

103955-MEC-18MOS-E-2002
Senior Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Engineering and has about 16 years hands-on experience working in maintenance, operation, commissioning and start-up at Power Plants.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 11/11/1978
Gender : Male
Marital Status : Married
Residence : El-Behira

EDUCATION

: B. Sc. in Mechanical Engineering, Ain Shams University, 2002

LANGUAGES

Arabic : Native Language
English : Fluent
French : Fair

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet
: AutoCAD
: Engineering Equation Solver

TRAINING COURSES AND CERTIFICATIONS

: Maintenance & Operating of Damanhour Combined Cycle Power Station) (Feb./Mar. 2004).
: Basic Operation Training on Siemens CTG V94.3A by Siemens, Nubaria, Egypt.
: Maintenance & Operating of Steam Turbine Mitsubishi Heavy Industries (MHI) Ltd. Nagasaki Shipyard & Machinery Works Japan, Japan Site (Aug./Sep. 2005).
: Maintenance & Operating of Steam Turbine Mitsubishi Electric Corporation Energy System Center, Japan Site (Sep. 2005).
: Maintenance & Operating of Steam Turbine Mitsubishi Heavy Industries (MHI) Ltd. Nagasaki Shipyard & Machinery Works, Nubaria Site (Sep. 2006).
: Traveling Water Screen Training INITEC/TARNOS, Nubaria Site (Apr. 2006).
: Hydrogen and Oxygen Gas Planet Training INITEC/STUART ENERGY, Nubaria Site (Apr. 2006).

- : Completed the training course for Motor Operated valves (Basic, Advanced, specialist) Levels, conducted by EEHC (6 weeks).
- : TOT training course in October 2018, conducted by EEHC.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Dec. 2014 till now
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria I & II Combined Cycle 1500MW Power Station
- Job title** : Senior Mechanical Maintenance Engineer
- Job Description** :
- Involved in minor inspection for 4 units Siemens STG5-4000F gas turbine unit (250MW): Worked in chemical cleaning for burners, changing of ceramic tiles of combustion chamber, visual inspection of turbine & compressor blades.
 - Involved in hot gas path inspection for Siemens STG5-4000F gas turbine unit (250MW): Worked with Siemens group of that inspection, removing the outer casing in the turbine section, lifting off upper sections of the turbine stationary blades carrier and turning out the lower section of the turbine stationary blades carrier and removing blades / vans for refurbishment / replacement, chemical cleaning for burners, changing of ceramic tiles of combustion chamber, visual inspection of turbine & compressor blades. Check the axial & radial clearance for blades.
 - Involved in the LTE the program inspection outage to two units Siemens gas turbine model SGT5-4000F, LTE is the Programmed schedule maintenance inspection @ 100,000 EOH, Lead the customer maintenance team during executes the LTE inspection outage for two units Siemens gas turbine model SGT5-4000F. Work with Siemens group to perform the Major Inspection (MO) + LTE Measures, Opening of entire machine, including compressor section; visual, NDE inspections and perform the following:
 - Repair, refurbishment or replacement of components.
 - Rotor Swapped by new and de-stacking/refurbishment of old rotor.
 - LTE specific NDT scope (e.g. ultrasonic testing).
 - 11MIC / 33MAC upgrade.
 - Use of refurbished B&V and burners.
 - Make overhaul Maintenance for Mitsubishi steam Turbine model TC2F-35.4
 - Plan and prepare for Tools, spare parts and manpower before start the overhaul work.
 - Removing upper casing for HIP & LP turbine, removing all blade rings, removing all bearing and make NDT, lifting off the rotor, inspection for internal prates & check the axial & radial clearance for blades, check the gland, sealing clearance & check the all bearing clearance.
 - Make alignment for HP-IP & LP and generator shaft.
 - Removing the (MSV-LH&RH, GCV-LH&RH, RSV-LH&RH, ICV-LH&RH, LPSV, and LPCV) for checking and inspection internal parts, take the internal clearance; check the all contact leak check, etc.
 - Inspection for the lube oil system (transfer the oil, cleaning the lines, inspect the main and auxiliary oil pump, refill the oil tank and do the flashing for all system).

- Follow up the unit commissioning and start-up (shaft balancing, adding or remove the balance weights as per vibration analysis record, the mechanical and electrical over speed trip test.....etc.).
- Follow up the commissioning for the steam turbine valves (check and adjusting the all valve stroke and full closed and full opening position,...etc.).
- Organize the material receiving – storage and handling procedure.
- Planning and controlling of material which includes receiving, storage, issuing, stocking, and disposal of material.
- Forecasting of material availability and arranging of replacement for storage – damage materials.
- It's my duties to prepare all reports related to outages, spare parts, special tools required, man poweretc. and presented it to my director.
- Lead the customer team for doing the Degradation thermal performance test after all SIEMENS SGT5-4000F overhaul outage.
- Lead the customer team for doing the commissioning and the test required including the add or removing balance Wight before the start-up after all Mitsubishi steam turbine TC2F-35.4 overhaul outage.

Dates : From Apr. 2010 till Dec. 2014

Employer : Dubai Electricity & Water Authority (DEWA), UAE

Project : Jebel Ali Power and Desalination Station "L" 2500MW & 140 MIGD:

- GT SIEMENS (SGT5-4000F) 4x250MW with evaporative cooler.
- STG ALSTOM (HDC200/2AS-NE33AU) 2x221MW (Extraction & condenser) with adaptive stage.
- Gas turbine (GE) (MS9001FA) 3x250MW.
- Back pressure steam turbine (BPST) SCS Toshiba 2x166MW.
- HRSG (NEM) with supplementary NG firing.
- MSF (FISIA) desalination units: 9 x 17.5 MIGD, @ sea water temperature 30 °C and 105 °C TBT.
- Aux. Boiler (NEM) 3 x Steam flow 370 T/Hr. @ 19 bara & 235 °C.

Job title : Power Station Operation Engineer

Job Description :

- Control board operation of Gas Turbines, Steam Turbines, Desalination Plants MSF FISIA Company, Water Treatment Plant, Emergency DG, Natural Gas Pressure Reducing Station, Sea Water Pump House, and Chlorination Plant & Demineralization Plant using SIEMENS (SPPA-T3000) Process control system.
- Making Work Requests and issue Safety Permits through Computerized Maintenance Management Systems (SAB) for corrective, preventive and annual maintenance programs.
- Follow up the Work orders for the site in accordance with the specifications and standards required for the plant.
- Lock out tag out for Electrical & Mechanical Equipment's before & after Work orders.
- Securing the field and safety of the Equipment's after shutdown.
- Supervising the Equipment's after operating, change over or maintenance.
- Reporting about my disorder and any unusual sound or smile (like fire).
- Tie between operator in main control room and technician in the field.
- Make the daily report of all activates and the calculation report for

generation and fuel gas or DFO consumption, and Distillate water production.

Dates : From Dec. 2006 till Apr. 2010
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Combined Cycle 2x750MW Power Station
Job title : Mechanical Maintenance Engineer
Job Description :

- Assist in minor inspection for 4 Siemens STG5-4000F gas turbine units (250MW).
- Assist in hot gas path inspection for 2 Siemens STG5-4000F gas turbine units (250MW).
- Assist in warranty major inspection for one steam turbine 250MW with supervisor Mitsubishi Company: moving upper casing for HIP & LP turbine, removing all blade rings, removing all bearing and make NDT, lifting off the rotor, inspection for internal prates & check the axial & radial clearance for blades, make alignment for HP-IP & LP and generator shaft, removing the control valves & stop valves and check for internal parts.
- Follow up the maintenance activities for the steam and gas turbine (2x750MW) Work orders for the site in accordance with the specifications and standards required for the plant.
- Follow up all the maintenance activities for steam turbine auxiliaries' (lube oil system, hydraulic oil system, sealing, gland steam...etc.) and gas turbine auxiliaries (lube oil and hydraulic oil system, cooling and seal air system, pneumatic system, gas and liquid fuel.....etc).

Dates : From Aug. 2005 till Dec. 2006
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Combined Cycle 2x750MW Power Station:

- Two modules, each module consists of:
 - Two Siemens CTG 250MW type V94.3A
 - Two horizontal Alstom HRSG
 - One Mitsubishi STG 250MW) (HP, IP, LP) steam line
- 500KV switchyard, 220KV switchyard, Four tie transformers 500/220KV
- Medium and Low Voltage Switch Gear

Job title : Shift Charge Engineer

Dates : From Dec. 2003 till Aug. 2005
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Combined Cycle 2x750MW Power Station
Job title : Commissioning & Start-up Engineer
Job Description :

- Commissioning, start-up and operation for cooling water system and closed cooling water system.
- Commissioning, start-up and operation for condensate water system.
- Commissioning, start-up and operation for BOP.
- Commissioning, start-up and operation for Siemens SGT5-4000F.
- Safe operation for Siemens Gas turbine SGT5-4000F and all its auxiliaries during the reliability period.
- Steam blow Team Leader of 4 (HRSG) Heat Recovery Steam

Generator – ALSTOM make.

- Commissioning and start-up of Mitsubishi steam Turbine model TC2F-35.4 250MW.

- Field of experience :**
- Awareness of Quality, Occupational Health & Safety.
 - Very good experience in power plants component especially in GAS TURBINE (construction, commissioning, operation and maintenance).
 - Good knowledge of codes as (ASME, ASTM, DIN ...etc.).
 - Good knowledge of various types in Materials of piping and fitting types, pressure schedule, pressure rating and welding types.
 - Good knowledge of safety rules during construction activities.