

Hashem Ali Hashem

18 el-bosery st., mansyet elbakry, masr elgeeda, Cairo, Egypt. • eng.hashemali@yahoo.com • Tel:+201092757478

04/11/1986 • Married • Exempted • Egyptian

Profile

I am seeking a suitable position suits my qualifications and skills. I would like to give all my efforts, and wish to gain a useful experience helping management to speed up production process and achieving quality.

Professional Experience

Instrumentation & Metering Engineer, Petrofac ✉

02/2022 – present

AL FAO Offshore platform, IRAQ

*Petrofac has worked with BOC for ten years as operations and maintenance service provider, helping to raise daily crude exports beyond 2 MMBBL.

Manage the Crude Oil Export Metering Package as follow:

- Perform conditional assessment and final project handover to the new company as per below activities:
 - 1- Ensure project deliverables are approved and transferred to the assigning party.
 - 2- Preparing the project status report.
 - 3- Filing in the project handover checklist.
 - 4- Completing outstanding documents and activities.
 - 5- Signing off the project handover checklist.
- All proving and re-calibrations are performed to API, MPMS standards, Iraqi National Code for Measurement of Hydrocarbon Fluids and recommendations of equipment manufacturers.
- Maintain all documentation associated with fiscal metering.
- Issue daily, weekly and monthly reports including all performed activities.
- Issue defect reports and MSRFs for any defected item.
- Carry out regular proving runs to maintain accuracy of steam instrumentation. Oversee master prover operations.
- Perform preventative maintenance relating to instrument devices such as densitometer inspection, flow computer configuration checks, sampling system strainers inspection, valve integrity check... to be against CMMS and data recorded in hard and soft copies.
- Follow up & execute all operation activities such as Batch preparation, valve management, Proving process...etc through Delta-V DCS.
- Perform visual inspection for all MOVs in weekly basis and recorded all comments and last status.
- Generate, review and analysis all health report data.
- Perform flow conditioners inspection and cleaning based on health report data.
- Analysis of calibration activities and performance.
- Identify deficiencies within the operational procedures regarding measurement systems
- Maintenance and troubleshooting of Fiscal Oil Metering Custody Transfer Units (Flow computer, Flow meters(USM), Automatic flow proportional sampling system (Jiskoot sampling system), Densitometer, Temperature Transmitter, Pressure Transmitter, DP Transmitters, Level Transmitters, Water Cut Meter, RTD, MOV and Prover etc.
- Support external audits by Employer and Government teams, involvement in inspections and safety observation tours.
- Work with the Project Scheduler to ensure that maintenance routine activities are accurate and justified.
- Monitor metering equipment performance and assist in improving performance.
- Preparation of Meter vs Ship deviation figure sheet, Pre and Post-inspection Sheet for metering skids.
- Review and analysis all third party (AmSpec) calibration activities and take the necessary corrective action if any calibration failed.
- Prepare work permit for any maintenance work on Fiscal Oil Metering Custody Transfer Unit.
- Supporting operation team in various regular plan activities.

*WASCO is a joint venture with DANA Gas. It is a gas process and LPG Recovery plant with daily capacity (200 MMSCFD, 5000 condensate BBD and 250 TON LPG)

- Review and understand client specifications during proposal phase. Raise clarifications and deviations not inline with Company standards.
- Review the instrumentation design basis and project specifications.
- Review preliminary MTO's for instrumentation bulk material during proposals.
- Provide inputs to other disciplines during project execution.
- Participate in engineering meetings.
- Responsible to deliver instrumentation engineering documents as per project schedule and in accordance to project budget.
- Participate in peer review of P&ID's and provide inputs as required. Define type of instrumentation that is required during project execution.
- Develop and review all instruments datasheets, material selection and technical specification to be included in the technical requisition during project execution.
- Review all instrumentation detail drawings and hook ups during project execution.
- Perform technical bid analysis of all instrumentation and instrumentation bulk material. Provide feedback to vendors.
- Review, comment and approved all outsourced instrumentation engineering.
- Review, comment and approved all instrumentation vendors' documentation.
- Participates in PHA studies such as Hazard and Operability- HAZOP, Hazard Identification-HAZID and SIL studies, safety reviews. (participates at Plant Re-HAZOP and SIL study)
- Define and review deliverables for SIL studies.
- Lead and assist junior Instrumentation engineers/designers when developing engineering deliverables.
- Maintain state-of-the-art knowledge in its discipline in accordance to applicable codes and standards.
- Provide support to processing facilities as required by Operations on engineering/technical matters.
- Produce, review, check and approve in-house designs and specifications.
- Carry out in-house site surveys, engineering / design;
- Review, evaluate and approve/reject Contract Changes / Variations;
- Responsible for managing, maintenance and troubleshooting instrument devices at plant to maintain overall system health and standards for optimum performance.
- Active participation in the design, installation and verification of newly added equipment
- Evaluating material requisitions and tenders, ordering new required materials, ensure the availability of critical materials and spare parts.
- Maintenance, troubleshooting and sizing of control Valves, Regulators and ESD (Emergency Shutdown Valve)(Fisher, Masonilean, Kimray, Bettis & Noriseal Models)
- Maintenance and troubleshooting of plant Fire and Gas system. (Honeywell and General monitors devices)
- Maintenance, troubleshooting and modify on plant PLC and SCADA systems. (Control Logix, Micrologix, Rsvi32 and Factorytalk products)
- Interface and provide clarification, guidance, and technical support to construction sites and commissioning engineers, provide start up assistance as required.
- Assure instrument Index, Input & Output Lists, Bill of Quantities, Block Diagrams, Equipment system specifications, cable routing, control room layouts, Cause and Effect Diagrams, Complex Control loop narratives and Safety narratives.

- Valve engineering : sizing, design, selection and special applications.(dated March 2016)
- Selection, calibration, maintenance and troubleshooting for field devices and control systems. (dated May 2016)

CMD (for non- Egyptian nationalities)

- Control room operations and design. (dated November 2017)
- Gas metering systems and custody transfer. (dated April 2019)

Online courses

- Introduction to process control and instrumentation. (dated April 2021)
- Rslogix 5000 Level 1 ControlLogix fundamentals and troubleshooting PLC course for Iraqi engineer. (dated November 2021)

Projects

1- Three Nodal compression package project,

Compressor with Waukesha engine (P9390GSI), surge vessel and separator

- Participate in peer review of P&ID's and provide inputs as required.
- Review all instruments datasheets, material selection and technical specification to be included in the technical requisition during project execution.
- Review all instrumentation detail drawings and hook ups during project execution.
- Perform C&E check.
- Perform function test for all instrument devices.
- Check all parameters and configuration at PLC code.(ControLogix L62)
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2- Ultrasonic Metering station project, Custody transfer

- Participate in performing function test for all instrument devices and Ultrasonic meter.
- Participate in commissioning and start up to flow-computer.
- Participate in commissioning and start up to GC.
- Perform SAT for the whole metering station in the presence of Emerson Rep.
- Review flow computers configuration against AGA-9.
- Replaced 2 CPU boards for 2 USM by new one and activate custody transfer option through meterlink software.

3- Stabilizer unit modification, Waukesha Engine H24GL

- Connect 8 CYL. Temp. Sensors to AB PLC (ControLogix L55) with complete configuration and added related screens with alarm configuration and security privileges to panel view application using FTview studio.

4- Waste water tank modification

- Connect all instrument devices mounted on the tank to PHIII PLC Panel.
- Program related configuration to PLC code.(ControLogix L62)
- Add related screen to RSview 32 application.

5- ITP Separator project

- Participate in peer review of P&ID's and provide inputs as required.
- Review all instruments datasheets, material selection and technical specification to be included in the technical requisition during project execution.
- Review all instrumentation detail drawings and hook ups during project execution.
- Perform C&E check.
- Perform function test for all instrument devices.
- Check all parameters and configuration at PLC code.(Micrologix 1400)
- Added new display for this separator using RSview32 at plant main HMI.

6- K-409 compression package modification, Waukesha Engine P9390GSI

- Participate in commissioning and start up activities.
- Issue MOC to modify PLC code for fixing Discharge valve problem that causes repeated shutdown.

7- Faraskour-1 Nodal compression package project,

Compressor with Waukesha engine (P9390GSI), surge vessel and separator

- Carry out in-house site surveys, engineering / design for all instrumentation devices;
- Edits and develops control design narratives for the whole package.
- Participate in HAZOP, Hazard Identification- HAZID and SIL studies, safety reviews.
- Review skid instrument installation specification/design.
- Review specifications Process Data Sheets (PDS) & Instrumentation Diagrams (P&ID's), Plot plans, General Arrangement (GA) drawings.
- Perform C&E check.
- Perform function test for all instrument devices.
- Check all parameters and configuration at PLC code.(ControLogix L62)
- Connect new elements to PLC panel.(Adding all instrument devices related to separator, surge vessel and fuel gas package to PLC code and configure those at compressor package PLC)(termination, testing and modify).**(Major modification)**

8- Faraskour-2 Nodal compression package project (EPC project),

Compressor with Waukesha engine (P9394GSI), surge vessel and separator

- Review EPC contracts/ Feed Package and detailed Engineering.
- Review instrument Index, Input & Output Lists, Bill of Quantities, Block Diagrams, Equipment system specifications, cable routing, control room layouts, Cause and Effect Diagrams, Complex Control loop narratives and Safety narratives documents.
- Review loop Diagrams, Functional Logic Diagrams, Terminations Diagrams, Installation Hook-up Drawings, Instrument Plot Plans, Control Panel Drawings, Control/Equipment Room Lay-outs, Cable Tray/Trench Lay-outs, Cable Schedules and Cable Drum Schedules, JB schedules, Interconnection Schedules, Installation detail drawings, Fire/Smoke Detection Lay-out and Alarm Lists.
- Participate in HAZOP, Hazard Identification- HAZID and SIL studies, safety reviews.
- Review skid instrument installation specification/design.
- Review specifications Process Data Sheets (PDS) & Instrumentation Diagrams (P&ID's), Plot plans, General Arrangement (GA) drawings.
- Verify contractor's work quality regarding specifications, reports, code application, submittal review, equipment selection, deliverables, and drawings.
- Provide technical responses to contractor's variation requests.
- Attend FAT for plant F&G panel at General Motors in USA.
- Attend function test for all instrument devices with vendor.
- Participate in changing plant control philosophy.

9- Coriolis Metering station project (EPC project), Custody transfer

- Issue a complete scope of work based on API MPMS 5.6.
- Participate in selecting the suitable place for installing the proposed flow meter after online negotiation with Emerson.
- Contact with vendors and get a complete proposal for the new meter.
- Review all technical offers to match our requirements.

10- El-Wastani Plant Firefighting and F&G Revamping Project (EPC project), (In Construction phase)

- Review instrument datasheet, instrument Index, Input & Output Lists, Bill of Quantities, Block Diagrams, Equipment system specifications, cable routing, control room layouts, Cause and Effect Diagrams, Complex Control loop narratives and Safety narratives documents
- Review loop Diagrams, Functional Logic Diagrams, Terminations Diagrams, Installation Hook-up Drawings, Instrument Plot Plans, Control Panel Drawings, Control/Equipment Room Lay-outs, Cable Tray/Trench Lay-outs, Cable Schedules and Cable Drum Schedules, JB schedules, Interconnection Schedules, Installation detail drawings, Fire/Smoke Detection Lay-out and Alarm Lists documents.
- Reply on vendor technical inquiries; participate in the technical evaluation of vendor bid offers.

Education

BSC. in Electronics and Communication Engineering, Higher institute of Engineering, el Shorouk academy, 2008.

Total Grade: Excellent with honor degree. (85.22%)

Languages

Arabic



English



Courses

Certified Functional Safety Engineer, TÜV Rheinland

12/2020 – 12/2025

TÜV Rheinland Group

Credential ID 21658/21

Lifeboat Coxswain

03/2022 – 03/2025

Solas Marine Services

Cert. No.: JIESS22535/LB/001

Authorized Gas Tester

03/2022 – 03/2025

Solas Marine Services

Cert. No.: JIESS22535/AGT/001

Safe Operation Of Hydratight

03/2022 – 03/2025

Solas Marine Services

Cert. No.: JIESS22535/SOH/001

Basic Fire Fighting

03/2022 – 03/2025

Solas Marine Services

Cert. No.: JIESS22535/BFF/001

Safe Operation Of Scissor Lift

03/2022 – 03/2025

Solas Marine Services

Cert. No.: JIESS22535/SOSL/001

Sea Survival

02/2022 – 02/2025

RelyOn Nutec

Cert. No. 8628811

Commissioning and start up

ENNPI

Rockwell Automation RSView32 project management

Amsol

Rockwell Automation RSLogix 5000 level 3 maintenance and troubleshooting

Amsol

Rockwell Automation basics of FTview studio machine edition

Amsol

Skills

Daniel MeterLink (For USM Diagnoses)

MON2000 (Gas chromatograph software)

RSlogix 5000

RSview 32

Factorytalk view products

Kelton- flowcal (For flow & energy calculations)

Emerson instrument toolkit

Microsoft Windows & Office

References

Mabrouk Smei, *Line Manager*
mabrouk.Smei@petrofac.com

Garry Burgess, *Line manager*
garry.burgess@petrofac.com

Certificates

USA visa

Control No. 20192208960001
Date of Expiry: 13/08/2024

Seaman book

Control No. CDC131655
Date of Expiry: 21/01/2027