# 103907-CSX-1MSx-E-2009 DCS Engineer

Holds a B. Sc. in Control Systems & Computers Engineering and a Higher studies Diploma in automatic control. Has over 13 years' experience in detailed maintenance, commissioning and development co-ordination of instruments and control systems in Power Plants.

#### PERSONAL DATA

Nationality : Egyptian Birth Date : 20/09/1987

Gender : Male Marital Status : Married

Residence : Currently Ghana

## **EDUCATION**

B. Sc. in Control Systems & Computers Engineering, Al-Azhar University,

2009

: Higher studies Diploma in automatic control, Cairo University, 2014

### **LANGUAGES**

Arabic : Native Language

English : Fluent

### **COMPUTER SKILLS**

: Windows, MS Office, Internet

: Programming languages: C#, Java

# TRAINING COURSES AND CERTIFICATIONS

: Instruments (Trainer) (Sep. 2021).

: Classic control and PLC (Trainer) (Feb. 2021).

: Troubleshooting of printed circuit boards (May 2019).

: Burner management system (Foxboro) (Sep. 2018).

: Boiler protection system (Triconex) (May 2018).

: Instruments maintenance by Siemens (Apr. 2018).

: Java development language, self-study.

English course by Berlitz Center (2017).

: OSHA construction 10 hrs (Sep. 2017).

: Maintenance reliability training (May 2017).

: Hydrogen unit operation & maintenance (Apr. 2017).

- : Project Management Professional (PMP) training (Mar. 2017).
- : Automotive repair and maintenance training (Feb. 2017).
- : Boiler operation training, Ansaldo (Sep. 2016).
- : Analyzer (sodium, conductivity, PH, silica) equipments training (May 2016).
- : Instrument and PLC Allen Bradley training (Mar. 2016).
- : Introduction in steam power plant (Sep. 2010).
- : MCSE (two tracks) (Jun. 2009).
- : CCNA (Aug. 2008).
- : C# programming (May 2007).

#### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Feb. 2023 till now

**Employer** : ABB **Project** : Ghana

Job title : DCS Engineer (800xA system)

Job Description

Work as DCS Engineer for commissioning and start-up combined cycle

(Bridge) power plant.

Creating and modification logic diagrams.

- Creating and modification graphics HMI.
- Work on ABB ESD system.
- Work on Machinery Condition Monitoring (MCM800) system.
- Work on digital communication (Modbus/TCP, OPC, profibus).
- Powering remote I/O cabinet and connecting with the CPU cabinet.
- Making loop check and function test for the logic.
- · Configuring network switches.
- Admin for the domain.

Dates : From Sep. 2014 till Feb. 2023
Project : Suez Thermal Power Plant

(upgrading the steam power plant from 95MW to 1x650MW)

Job title : I&C Engineer

Job Description : •

• Lead a team of 6 people to troubleshoot any defect in the instrumentation of the site.

- Supervised and participated for the following activities throughout the construction, commissioning and start-up phases of the power plant:
  - Installation for the instrumentation and control systems.
  - Commissioning for the Burner management system with Invensys DCS (Foxboro I/A) and Protection system (Triconix).
  - Commissioning for ABB power plant DCS (800XA).
  - Commissioning for the Soot-blower system with Siemens s7-300 PLC.
  - Commissioning for the Water treatment system with Allen-Bradley PLC control.
  - Commissioning for the Turbine feed water pump with Woodward control system Micronet.
  - Preparing the recommended spare parts and workshop tools.
  - Reviewing the control philosophy, P&ID, wiring and hook-up

documents.

- Participating in DCS I/O panels Factory acceptance test for the ABB 800XA DCS.
- Following up the calibration of the instruments of the site.
- Follow up the loop check for the instruments (vibration, pressure, flow, level, temperatures) and valves of the power plant.
- Commissioning for the fire alarm system.
- Commissioning for the hydrogen unit in our power plant.
- Commissioning for the Continuous emission monitoring system (CEMS).
- Administrator for the 800XA ABB DCS.
- Administrator for the burner management system and boiler protection system (Foxboro and triconex).
- Automation Engineer for the water treatment as PLC Engineer "Allen-Bradley" type.
- Maintain the instruments (ABB, Rosemount, Siemens, Endress+Hauser and HACK) for various measurements, switches and valve's positioners (Siemens, eckardt and DVC 6200) of the power plant through the scheduled and corrective maintenance.
- Maintenance Engineer for the hydrogen generator proton type.
- Maintenance Engineer for the 4 centrifugal compressors Centac type with PLC master controlling the system pressure and the anti-surge condition.
- Maintenance Engineer for the auxiliary boiler with PLC Siemens s7-400 control system.
- Maintenance Engineer for pneumatic, solenoids and motorized (Auma, Rotork, Centork, etc....) on/off and control valves.
- Maintenance Engineer for the air dryer system with PLC Siemens s7-1200 control system.
- Increasing the efficiency of the rotating equipment by maintaining the oil purification control system.

Dates : From Sep. 2010 till Sep. 2014

Project : Ataka Power Plant (4 units with totally 900MW steam power plant)

Job title : I&C Engineer

**Job Description**: • Participated the DCS team for caring out all control functions that improve the power plant process.

Solved the (DCS ovation 3.3.1) software and hardware defects.

- Solved the network (Cisco switches) faults between controllers and the HMI station.
- Identified new signals (analog, digital...) in the process.
- Created and modified control loops.
- Created and modified displays to preview online signals.
- Administrated vibration system (CSI 4600) that was linked with the DCS by OPC protocol, this was comprised of one server, client (DCS) and vibration cabinet with I/O modules.

Dates : Part time Employer : Contaga Co.

**Project** : Calibration for the instruments of Assiut Combined Cycle Power Plant

Job title : Calibration Engineer

**Job Description**: • Calibration the instruments of the site.

Preparing the certificates of the instruments.

Dates : From Feb. 2010 till May 2010 Employer : Micro Company, Cairo – Egypt

Job title : Computer Engineer

**Job Description**: Fixed computers and power supplies of the computer devices.

#### **Technical Skills:**

- Instrumentation (installation, commissioning and maintenance).
- Communication protocols (Foundation Field bus, Profibus, HART).
- Burner management system (BMS).
- ESD (Triconex system).
- PLC programming languages (ladder, structure text, function block, sequential function chart).
- DCS (ovation, 800XA, Foxboro, Woodward).
- ESD (Triconex system).
- Siemens applications (sematic, Wincc and TIA portal).
- Allen Bradley applications (Rslogix and factory talk view studio).
- Instrumentation calibration.
- Programming (c#, java).
- Classic control.
- Safety instrument system concept.
- PLC (Siemens s7-300, 400, 1200 and Allen Bradley).
- Instrumentation documents (P&ID, process flow diagram and loop diagram).
- Process control (PID concept).
- Thermal Power Plant process.
- Networking.
- Preventive maintenance.
- OSHA.