which will manage the client requirements.
- Identify capabilities of the team members, points to develop to get the maximum of each and every one of them.
- Understand major goals including Customer satisfaction, meeting

- his expectations, develop the business and deepen the relation with him.
- Achieve goals as per Company strategy, Improve & develop business process, ensure Learning & growth, development of the team.
- Identify project variations if any.
- Thoroughly review documents before delivering to the client.
- Able to make tough decisions at hard time and escalate issues when required.
- Resolve team issues and miscommunication issues.
- Suggest areas for improvement in internal processes along with possible solutions.
- Direct & mentor team members or colleagues having less experience.

#### Technical Skills:

- Plan, specify, design and oversee the engineering instrumentation and control/electrical departmental deliverables for Engineering.
- Involved in HAZOP study and discuss the end user or third party to optimize the design to reduce the hazards.
- Preparation and review of Material Requisition and technical evaluation as per project specific requirements.
- Preparation and review of material requisition of different type of instruments like pressure transmitters, level transmitters, flow transmitters, analyzers, on-off valves and control valves. Technical evaluation.
- Preparation and review of different types of design drawings like, main cable routing and sections, instrument layout, process installation details, instrument electrical installation details, control system architectural layout, cause and effect diagrams, central control room and local control rooms layouts, junction box drawings, interconnection block diagrams, interface loop diagrams (field and MCCs), logic diagrams, etc.
- Preparation and review of different types of design documents like detailed cable schedule and MTO, instrument index, document index, overall alarms and set point list, cause and effect etc.
- Preparation and review of piping and instrumentation diagram (P&ID).
- Supervision of the construction activities which includes cable trench excavation, structural and cable tray work, fabrication of instrument and junction box frames and foundations, cable laying, glanding, termination, pre-commissioning and commissioning checklists, continuity and loop checking, configuration supervision of PLC graphics and I/O points, integration with existing plant control system.
- Handle purchase requisition and provide advice during procurement process and purchase order preparation.
- Participate in relevant meetings, prepare progress reports and comply with project execution schedule.
- Proactively resolve any discrepancies between company and client.
- Keeping up to date with the latest developments and technical innovations in instrumentations and control engineering.

- Lead engineering team and support junior engineers within the engineering team.
- Communicate effectively with the engineering team, company management, and customers.
- Organize the workload, tasks & assignments between the team members to ensure smooth.
- Prepare Procurement Schedule and the Gantt Chart for project execution plan.
- Support the Procurement activities, negotiations, technical evaluations, TOC between different probable suppliers (technically & commercially), Ability to open channel with new suppliers & develop business with partners.
- Interconnect between the electrical dpt & other disciplines & Expedite the work flow process beyond the conventional.
- Ability to prepare ITP, IFAT procedures to conduct the test accordingly.
- Ability to conduct FAT test to make sure that a product or integrated system meets the design requirement and specifications.
- Attended many FATs during the last few years in my career, however following are examples of some of them:
  - Variable speed drive 40 Kw & 80 Kw, Supplier: Emersoncontrol technique, Location: United Kingdom.
  - CO2 system CO2 gas/vapor feed flow rates up to 40 kg/hr, Supplier: TOMCO, Location: USA.
  - Tens of PLC panels with different PLC system architecture with more than 1200 input/outputs.
  - Tens of MCCs and LCPs with different ratings.
- Pre-commissioning, Commissioning & Start-up Comprises the following activities:
  - Preparation of commissioning schedule that meets the project execution schedule.
  - Supervision on Construction completion and clearance of punch list.
  - Supervision on Power voltage checks for correct levels.
  - Incoming power supply check, System power up and health tests, Electrical panel inspection.
  - Point-to-point continuity test for control & signal wiring.
  - Supervision on MCC energize procedures, tests, incoming and outgoing breakers function checks.
  - Supervision on MCC ATS function check, motors rotation direction and solo run.
  - Proper Installation, wiring, Programming and calibration of the measuring instrumentations (E&H, Rose Mount, ABB, Signet, Siemens, LTH, Hack, Swan, Thermo scientific ...).
  - Wiring and Programming Variable Speed Drive (Mitsubishi, ABB, Danfos, Schneider...).
  - Software Application design: Rockwell PLC, Control LOGIX 5000, Compact & MicroLOGIX, PV, PV1000+, Redundant systems, control net, Ethernet, Profibus, Modbus, Prosoft gateways (Ladder Diagram, Factory Talk, Historian, RSNETWORX).
  - Siemens (S7 200, 300, 400H, WinCC v7.3SCADA, Profibus with

- distributed I/O's, Ethernet Network, Redundant systems).
- Intensive advanced training on Wincc v7.3 by Siemens Saudi Arabia (certified).
- Communication links checks.
- SCADA field loop checks & operational functional tests.
- FAT & SAT.
- Trouble shooting.
- Other Site Work:
  - Commissioning Team Leader (in Client Daily Comm. & Start-up meeting).
  - Planning of day-to-day job schedule with workers and handling manpower.
  - Trouble shooting for day to day problems in the various plants being handled.