**102811-MEC-18OS-E-2009**
Mechanical Engineer

Holds B. Sc. in Mechanical Power Engineering and M. Sc. in Thermal Engineering. Has about 8 years hands-on experience working in operation field.

## PERSONAL DATA

| | | |
|---|---|---|
| Nationality | : | Egyptian |
| Birth Date | : | 15/10/1986 |
| Gender | : | Male |
| Marital Status | : | Married |
| Residence | : | Currently Dubai, UAE |

## EDUCATION

: B. Sc. in Mechanical Power Engineering, Alexandria University, 2009
: M. Sc. in Thermal Engineering, Alexandria University, 2013

## LANGUAGES

| | | |
|---|---|---|
| Arabic | : | Native Language |
| English | : | Good |

## COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: AutoCAD (2D, 2D Isometric, 3D)
: Matlab
: Visual Basic

## TRAINING COURSES AND CERTIFICATIONS

: English**:** TOEFL Certificate.
: Office Certificate (Word, Excel, Power Point, Access, Internet) from Arab Cultural Center.
: Matlab Certificate (Dynamic System Modeling using MATLAB and Simulink) from EAAC Center.
: Summer trainings at:
- Petroleum Marine Service Company (P.M.S).
- General Authority for Passenger Transport.
- West Delta Electricity Production Company.
- Alex Company for Electricity.

: Job Training Certificate from Ansaldo Energia Company for Steam Turbine Operation.

: Job Training Certificate from West Delta Electricity Production Company for Common Failure in Steam Turbine.

# CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Feb. 2015 till now

**Employer** : Dubai Electrical and Water Authority (DEWA)

**Project** : Jebel Ali Power Plant Complex in Plant 2 (M Station):

- Three Power Blocks Combined Cycle:
  - Gas Turbines (GT): Two Gas Turbines Generators with Dual fuel Burner Supplied by Siemens Supply 250MW.
  - Heat Recovery Steam Generator (HRSG): Two Heat Recovery Steam Generator Dual Pressure Level with Auxiliary Fire Connected Parallel to one Steam Turbine and Two Pressure Reduction Stations (HP/IP & HP/LP) Supplied by Doosan.
  - Steam Turbine (ST): One ALSTOM Steam Turbine Generator rated to 250MW.
- Eight Units MSF Desalination units, Blending Plant and Demi Water Plant.
- Two Auxiliary Boiler.
- Natural Gas Pressure Reduction Station.
- Distillate Fuel Oil (DFO) Tank Farm Consist of 16 Tanks.

**Job Description** :

- Responsible to Perform, Control and Monitor from Central Control Room the operation of the Power Generation ensure continuous supplies of Power.
- Prepare and operate Combined Cycle 750MW (Gas Turbine, HRSG, Steam Turbine and there auxiliaries) in all operation modes (cold, warm and hot) start-up, and safe shutdown, change over the equipment from local and control room.
- Coordinate with other operators to achieve reliable, efficient and safe operation of Equipment, System, Plant and Safety of Operating Personnel.
- Responsible to monitor and check operating condition of Plant, Equipment and Record Process Parameter available in local area and Report to SPSO and DMSO to take corrective action in case of any abnormality.
- Responsible to Follow up and Carry out Plant Routine Activities as per Approved Schedule.
- Responsible to assist in start-up, shutdown and Emergency Operation of the Plant and Equipment as per instruction. Report Abnormality and Defects observed to the Superiors.
- Responsible to take necessary reading for preparation of daily, weekly and monthly report.
- Responsible to carry out necessary isolation and normalization with instruction of SPSO and DMSO and place LC tag in each isolation point and remove after normalization.
- Responsible to carryout fuel oil Storage Tank filling from Road Tankers. Obey safety rules.
- Participate tool box talk on-job training and group discussion conducting by SPSO, DMSO and to carry out the job accordingly. Train Assigned new Operators as substitutes.

- Operate Power Plants Auxiliaries:
  - Natural Gas Pressure Reduction Station or all Power Blocks and Auxiliary Boilers.
  - Distillate Fuel Oil (DFO) Tank Farm Consist of 16 Tanks.
  - Demi Water Plant.
  - Two Auxiliary Boiler.
- Operate eight Units in MSF water Desalination.
- Blending Plant and Demi Water Plant.
- Prepare all the required Technical Mechanical Documentation.
- Electrical Distribution System Operation Rack in & Rack out Electrical Breaker 11KV, 380KV and 220KV for all Plants.

**Dates** : From Apr. 2010 till Jan. 2015

**Employer** : West Delta Electricity Production Company

**Project** : Sidi Krir Combined Cycle Power Plant (750MW):

- Gas Turbines (GT): Two Gas Turbines Supplied by MITSUBISHI. Model M701F Gas Turbines each Coupled to Hydrogen Cooled Generator each rated to 250MW
- Heat Recovery Steam Generator (HRSG): Two NEM Three pressure level, Reheat, Unfired Heat Recovery Steam Generator (HRSGs)
- Steam Turbine (ST): One ANSALDO ENERGIA Steam Turbine Generator rated to 250MW

**Job Description** :

- Prepare and operate Combined Cycle 750MW (Gas Turbine, HRSG, Steam Turbine and there auxiliaries) in all operation modes (cold, warm and hot) start-up, and safe shutdown, change over the equipment from local and control room.
- Operate and monitor Gas Turbine Generator Supply 250MW & Linked with team work for Annual Gas turbine overhaul.
- Operate and monitor Two Heat Recovery Steam Generator Connected Parallel to one Steam Turbine & Linked with team work for HRSG Sections Inspection during Annual Gas Turbine overhaul.
- Operate and monitor Steam Turbine consist of three sections HP, IP and LP Operates under Sliding Pressure Supply 250MW & Linked with team work for Inspection overhaul to Steam Turbine blades and main Steam valves.
- Operate Generators & Generator Auxiliaries (Hydrogen cooling & Seal oil Systems).
- Operate Power Plants Auxiliaries.
- Reporting the equipment condition during shift.
- Prepare all the required Technical Mechanical Documentation.
- Good knowledge with steam unit troubleshooting.
- Good knowledge with P&I diagrams and process drawing.

**Dates** : From Dec. 2009 till Apr. 2010

**Employer** : Misr Chemical Industries Company

**Job Description** :

- Shift Engineer for Operation and Maintenance of Fire Tube Boiler.
- Inspection Overhaul for Fire Tube Boiler.
- Maintenance for shell & Tube Heat exchanger.
- Reporting the equipment condition during shift.
- Good knowledge fire tube Boiler troubleshooting.

**Field of experience :**

- Ability of Thermodynamic, Thermo economic and Heat transfer Analysis (Power Plants – Gas Turbines – Steam Turbines – Boilers – Heat Exchanger).
- Power Plants.
- Gas Turbines (Operation – Spin cooling after shut down – good knowledge in standard overhaul).
- Steam Turbines (Operation – Governor & Control System).
- Condensers (Sizing – Construction – Vacuum System – Circulate Water System).
- Boilers (Operation – Thermal Analysis – Control System – Inspection).
- Steam (Steam Generation – Pool Boiling – Flash & live Steam).
- Pumps (Analysis for system curve & performance curve – Pump Construction – Pump Connections).
- Generators (Operation – Hydrogen Cooling System – Seal Oil System).
- P&ID (Good knowledge with P&I diagrams and process drawing).
- ASME (used ASME 2004 Boiler & Pressure Vessel to size HRSG similar to one which in Sidi Krir Power Plant).
- TEMA (use TEMA 8th Edition to Arrange the tubes inside HRSG similar to one which in Sidi Krir Power Plant).
- Mechanical Engineering.
- Engineering.
- Engineering Management.
- Valves.
- Commissioning.
- Piping.
- Mechanical Drawing using AutoCAD (2D, 2D Isometric, 3D).
- Dynamic System Modelling using MATLAB and Simulink (Suspension System – Electrical motor).