

**103868-MEC-18MOS-E-2009**  
**Mechanical Commissioning Engineer**

Holds a B. Sc. in Mechanical Power Engineering and has over 12 years hands-on experience working in operation, commissioning, start-up and maintenance.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 01/12/1986  
Gender : Male  
Marital Status : Married

## EDUCATION

: B. Sc. in Mechanical Power Engineering, Benha University, 2009

## LANGUAGES

Arabic : Native Language  
English : Very Good

## COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet  
: Carrier Hourly Analysis Program (HAP)

## TRAINING COURSES AND CERTIFICATIONS

- : Steam Power Plant Equipments And Operation Systems (BECHTEL COURSE), Shoubra El-Kheima Power Station.
- : Boiler Operation and Maintenance (30 days), Hitachi.
- : Basics of Power Plant (40 days), Cairo West Thermal Power Plant.
- : Protection of Power Plant Units in Emergency Cases (6 days), Shoubra Thermal Power Station.
- : Turbine and Boiler Control (6 days), Shoubra Thermal Power Station.
- : AutoCAD (2D), Ain Shams Faculty of Engineering.
- : Summer training at Cairo North Power Station (Jul. 2007):
  - I knew many things about how to control the motors.
  - I knew many things about how to rotate the motors.
  - Operation & Maintenance of Steam Power Plant – Gas Power Plant – Combined Cycle Power Plant.
  - Acquaintance with HRSG – Turbine – Generator – Transformers – Instruments.

# CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Jan. 2021 till now  
**Employer** : [EGYPTROL](#), AC Boilers Subcontractor  
**Project** : Assiut Supercritical Power Station 1x650MW Gas/Oil Fired Boiler  
**Job title** : Mechanical Commissioning Engineer  
**Job Description** :

- Performing pre-commissioning and commissioning activities: walk down inspection, punch list, and prepare for steam blowing.
- Carry out all commissioning activities (chemical cleaning, steam blowing) as per manufacture recommendation.
- Hydro test, air blowing and flushing for all boiler systems piping to be ready for operation.
- Solo and heat run test for pumps and fans.
- Boiler safety valves calibration to its setting pressure.
- Firefighting system commissioning.
- Carry out Gas Distribution Test for Dry Electrostatic Precipitator (DESP).

**Dates** : From Mar. 2020 till Dec. 2020  
**Employer** : [EGYPTROL](#), AC Boilers Subcontractor  
**Project** : South Helwan Power Plant (3x650MW) Gas/Oil Fired Boiler  
**Job title** : Shift Charge Engineer  
**Job Description** :

- Performing pre-commissioning and commissioning activities: walk down inspection, punch list, and prepare for steam blowing.
- Carry out all commissioning activities (chemical cleaning, steam blowing) as per manufacture recommendation.
- Cold/Hot Startup and shutdown procedure.
- Operation of boiler according to operation instructions during Benson load using BCP (Boiler Circulating Pump) till once through load.
- Maintain the boiler in proper operation.
- Maintain maximum boiler efficiency by adjusting, reading, and interpreting gauges, indicators, and steam flow meters.
- Operate steam plant as situation warrants on natural gas or oil.

**Dates** : From Jan. 2018 till Jan. 2020  
**Employer** : [EGYPTROL](#), Al Toukhi Subcontractor  
**Project** : Conversation of Hail-2 Simple Cycle to Combined Cycle Power Plant, project in Hail, Saudi Arabia. The facility is a 4 x 4 x 1 combined cycle configuration consisting of:

- 4 SIEMENS SGT6-2000E gas turbines.
- 4 AMEC FOSTER WHEELER HRSG two pressure.
- One SIEMENS SST-800 Steam Turbine 165MW.
- Direct Air Cooled Condenser.

**Job title** : Mechanical Commissioning, Start-up & Central Control Room Engineer  
**Job Description** :

- Performed pre-commissioning and commissioning activities: walk down inspection, punch list, and prepare HRSG for steam blowing.
- Implementing start-up, normal, shut down operations and emergency handling as per operation manual and auto.
- Communicate with dispatchers to match production with system requirements.

- Monitoring turbines, generators, transformers, all motors, pumps and all plant equipment's.

**Dates** : From Jul. 2016 till Dec. 2017  
**Employer** : [EGYPTROL](#), AC Boilers Subcontractor  
**Project** : Suez Thermal Power Plant new project unit (1x650 MW gas/oil)  
**Job title** : Mechanical Commissioning & Start-up Engineer  
**Job Description** :
 

- Ansaldo Caldaie steam boiler specification: Radiant box type, natural gas & fuel oil, BM.C.R 574.3 kg/s, SH outlet pressure 183 bar, SH outlet temperature 541°C, RH steam flow 480.5 kg/s, HR pressure 41.1 bar, HR temperature 565°C, burner type TEA B.A., No. of burners 30, Two air heaters, Two forced draft fans and Two gas recirculation fans.
- Commissioning of the following System:
  - Water and steam cycle.
  - Combustion air/flue gases.
  - Mazout and solar oil.
  - Firefighting.
  - Shut off & control valves.
  - Fuel oil heaters.
  - Steam blowing.

**Dates** : From May 2015 till Jul. 2016  
**Employer** : INITEC Energia  
**Project** : New Project in GIZA North Power Plant (3 modules x 2250MW)  
**Job title** : Shift Charge Engineer  
**Job Description** :
 

- Carry out all commissioning activities (Hydro-test, chemical cleaning, steam blowing) as per manufacture recommendation.
- Making commissioning for service water system, firefighting system, condensate system, closed cooling system, compressed air system, demine water system, fuel, oil, system, fuel gas system, feed water system, drain system, H2, N2, CO2 system.
- Create elaborate commissioning plan including the scope of commissioning activities, duration for each, scope of interlinked activities, resources available, commissioning material requirements as well as availability of tools and machinery.
- Managing and coordination with different subcontractors working at site.
- Ensure that all safety and precautionary requirements and procedures are followed during the commissioning process in line with the commissioning schedule.
- Supervising pre-operational, operational and load performance activities.
- Making on-site training for client engineers.

**Dates** : From Apr. 2014 till Apr. 2015  
**Employer** : DEWA (Dubai Electricity and Water Authority)  
**Job title** : Operation Engineer  
**Job Description** :
 

- Start-up and shut-down procedures for Thermal Power Plant 1x350MW (cold, warm and hot start-up and normal or emergency shut-down).
- Boiler and auxiliaries operation (HITACHI).
- Operate and adjust high-pressure gas and oil fired boiler in the steam

generating plant.

- Maintain maximum boiler efficiency by adjusting, reading, and interpreting gauges, indicators and steam flow meters.
- Maintain oil heaters, pumps, oil storage facilities and oil unloading equipment.
- Operate steam plant as situation warrants on natural gas or oil.

- Dates** : From Jan. 2010 till Apr. 2014
- Employer** : Cairo Electricity Production Company
- Project** : Cairo West Thermal Power Plant Units 7 & 8 (2x350MW)
- Job title** : Operation Engineer
- Job Description** :
- Local Engineer:
    - Apr. 2010: Observing the Hydrostatic for Boiler.
    - May 2010:
      - Observing Erection & Commissioning of all machines (Fans, Pumps and Auxiliary Machines).
      - Observing Installation of Turbine and Turbine Auxiliaries.
      - Observing Installation of Boiler and Boiler Auxiliaries.
      - Observing Installation of Piping and Valves.
  - Turbine Operator (Mitsubishi):
    - Start or signal AUXILIARY - EQUIPMENT OPERATOR to start turbines auxiliaries (Vacuum pumps, lube oil pumps, fans, control oil pumps and seal oil pumps).
    - Adjust throttle and vacuum-breaker valve to engage governor that regulates speed of turbines and notifies SWITCHBOARD OPERATOR that turbine-driven generators can be synchronized with auxiliary units.
    - Monitor turbines to detect any equipment malfunctions and stops it when malfunctions occur.
    - Record instrument readings at specified intervals.
    - Perform minor maintenance or equipment, using hand tools.
  - Boiler Operator (Hitachi):
    - Operate and adjust high-pressure gas and oil fired boiler in the steam generating plant.
    - Maintain maximum boiler efficiency by adjusting, reading and interpreting gauges, indicators and steam flow meters.
    - Maintain oil heaters, pumps, oil storage facilities and oil unloading equipment.
    - Operate steam plant as situation warrants on natural gas or oil.
  - BOP Operator (Balance of Plant):
    - Safe operation on powerhouse utilities production equipment and related systems.
    - The equipment and systems will include condensate pumps, Booster feed water pumps, main feed water pumps, Heaters, compressors and other support systems.
  - Shift Charge:
    - Testing and changing over for all mechanical equipment locally and from control (good dealing with hydrogen production plant and mechanical equipment).
    - Making connection and disconnection for electrical circuits of 6.3KV, 400 V and operation of electrical diesel generators.
    - Making daily technical reports about the units.

- Very good dealing with fire fighting system (water system, foam system and powder system locally and alarms control panel).

**Dates** : From Jun. 2009 till Jan. 2010  
**Employer** : Integrated System Company  
**Job title** : Maintenance Engineer  
**Job Description** : Maintenance for waste water treatment in 18 Factory.

**Dates** : May/Jun. 2009  
**Employer** : General Company for Porcelain & Ceramic  
**Job title** : Maintenance Engineer