**101043-MEC-M-E-2006**
Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 8 years hands-on experience working in maintenance of gas and steam turbines at Nubaria Power Station.

## PERSONAL DATA

| | | |
|---|---|---|
| Nationality | : | Egyptian |
| Birth Date | : | 20/02/1984 |
| Gender | : | Male |
| Marital Status | : | Single |
| Residence | : | El-Behira |

## EDUCATION

: B. Sc. in Mechanical Power Engineering, Alexandria University, 2006

## LANGUAGES

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

## COMPUTER SKILLS

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

: PMP course & Primavera (P6), New Horizons Computer Learning Centers of Alexandria.

: Operation Training on Siemens CTG V94.3A, Nubaria Power Station.

: I&C Operator and Maintenance Course on Siemens CTG V94.3A, Nubaria Power Station.

: Basic Operation Training on Siemens CTG V94.3A, Nubaria Power Station.

: Mechanical Maintenance Training, Nubaria Power Station.

: Operation Training on Combined Cycle, Nubaria Power Station.

: Operation Training on Switchyard, Nubaria Power Station.

: Training course in the field of occupational safety and health, Nubaria Power Station.

: Training course in the field of maintenance management and inventory control (Amplissima), Talkha Power Station:

- Work Order Module Functions.
- Preventive Maintenance Module Functions.
- System Administrator Functions.

- Plant Module Functions.
- Document Module Functions.
- Store Module Functions.
- Purchasing Module Functions.
- Report Generator Functions.

: Training course in the field of maintenance management and inventory control (EMPAC), Abu Qir Power Station.

# CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Jan. 2008 till now

**Employer** : Middle Delta Electricity Production Company (MDEPC)

**Project** : Nubaria Combined Cycle (3x750MW) Power Station:

- Two modules, each module consists of:
  - Two Siemens CTG 250MW type V94.3A.
  - Two horizontal Alstom HRSGs.
  - One Mitsubishi STG 250MW (HP, IP, LP).
- One module consists of:
  - Two GE CTG 250MW.
  - Two horizontal STF HRSGs.
  - One Alstom STG 250MW (HP, IP, LP).
- 220KV switchyard, 500KV switchyard.
- Four tie transformers 500/220KV.
- Medium and Low Voltage Switchgears.
- 8 outgoing circuits 220KV, 2 outgoing circuits 500KV.

**Job title** : Mechanical Maintenance Engineer

**Job Description** :

- Assist in erection of wet compression system for 2 units Siemens gas turbine V94.3A (250MW):
  - Erection of wet compression skid.
  - Make alignment check for the wet compression skid pump.
  - Erection of piping & nozzle for wet compression system.
  - Make NDT for piping.
  - Make hydro test for wet compression system.
- Assist in minor inspection for Siemens CTG 250MW type V94.3A for 4 units Siemens gas turbine (250MW):
  - Chemical cleaning for burners.
  - Changing of ceramic tiles of combustion chamber.
  - Visual inspection of turbine & compressor blades.
- Assist in hot gas path inspection for Siemens CTG 250MW type V94.3A for 4 units Siemens gas turbine (250MW):
  - Removing the outer casing in the turbine section (casing #3).
  - Lifting off upper sections of the turbine stationary blades carrier.
  - Rolling out the lower section of the turbine stationary blades carrier.
  - Removing old blades / vans for refurbishment / replacement.
  - Chemical cleaning for burners.
  - Changing of ceramic tiles of combustion chamber.
  - Check clearance for 1$^{st}$ stage compressor & 4$^{th}$ stage turbine blades.
  - Removing and inspection fuel oil and fuel gas stop and control valves and make passing test for all valves.
- Assist in major inspection for 2 units Siemens gas turbines (250MW):
  - Chemical cleaning for burners.

- Changing of ceramic tiles & damage ceramic heat shield of combustion chamber.
- Visual inspection of compressor blades.
- Check the axial & radial clearance for blades.
- Removing the outer casing in the turbine section (casing #3).
- Removing the casing of combustion chamber (casing #2).
- Removing the compressor casings (casing 1, 2 comp).
- Lifting off upper sections of the turbine stationary blades carrier and the lower section of the turbine stationary blades carrier.
- Removing old blades / vans for refurbishment / replacement for all turbine & compressor.
- Lifting the rotor from horizontal position to vertical.
- Distracting the rotor.
- Make NDT for all critical places (as slots of the blades of the compressor & turbine disks).
- Make alignment between the gas turbine & and generator shaft.
- Oil flushing.
- Removing and inspection fuel oil and fuel gas stop and control valves and make passing test for all valves.
- Removing fuel oil pumps and makes inspection of internal parts and reassembly again and makes alignment for the pump.
- Removing hydraulic oil pump and make inspection of internal parts and reassembly again.

- Assist in CI inspection for GE gas turbine frame FA9001 (250MW):
  - Changing cap assembly, combustion linear, transition piece.
  - Removing flow sleeve, crossfire tubes, fuel nozzle casing.
  - Make clearance check up for VIGV by taking backlash, inner bearing clearance & gap between VIGV and bearing casing (body).
- Assist in warranty inspection for GE gas turbine frame FA9001 (250MW), I worked with supervisor GE Company of that inspection in:
  - Removing the compressor inlet casing.
  - Removing the compressor casing.
  - Removing the compressor discharge casing (CDC).
  - Removing the turbine casing.
  - Removing the exhaust frame.
  - Changing cap assembly, combustion linear, transition piece.
  - Removing flow sleeve, crossfire tubes, fuel nozzle casing.
  - Visual inspection of compressor blades.
  - Check the axial & radial clearance for blades.
  - Changing the damage blades/vans for replacement for compressor.
  - Make NDT for all critical places (as the blades of the compressor & bearing, etc.).
  - Make clearance check up for VIGV by taking backlash, inner bearing clearance & gap between VIGV and bearing casing (body).
- Assist in warranty major inspection for 2 Mitsubishi steam turbines (250MW) with supervisor Mitsubishi Company:
  - Removing upper casing for HP - IP turbine.
  - Removing upper casing for LP turbine.
  - Removing the stationary blades diaphrams.
  - Removing all bearing and make NDT.
  - Lifting off the rotor.
  - Inspection for internal parts.
  - Check the axial & radial clearance for moving & fixed blades.

- Make alignment for HP-IP & LP and generator shaft.
- Removing the control valves & stop valves and check for internal parts.
- Oil flushing.
- Cleaning and inspection of oil purifier.
- Cleaning and inspection of oil cooler.
- Inspection and cleaning of water chamber for condenser.

- Assist in minor inspection for Mitsubishi steam turbine (250MW):
  - Oil flushing.
  - Cleaning and inspection of oil purifier.
  - Cleaning and inspection of oil cooler.
  - Inspection and cleaning of water chamber for condenser.
  - Inspection and cleaning of hot well for condenser alignment check for pumps (vacuum pump, oil pump etc.).
- Assist in inspection and maintenance for 2 overhead cranes (120 tons), I worked with KUHNEZUG Company of that inspection in:
  - Removing and change wheels of the crane.
  - Make check and inspection of all bolts and nuts in the crane.
  - Erection a new rail way to the crane.
  - Make balance for the new way of the crane.
  - Make loading test (static, dynamic) at load above 120 ton.
- Assist in mechanical store as Material Control Engineer for Companies (such as Siemens, Mitsubishi, Initec, KSB, KUHNEZUG, etc.) in re-organization of the mechanics store by:
  - A coding of the shelves that have the spare parts.
  - Take the technical data for each spare part.
  - Registration of each spare part and its technical data in two copies soft and hard wire.
  - Control for each spare part through the work of daily, weekly and monthly report.
- Maintenance for Mitsubishi steam turbine (250MW).
- Maintenance for Siemens gas turbine (250MW).
- Follow up the maintenance activities for the steam and gas turbine (2x750MW).
- Overhaul Inspection pump house pumps and maintenance compressor and travel screen.
- Commissioning & start-up for gas turbine with gas and fuel oil.
- Experience in rotating equipment maintenance including pumps, compressors, hydraulic pumps and valves.

**Dates** : From Jan. 2013 till Jun. 2013

**Employer** : Kharafi National (PIC)

**Project** : Petrochemical Industries Company for ammonia & urea production in Kuwait:
- Two plants A & B
- 2 lines of ammonia II, III & IV
- Utility B

**Job title** : Planning Engineer

**Job Description** :
- Make scheduling for daily and weekly working for all rotating equipment.
- Make purchasing requisition (MX) & purchasing order (PO) for all material regarding to rotary department.

- Make scheduling for CM & PM for all rotating equipment.
- These all on Maximo.