

MOHAMMED SHAHJAHAN

Electrical & Instrument QC Engineer

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### CAREER SUMMARY

Having 9+ years of experience in Construction, commissioning, maintenance & Supervision of projects like – **Refineries, Petrochemicals, Oil & Gas Plants, Power plant** and Currently working with SENDAN INTERNATIONAL COMPANY LTD, SAUDI ARABIA as an **Electrical & Instrument QC Engineer** in PCQ1 CCR interface with PCQ2 CCR Project in Sabtank (Sabic affiliate) Jubail, Saudi Arabia with full responsibility of project execution which includes Co-ordination with Client and various working agencies, Project Planning, Quality control of materials and workmanship, progress monitoring on the basis of established schedule, scrutiny and related site works. Having Excellent interpersonal and communication abilities, possess a wide range of technical skills.

### PACKAGE KNOWN: -

**Well familiar with Erection, Testing, Commissioning & Maintenance of the following equipment:**

#### HT system (230/33/6.6 KV):

- ◆ Transformers from leading companies (Step Up up to 230 KV, Power up to 25MVA/Distribution up to 2MVA/Converter duty 2MVA -3.7 MVA, Dry type 1.6MVA).
- ◆ VCB from Eaton/ABB.
- ◆ HT switch-gears from EATON/ABB/Hyundai.
- ◆ Protective Relays (Transformer, Motor, Feeder, Reactive Compensation, Battery Bank, Insulation Management Relays) from GE/SEL.
- ◆ Sub-Station SCADA system.
- ◆ Gas Turbine Generators (GTG from GE, USA) up to 180 MW/18 KV
- ◆ Gas Insulated Switch gear (GIS from ALSTOM Germany, 230 KV)
- ◆ Isolated Phase Bus (IPB 18 KV/4000 A) and Power Cable up to 230 KV from ILJIN Korea.

#### LT system:

- ◆ ACB from SIEMENS, ABB and AEG.
- ◆ Soft Starters from ABB, SIEMENS, AEG.
- ◆ AC/DC Drives from SIEMENS, ABB (ACS 800,550 for EOT Cranes).
- ◆ AC motors up to 250KW from SEW motors Germany.
- ◆ DC motors up to 1800 KW
- ◆ Switch-gears, PCC, MCC, PDB, MLDB.
- ◆ PLC (S7 400/300), Ladder Logic program, Relay Logic.

### CORE STRENGTHS

- ◆ Time Management & Prioritization
- ◆ Risk Assessment & Management
- ◆ Organizational ability
- ◆ Documentation
- ◆ Strong Analytical skill
- ◆ Process improvement
- ◆ Quality control

### TECHNICAL SKILLS: -

- ◆ C/C++
- ◆ Microsoft Office, Excel, Power point, Outlook.
- ◆ International codes and standard, NEC, NEMA, IEC, SAES.
- ◆ Familiar with Auto CAD, SAP.

**PROFESSIONAL EXPERIENCE: -**

**Company** : SENDAN International Co Ltd.  
**Position** : Electrical & Instrument QC Engineer (15<sup>th</sup> July 2018 to Till date)  
**Client** : Sabic Terminal Service Company(Sabtank- Sabic affiliate).  
**Contractor** : SENDAN

**PROJECT: - PCQ1 CCR INTERFACE WITH PCQ2 CCR PROJECT.**

**PCQ1 CCR interface with PCQ2 CCR project** is a major project in Sabtank to design, supply and commissioning for relocation of DCS/ESD/F&G/ATG/ Wireless Communication/CCTV/Siren System from Old PCQ1 Control to New PCQ2 Control Room using 3 KM Fiber Optic Connection (144 core redundant). This project include installation testing and commissioning of New EVANS console and **DCS (Yokogawa)**. Automatic Tank Gauging (ATG) relocation using Fiber connection, new Dell Server, Network switches, KVM Extender, Tank Master inventory management software with **Emerson**. Installation, testing and commissioning of New ESD Matrix Panel, ESD Maintenance Override Switch, ESD Remote I/O Cabinet, New Engineering Work station in PCQ2 CCR with Yokogawa team. New CCTV cabinet comprising of control unit & MP-48 CCTV Matrix, 55" Monitors (8 Pcs) for CCTV/F&G/DCS/ESD.

**Roles and Responsibilities: -**

- ◆ Inspection of all project materials from vendor and local purchase.
- ◆ Inspection of all newly installed DCS/ESD/F&G/CCTV/Siren System.
- ◆ Inspection of all Ethernet, power and fiber optic cables, testing and termination.
- ◆ Inspection of cable route, tray/conduit for all the cables.
- ◆ Inspection of installation and testing visualization system.
- ◆ Attended all design review meeting, FAT for DCS and ESD System.

**Company** : SENDAN International Co Ltd.  
**Position** : Electrical & Instrument QC Engineer (10<sup>th</sup> Dec 2017 to 10<sup>th</sup> July 2018)  
**Client** : Yanbu Petrochemical Company(YANPET/SABIC).  
**Contractor** : GOLDEN WING

**PROJECT: - PLC UPGRADE PROJECT, YANPET, KSA.**

**PLC Upgrade project** is a major shutdown project in Yanpet to replace old Siemens S5 with new S7-1500 PLC and new Siemens Operator panel (TP900/TP700) with touch screen panel in bagging machine (Wind Moller & Holscher), Palletizer, Shrink Frame (Moller) in all the six packaging line in packaging 2 area along with WINCC server, Engineering station, 65" monitor for visualization system installation and commissioning.

**Roles and Responsibilities handled: -**

- ◆ Inspection of all project materials from vendor and local purchase.
- ◆ Inspection of all newly installed PLC, Operator panel.
- ◆ Inspection of all Ethernet, power and fiber optic cables, testing and termination.
- ◆ Inspection of cable route, tray/conduit for all the cables.
- ◆ Inspection of installation and testing visualization system.

**Company** : SENDAN International Co Ltd.  
**Position** : E&I Engineer (10<sup>th</sup> Sept 2016 to 31<sup>st</sup> Sept 2017)  
**Client** : Saudi Aramco YNGL/Yanbu Petrochemical Company(YANPET/SABIC).  
**Contractor** : DAELIM

**PROJECT: - ETHANE GAS METERING SKID PROJECT, YANBU, KSA.**

**Ethane gas metering skid project** is a project to supply ethane gas from Saudi Aramco -YNGL to Yanbu Petrochemical Company (YANPET/SABIC) for additional requirement of ethane gas, which constitutes pipeline from Aramco to Sabic and a metering skid to compute the flow rate. It also has a remote terminal unit (RTU) on metering skid (in Sabic) which is connected to the RTU and Flow Computer (in Aramco) through 8 km fiber optic cables and through data/instrument cables to existing PIB/CCR.

**Roles and Responsibilities handled: -**

- ◆ Installation of metering skid, RTU panels and related power, instrument, control, fiber optic cables termination and testing.
- ◆ Instrument impulse tubing, air supply, calibration and loop check of all instruments and analyzer.
- ◆ Installation and testing of cathodic protection system for underground pipelines.
- ◆ Installation and testing of Electrical and instrument ground rods, cabling and termination.
- ◆ Installation of ZV, MOV, FCV and related power/control cables, instrument air supply, loop check and functional testing.

**Company :** SENDAN International Co Ltd.  
**Position :** Electrical QA/QC Inspector (10<sup>th</sup> May 2015 to 20<sup>th</sup> Aug 2016)  
**Client :** Saudi Aramco/Power Co-generation plant Company (PCPC).  
**Contractor :** Samsung Engineering.

**PROJECT: - ARAMCO CO-GEN IPP PROJECT, ABQAIQ, KSA.**

**Aramco Co-Generation Independent Power Plant project** is a power plant of 360 MW capacity inside Saudi Aramco facility in Abqaiq (KSA) which constitutes 2 units of GTG (180 MW each) from GE and HRSG from S&T Korea. And Gas Insulated Switch gear (GIS 230 KV) from ALSTOM, Step up Transformer (18KV/230KV) with OLTC from Siemens Germany.

**QC ACTIVITIES CARRIED OUT:**

- ◆ Responsible for all Quality Control activities for the allotted area of discipline
- ◆ Familiarization with overall construction scope of work
- ◆ Submission of ITP, QCP and PQP to the client according to their standards and procedure.
- ◆ Site surveillance to check the construction work and give comments if necessary, according to International Standard, company standards and specification.
- ◆ Conduct internal inspection among all activities and record inspection findings in the internal inspection logbook, follow up with the construction to ensure that the activities complying with the requirements. To coordinate, control and monitor all Electrical Quality control / Inspection activities at the project site.
- ◆ Engineering standards and procedures and applicable national and international codes and standard as NFPA70/NEC, NETA-ATS, NEMA VE1, VE2, MG1, IEC, IEEE etc.,
- ◆ Reporting both verbally and in writing any non-conformance discovered.
- ◆ To prepare request for inspection for client inspection for completed activities.
- ◆ Highlighting all discrepancies detected during monitoring inspection and informing the same to QC Manager.
- ◆ Prepare Non-Conformance Reports (NCR) for non-compliance activities against the approved quality plans, inspection test plans, relevant to client.
- ◆ Taking immediate remedial to clear inspection log book comments.
- ◆ Manage the electrical Contractors construction activities, schedule and progress.

**Company :** SENDAN International Co Ltd.  
**Position :** Electrical Engineer. (04<sup>th</sup> Feb 2014 to 15<sup>th</sup> Feb 2015)  
**Client :** Sadara Chemical Company (Jubail 2)  
**Contractor :** Daelim

**PROJECT: - SADARA CHEMICAL COMPANY, JUBAIL, KSA.**

**Sadara Chemical Company** is constructing one of the world's largest chemicals complexes in Jubail Industrial City in Saudi Arabia. The fully integrated complex will consist of 26 chemical manufacturing units and be one of the largest of its kind in the world. It will produce about 1.5 million tons per annum (mtpa) of ethylene and about 400,000tpa of propylene. The complex will also produce a variety of chemicals, such as amines, propylene glycol, polyurethanes, low density polyethylene, linear low density polyethylene, elastomers, glycol ether and propylene oxide.

**Roles and Responsibilities handled: -**

- ◆ Installation of MV/LV transformers (4.16KV/480V) testing and commissioning.
- ◆ Erection of MV/LV switch gears, MCC, EMCC from EATON (USA) & termination of power/control cables.
- ◆ Installation of Transient UPS System for control substation.
- ◆ Installation & commissioning of Battery/UPS system and DC power panel.
- ◆ Installation & commissioning of MV MCC for cooling tower ID fans with GE MULTILIN 369 motor management relay.
- ◆ Installation & commissioning of AC/DC drives from ABB.

## Curriculum Vitae

### Mohammed Shahjahan

- ◆ Installation, testing & commissioning of FIRE ALARM system from SIEMENS (GERMANY).
- ◆ Installation & commissioning of Communication system using UTP, fiber optic cable, speakers, Duplex information face plate and EPMS Pane.
- ◆ Installation of security & system for substation, operator building, PIB & communication room.
- ◆ Installation & energization of lighting inside and outside substation, operator building, generator building, expand-compressor building, pipe racks and Field Lighting.
- ◆ Attended meetings for Planning and status of the ongoing jobs, and the jobs on priority.
- ◆ Followed up the material controller regarding Equipment/device arrival, Unloading and proper storage and Shifting of packages according to the requirement and priority basis.
- ◆ Grounding of Electrical Control Rooms, Lightning, Panels and Equipment.
- ◆ Control and Power cable laying according to Schedule and their lugging, terminations.
- ◆ Review the completion status of the jobs at different sites.
- ◆ Handling of manpower available during shift, Job distribution and ensuring completion of job by monitoring.
- ◆ Ensuring the rules and regulation regarding safety during shift to avoid any accident.
- ◆ Coordinate with QA/QC inspector for inspection of the completed jobs in compliance with standards.

**Company :** Imanco Agencies Commerce and Contracting Co. Ltd.(Saudi Arabia)  
**Position :** Electrical Engineer. (26 Mar 2012 to 30 Dec 2012)  
**Client :** Jizan Seaport Authority  
**Project :** Jizan Port Power station project.

#### JOB PROFILE: -

Worked as an Electrical & Instrument Engineer in **12 MW** power station construction project in which diesel operated generators from **Caterpillar**, Generator control panel (**EMCP 3.1**) from **Haensatic Power Solution (Germany)**, **13.8 KV** Switch gear from **Johnson and Philip Electrical Company (China)** and Transformers from **United Transformers Electric Company (Saudi Arabia)** were installed and Commissioned.

#### JOB RESPONSIBILITIES: -

- ◆ Installation and commissioning of three Caterpillar generators Model 3612 with 12 cylinders, 1200 rpm and 3846 KW capacity.
- ◆ Installation and testing of 20-ton crane from Eastern Morris Crane Company.
- ◆ Installation and commissioning of generator control panels (EMCP 3.1).
- ◆ Installation and commissioning of 13.8 KV Switch gear with two utilities and four feeder lines.
- ◆ Installation and commissioning of DC panel for the Switch gear.
- ◆ Installation of two Transformers of rating 500 KVA, 13800 Volts, 3 phase, 60 Hz.
- ◆ Installation and testing of three Air Compressors, two electrical and one diesel operated with six Air bottles from NIK AIR (Germany) and related piping.
- ◆ Responsible for installation of Air conditioners, Lighting.
- ◆ Looking after the installation of fire alarms and fire-fighting system.

**Company :** Imanco Agencies Commerce and Contracting Co. Ltd. (Saudi Arabia)  
**Position :** Electrical Engineer. (05 Jan 2013 to 25 Dec 2012)  
**Client :** King Fahad Industrial Port Authority  
**Project :** King Fahad Industrial Port Expansion project.

#### JOB PROFILE: -

Worked as an Instrument & Electrical Engineer in Electrical Substation construction project in which four substations of rating 34.5 KV/13.8 KV with 10 MVA transformers from **Eleswady Transformers**, **Johnson and Philip Electrical Company** Switch gears, control room equipped with SCADA system form Siemens. Maintenance of Fire water tanks in Sab tank section in Jubail Industrial Port equipped with Radar level sensors, level and flow control by SCADA system based control room.

#### JOB RESPONSIBILITIES: -

- ◆ Installing and commissioning of 10 MVA transformers (34.5/13.8) KV.
- ◆ Installing and commissioning of 13.8 KV switch gears and Vacuum Circuit Breakers (VCB).
- ◆ Commissioning of Control Room for Electric Substation with Remote input output terminals, panels and SCADA System.
- ◆ Preparation of Cable trench, ducts and manholes for 34.5 KV, 13.8 KV, 600V and 400 volts.

## Curriculum Vitae

### Mohammed Shahjahan

- ◆ Connecting all substation and Control Room with Optical Fiber Network.

**Company :** Doha petroleum (DOPET)  
**Position :** Instrument Supervisor (10 Jan 2012 to 15 Mar 2012)  
**Client :** Qatar Fertilizer Company (QAFCO)  
**Project :** Shutdown/Maintenance project.

#### **JOB PROFILE: -**

Worked as an Instrument Supervisor at QAFCO in Shutdown and preventive maintenance program in unit 3 (Urea). I was responsible for the work in compressor house for uninstalling all the temperature and vibration sensor of the compressors, turbines and gears for mechanical work and re installing the same. Faulty or malfunctioning components such as RTD, Thermocouple, vibration sensors, Temperature transmitters, Pressure transmitters, Flow transmitters, Level transmitters were replaced or repaired according to the work list.

#### **JOB RESPONSIBILITIES: -**

- ◆ Worked in the Calibration, Maintenance & Servicing of the Transmitters including Pressure, Temperature, Flow and Level of different manufacturers such as Yokogawa, Rosemount, Honeywell, ABB etc.
- ◆ Worked in the advanced **FOUNDATION FIELDBUS** Protocol.
- ◆ Servicing and Maintenance of Entire Instrumentation system.
- ◆ Calibration, Servicing and Maintenance of Process Control Valves and Level Trolls of different Manufacturers such as Dresser Masoneilan, Metso, Fisher etc.
- ◆ Overhauling of Control Valves and of different Manufacturers.
- ◆ All types of switching devices {Pressure, Temperature and Level}.
- ◆ Level Gauges, Level Troll (Interface), Pressure Gauges Calibration, Overhauling and Repairing of the Mechanism Inside.
- ◆ Worked on Vibration Measuring, Monitoring and Simulation and Handling of Wobulator TK-3.

**Company :** Electro steel Steels Limited, India.  
**Position :** Instrument Engineer (5 July 2010 to 28 Dec 2011)  
**Project :** Rolling Mill Construction project & Maintenance.

#### **Organization Profile: -**

M/s Electro Steel Steels Limited (ISO 9001:2008 certified), An associate Company of Electro Steel Group, **pioneer in DI Pipe market in India** is set up a **2.2 Million Ton Per Ann um (MTPA) Greenfield Integrated Steel & DI Pipe Plant** to produce **0.7MTPA Bar Mill, 0.5 MTPA Wire Rod Mill, 0.27 MTPA commercial billet, 0.4 MTPA pig iron & 0.33 MTPA Ductile Iron Pipe**. The proposed plant is based on Coke Oven, Sinter Plant, Pellet Plant, Blast Furnace, Basic Oxygen Furnace, Billet Caster, and **120MW Thermal Power Plant**.

**Technology Supplier:** A leading Chinese Consultation Agency **Shandong Province Metallurgical Construction Company (SDM)** for supply of technology & engineering based on successfully operating Integrated Steel Plants in various locations in China.

#### **JOB PROFILE: -**

##### **Construction & Commissioning Activities: -**

##### **PLC Control System: -**

- ◆ Review and preparation of PLC system architecture, finalizing hardware and software requirement, power distribution scheme, wiring scheme, operator console layout etc., coordinating with PLC vendor, participating Engineers review meetings.
- ◆ Erection, Commissioning & Maintenance of Siemens S7 400/300/200 PLC control system of Bar Mill.
- ◆ I/O testing for field instruments through PLC.
- ◆ Maintenance of PLC Modules according to ISO Standard.
- ◆ Communication network between PLC/RIO/Drives/Control stations and all Mill Pulpit using Fiber Optics/LAN/Profibus protocol.
- ◆ Maintenance of RIO Panels and IM Modules.



## Curriculum Vitae

Mohammed Shahjahan

### Electrical and Automation: -

- ◆ Maintenance of LVDT, Thermocouple, RTD, Flow Transmitter, Pressure Transmitter, Level Transmitter, Flow Transmitter/switch, Load Cell, Bimetallic Thermometer, Pressure Switch, Smart Valve Positioner, Electro-Pneumatic Positioner, Solenoid Directional Valve, HMD, Loop Scanner, Proximity Switch, Encoder, Dust Analyzer.
- ◆ Commissioning, maintenance and Parameterization of AC/DC Drives, Soft starters (Siemens, ABB ACS-550/800).
- ◆ Erection, Commissioning and Maintenance of Mill Stand DC motors up to 1800 kilowatts, Asynchronous induction motors of Reheating Furnace, Mill Stand, Cooling & Collecting area, Mill hydraulic, Lubrication, Water Treatment Plant, Lathe Machine, Wire cut EMD Machine, Central Air Conditioning Unit etc.
- ◆ Erection of PCC, PDB, MCC and MLDB Panels.
- ◆ Erection, commissioning and maintenance of Distribution Transformers (for all Mill AC motors), Rectifying Transformers (for all Mill DC motors) and Dry Type Transformers (for Lighting and Chiller Plant).
- ◆ 1000 KVA Diesel Generator Installation and Maintenance.
- ◆ Erection, commissioning and maintenance of and 6.6KV Vacuum Circuit Breakers (VCB) of Main Control Substation & Low voltage Switch-gear, Air Circuit Breakers.

### After project (as a Maintenance Engineer):-

- ◆ Responsible for all shift activities like handling of breakdowns, shutdowns, availability of equipment, recording & monitoring of parameters of main and critical equipment, shift reports, updating of documents /checklist provided (material consumed during shift, ISO documents), reporting of all major activities to reporting officers.
- ◆ Handling of manpower available during shift, Job distribution and ensuring completion of job by monitoring.
- ◆ Ensuring the rules and regulation regarding safety during shift to avoid any accident.
- ◆ Planning & Execution of preventive maintenance schedule provided.
- ◆ Ensuring the availability of spares by checking & updating of spares available with us.
- ◆ Raising of purchase requisitions via SAP, follow-up with purchase department and supplier.
- ◆ Desired rectification/ modifications required for improving the system's performance, evaluation of cost & material required for it, approval for its execution etc.
- ◆ Involved in preparation of ISO documents for getting ISO certification.
- ◆ Implement ISO standard Procedures.
- ◆ Attend E.O.T Crane Breakdowns.

### ISO 9000 Documentation: -

- ◆ Prepared all ISO Documents to maintain the Total Quality Management system.
- ◆ To maintain and keep the Record of Calibration of all Field Measuring Instruments.
- ◆ Procedure and system to do the better maintenance of the equipment to have zero breakdowns.

### PLC AND SCADA TRAINING AT IIATCA, KOLKATA.

16/12/2008 TO 14/02/2009

- ◆ Basics of operation and maintenance of PLC from **Siemens** and **Allen-Bradley**.
- ◆ Troubleshooting of **PLC**.
- ◆ Ladder logic programming and feeding to **PLC** memory.

### INDUTRIAL TRAINING AT BHARAT SANCHAR NIGAM LIMITED (BSNL).

04/01/2010 TO 28/05/2010

- ◆ Operation and maintenance of **Electronic Switching System Digital (EWSD)** by **Siemens**.
- ◆ **Optical Fiber** Cable Room connections and troubleshooting.
- ◆ Operation and maintenance **BTS** tower and **3G** equipment from **Siemens**.

### ACADEMIA

<b>B.Tech. (Instrumentation Engineering)</b>	2010	8.01/10	After securing a rank among 7.6% in All India Joint Entrance Exam
West Bengal University of Technology, Kolkata			

<b>12<sup>th</sup></b> (Physics, Chemistry, Maths and English)	2003	67%	From one of the best colleges of Nawada.
KLS College, Nawada			

<b>10<sup>th</sup></b> (Science, Mathematics, Social Science, English)	2001	66.8%	School Topper among 300 students
SNS High School, Nawada			

## Curriculum Vitae

Mohammed Shahjahan

### PERSONAL DETAILS

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**Date of Birth:** 05 February, 1987

**Gender:** Male

**Marital Status:** Married

**Nationality:** Indian

**Permanent Address:** H/N-44, Ward No-33, Kamalpur, Ansar Nagar, Nawada, Pin-805110, Bihar, India.

**Linguistic Abilities:** English, Hindi, Bangla, Urdu and Arabic.

**Willing to relocate:** yes

### DECLARATION

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I hereby confirm that all the information provided above is correct up to my knowledge.

Place: Jubail (KSA)

Sign:

Dated: 18/4/2018

(Md. Shahjahan).