#### **100522-MEC-1COS-E-2008** Construction, Commissioning, Start-up & Operation Engineer

Holds a B. Sc. in Mechanical Engineering and a Power Station Diploma. Has about 9 years hands-on experience working in installation for gas turbine, steam turbine, boilers and related auxiliaries. All aspects of commissioning start-up and operation for all mechanical equipment (static and dynamic) to be according client contract specification, and manufacture requirement. Understanding of P&ID drawing and pipe line installation commissioning, under & above Ground piping, pumps and valves..

# PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	14/08/1984
Gender	:	Male
Marital Status	:	Married
Residence	:	Kafr El-Sheikh

### EDUCATION

- : B. Sc. in Mechanical Engineering, Mansoura University, 2008
- : Power Station Diploma, Kafr El-Sheikh University, 2018

# LANGUAGES

Arabic	:	Native Language
English	:	Very Good

## **COMPUTER SKILLS**

: Windows, MS Office, Internet

## CHRONOLOGICAL EXPERIENCE RECORD

Dates	:	From 2009 till now	
Employer	:	Middle Delta Electricity Production Company	
Project	:	EI-Atf 750MW Combined Cycle	
Job title	:	Construction, Commissioning, Start-up & Operation Engineer	
Job Description	:	OWNER Representative Mechanical Engineer, responsible for:	
		• OWNER Mechanical Construction Engineer, responsible for:	
		<ul> <li>Preparation of Isometrics / Weld Maps.</li> </ul>	
		<ul> <li>Control of Spool Fabrication activities.</li> </ul>	
		- Conoral Control of Construction activities (Mechanical)	

- General Control of Construction activities (Mechanical).
- Assisting Piping Engineer in Pipe Engineering activities.
- Making a Plan and Control for All Activity (Piping and Equipment Installation).

- All Types of Fabrication, Welding Methods, Procedures and Materials.
- Performing Visual Inspection.
- FOR GAS TURBINE LARGE FRAME:
  - Commissioning, Start-up and operation of gas turbine Mitsubishi (2x250MW) (M701F) and its Related auxiliaries such as: Lube oil unit – hydraulic oil unit – purge air compressor – GT by pass damper – fuel gas compressor – vibration monitoring system – turbine cooling air cooler (TCA) – hydrogen filling system for cooling generator – hydrogen releasing system by using air after using CO2 – CO2 firefighting system.
  - Participated in gas turbine inspection (M701F) for unit (1, 2):
    - 8000 equivalent operation hours combustion chamber inspection (Jan. 2010).
    - 16000 equivalent operation hours gas turbine hot gas path inspection (Oct. 2010).
    - 24000 equivalent operation hours combustion chamber inspection (Oct. 2011).
    - 32000 equivalent operation hours gas turbine hot gas path inspection (Oct. 2012).
    - 40000 equivalent operation hours combustion chamber inspection (Nov. 2013).
  - Participated in gas turbine fuel oil piping & water injection piping flushing.
  - Participated in major overall for natural gas compressor (centrifugal compressor).
  - Participated in major overall for purge air compressor (reciprocating compressor v-type).
- FOR NEM HRSG boilers:
  - Perform the chemical cleaning according to procedures for condensate system & feed water system.
  - Perform the steam blow-out activities for HP steam, HRH & CRH steam, LP steam lines.
  - Commissioning, Start-up and operation of Steam turbine ANSALDO (250MW) and it's related auxiliaries such as: Lube oil system – hydraulic oil system – jacking oil system – hydrogen filling system for cooling generator – vacuum system – STF condenser – seal oil system.
- FOR steam turbine:

Final warranty overall for Ansaldo steam turbine 250MW, including the following:

- Valves & bearings inspection by ultrasonic & penetration test.
- Check clearance gap & stroke for valves.
- Check the clearance of the bearings.
- Check the thrust clearance for the shaft of the turbine by external jacking pump.
- Also construction, commissioning and testing for the following systems:
  - Condensate system & condensate pumps.
  - Feed water system (LP, HP/IP) FWP's.
  - Circulating water system & CW pumps.

- Perform the sequence test for the following systems:
  - Condensate system & condensate pumps.
  - Feed water system (LP, HP/IP) & FWP's.
  - Circulating water system & CW pumps.
  - Service water system.
  - Closed cooling system.
  - Instrument and service air system.
  - Potable water system.
  - Cooling water intake equipment (sluice gate, traveling screen).
- Record the commissioning data for all systems mentioned previously.
- Lifting test for cranes by water bag (static / dynamic).
- Report and advice the daily activities for all systems mentioned previously.
- Conducting all preparation steps of units in field to realize permissive for Start-up from control room such as (filling line of water free of bubbles, all Safety valves ready, coolers in service, all skids of hydraulic and pneumatic Ready, firefighting ready, all electrical power source ready position of Motorized valves in auto mode and ready to work locally, all manuals valves Before and after control and motorized valves shall be open, etc.
- Responsible of start-up, operation, remarking alarms of units from control Room and solve operation problems.
- Survey in field for more check and confirmation of safe operation of equipment.

#### **Field of experience :** • Gas turbine construction, commissioning, start-up and operation.

- Boiler (HRSG) commissioning, start-up and operation.
- Steam turbine & auxiliaries (condenser, vacuum system, tube cleaning system and debris filter) commissioning and start-up.
- Construction, commissioning and start-up for combined cycle auxiliaries such as (closed cooling system, Condensate system, feed water system and circulating cooling system).
- Skills:
  - Technical ability in the field and in the office.
  - Adaptable, with ability to have valuable input to many aspects of a project.