

101545-MEC-18CMSY-E-2002
Senior Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 21 years' experience working in maintenance of combined cycle power plant (steam / gas turbines, generators, HRSG, rotating equipment, pumps, compressors, BOP, firefighting system, HVAC and diesel engines). Also, maintenance of water treatment / desalination plant. Moreover, working in construction, commissioning and start-up.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 26/10/1977
Gender : Male
Marital Status : Married

EDUCATION

: B. Sc. in Mechanical Power Engineering, Zagazig University, 2002

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoCAD

TRAINING COURSES AND CERTIFICATIONS

- : Training course for maintenance of HRSG Boiler (ALSTOM), Surabaya - Indonesia.
- : Training course for maintenance of Gas Turbine (SIEMENS), Nubaria - Egypt.
- : Training course for maintenance of Hydrogen and oxygen gas plant.
- : Training course for maintenance of Traveling water screen system, TARNOS, Egypt.
- : Training course for maintenance of Live line insulator washing system (TYCO).
- : Training course for maintenance of Safety valves (TYCO).
- : Training course for maintenance & operation for diesel engine.
- : Training course for maintenance of HRSG Boiler (STF), ITALY (2009).
- : Training course for maintenance of MITSUBSHI, Egypt (Jul. 2006).
- : Gas Turbine operation training in Nubaria Power Plant (GE 9001FA).

- : GE with DLN 2.6+ and Mark (VIe) training in Nubaria Power Station.
- : Steam Turbine operation training in Nubaria Power Plant (ALSTOM).
- : HRSG Operation Training in Nubaria Power Plant (STF).
- : Training course for commissioning and maintenance of Fire system (CHEMTROL), Egypt (Jun. 2006).
- : Training course for maintenance for combined cycle (WDPC), Egypt.
- : ICDL

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2020 till now
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria Combined Cycle Power Station (Module III) 1x750MW
- Job title** : Senior Mechanical Maintenance Engineer
- Job Description** :
- Follow up all plant Turbines (Gas & Steam) maintenance activities on (Daily, weekly, monthly & annually) basis.
 - Supervising & Scheduling Mechanical Maintenance for Turbine Auxiliaries (preventive & predictive maintenance, troubleshooting & overhauling) for Axial Flow & centrifugal pumps, travelling screen, trash rakes, valves, overhead crane
 - Team Leader for Supervisors, organizing labors and providing process expertise to them.
 - Maintaining daily Maintenance report.
 - Preparation of spare part lists (Capitals & Consumables) and special tools required for overhaul maintenance and inspection.
 - Supervise all activities for (CI), (HGP) and (MI) for gas turbines and generator.
 - Supervise all activities for overhaul maintenance for steam turbines, valves and generator.
 - Supervise all activities for major inspection of steam and gas Auxiliaries.
 - Coordinate between the department and arrange the requirements.
 - Attend weekly troubleshooting meetings.

- Dates** : From Feb. 2020 till May 2020
- Employer** : DOOSAN
- Project** : SHOAIBA POWER PLANT, KSA
- Job title** : Lead Mechanical Maintenance Engineer
- Job Description** :
- Making the Organization Required for Work Activities.
 - Following up and controlling the Work at Site.
 - Providing Technical Assistance at Site.
 - Reporting site activities to the top management in regular basis.
 - Identifying and Requesting the Spare Parts and special tools Required for the Outage.
 - Performing the end of outage report.
 - Supervise all overhaul activities for ALSTOM Steam Turbine maintenance:
 - Performing major inspection of one ALSTOM steam turbine (400MW).

- Performing major inspection of steam turbine valves (Stop & control HPIP Valves).
- Performing major inspection of steam turbine generator.
- Performing major inspection for steam turbine Auxiliaries.
- Monitor and attend all Types of NDT's and Hydro tests and all Pumps and Motors alignments and all pipes systems Air blow-off and flushing.
- Testing and commissioning till operation.

- Dates** : From 2015 till 2020
- Employer** : Middle Delta Electricity Production Company (MDEPC)
- Project** : Nubaria Combined Cycle Power Station Module 3 (1x750MW)
The module contains two 9FA CTG 2x250MW manufactured by GE Energy, two HRSG manufactured by STF and one 250MW STG manufactured by ALSTOM.
- Job title** : Lead Mechanical Maintenance Engineer
- Job Description** :
- Prepare weekly and monthly routine and preventive maintenance plans.
 - Attend weekly troubleshooting meetings and maintaining daily Maintenance report.
 - Preparation of spare part lists and special tools required for overhaul maintenance and inspection.
 - Supervise all activities for GE MS9001FA Gas Turbine maintenance:
 - Performing combustion inspection (CI) Disassembly, Inspection and Reassembly.
 - Performing hot gas path inspection (HGP) Disassembly, Inspection and Reassembly.
 - Performing Major inspection (MI) Disassembly, Inspection and Reassembly.
 - Inspect clearance for journal and thrust bearing of turbine.
 - Generator bearings and hydrogen seal inspection maintenance.
 - Turbine bearings inspection maintenance.
 - Performing alignment for generator shaft with turbine shaft.
 - Measuring and recording turbine & compressor & bearing and seal clearances.
 - Performing Borescope inspection for compressor, burner and turbine.
 - Testing and commissioning until operation.
 - Supervise all activities for ALSTOM Steam Turbine maintenance:
 - Prepare weekly and monthly routine and preventive and routine maintenance plans.
 - Performing major inspection of steam turbine (250MW).
 - Performing major inspection of steam turbine valves.
 - Performing major inspection for steam turbine generator.
 - Performing major inspection for steam turbine Auxiliaries.
 - Monitor and attend all Types of NDT's and Hydro tests and all Pumps and Motors alignments and all pipes systems Air blow-off and flushing.
 - Testing and commissioning until operation.
 - Supervise all activities for auxiliaries equipment maintenance:
 - Performing Lube, seal and hydraulic oil system maintenance

- (pumps, coolers, filters and valves).
- Performing Diverter damper hydraulic oil system maintenance (pumps, coolers, filters and valves).
- Performing Gas fuel and fuel oil systems maintenance (valves, liquid fuel pump and distributor).
- Performing Water injection and compressor wash systems maintenance.
- Performing Atomizing air system maintenance (air compressor, air cooler, valves and air filter).
- Performing service and instrument air compressors (Atlas Copco) and air dryer system maintenance.
- Performing Air process unit system (APU) maintenance.
- Performing Filter house inspection and replacement filters.
- Performing closed cooling and water service systems maintenance (pumps, filters, valves & heat exch.).
- Performing condenser and condenser pumps maintenance.
- Maintenance and fix of (condenser vacuum / condensate / water box vacuum pumps, ball-cleaning system).
- Maintenance and fix of vertical sump pump.
- Maintenance and fix of all actuators (pneumatic and hydraulic).
- Performing inspection and maintenance for one overhead crane (120 tons).

Dates : From 2013 till 2015

Employer : [EGYPTROL](http://www.egyptrol.com) – Commissioning Subcontractor for SAMSUNG C&T

Project : Qurayyah Independent Power Project (6x750MW) – Combined Cycle

The Qurayyah IPP Project is approximately 100 km south of the port of Dammam on the coast in the Eastern province of the Kingdom of Saudi Arabia. The facility is a 2 on 1 combined cycle configuration consisting of twelve (12) Siemens SGT6-PAC 5000F gas turbine generating units (GTGS), twelve (12) heat recovery steam generators (HRSGs), six (6) Siemens SST6-4000 steam turbine generators (STGs), and six (6) sea water condensers, six (6) EDG (CUMMINS 1250kw) and two (2) diesel engines (CUMMINS) for firefighting system.

Job title : Lead Mechanical Commissioning & Start-up Engineer

Job Description :

- Supervise all commissioning and start-up activities (steam turbine, gas turbine, HRSG, fire-fighting).
- Give technical support for the construction team from time to time to meet the contract specifications and requirement.
- Coordinate all Start-up activities with other departments (I&C, Electrical, ...etc.).
- Monitor and attend all Types of NDT's and Hydro tests and all Pumps and Motors alignments and all pipes systems Air blow-off and flushing.
- Coordinate with client and Vendor technical advisor for all GT testing tasks.
- Support client in Routine & Preventive Maintenance for all Mechanical system during reliability of the units and Warranty period.
- Support Warranty engineer in all claims related to mechanical systems.
- Prepare daily and weekly reports for all mechanical Start-up activities.
- Carry out all commissioning activities as per manufacture recommendation.

- Testing and commissioning until operation.

Dates	:	From 2008 till 2013
Employer	:	Middle Delta Electricity Production Company (MDEPC)
Project	:	<p>Nubaria Combined Cycle Power Station (3x750MW):</p> <p>Two modules contains for each: two gas turbines 2x250MW V94.3A manufactured by Siemens German Company, four Heat Recovery Steam Generators (HRSG) manufactured by ALSTOM, 250MW TC2F condensate steam turbine manufactured by MITSUBSHI, one module contain two gas turbines 2x250MW manufactured by GE Energy, two Heat Recovery Steam Generators manufactured by STF, 250MW condensate steam turbine manufactured by ALSTOM-INITEC Siemens to balance of plant equipment such as pumping, Pipeline Critical pipes high, intermediate and low pressure steam pipes, Valves, Tanks compressor, piping, coating, installation, welding processes, circulating water system, service water system, closed cooling water system, firefighting system.</p>
Job title	:	Mechanical Maintenance Engineer
Job Description	:	<ul style="list-style-type: none"> • Prepare weekly and monthly routine and preventive maintenance plans. • Attend weekly troubleshooting meetings and maintaining daily Maintenance report. • Preparation of spare part lists and special tools required for overhaul maintenance and inspection. • Siemens V94.3A Gas Turbine maintenance: <ul style="list-style-type: none"> - Performing minor inspection for 4 units Siemens gas turbine V94.3A (250MW). - Performing hot gas path inspection for 4 units Siemens gas turbine V94.3A (250MW). - Performing major inspection for 2 units Siemens gas turbine V94.3A (250MW) in parallel. - Erection of wet compression system for 2 units Siemens gas turbine V94.3A (250MW). • Mitsubishi Steam Turbine maintenance: <ul style="list-style-type: none"> - Performing warranty inspection for 2 Mitsubishi steam turbines (250MW). - Performing minor inspection for 2 Mitsubishi steam turbines (250MW). - Performing major inspection for 2 Mitsubishi steam turbines (250MW). • Equipment Maintenance: <ul style="list-style-type: none"> - Performing Lube, seal and hydraulic oil system maintenance (pumps, coolers, filters and valves). - Performing Diverter damper hydraulic oil system maintenance (pumps, coolers, filters and valves). - Performing Gas fuel and fuel oil systems maintenance (valves, liquid fuel pump and distributor). - Performing Water injection and compressor wash systems maintenance. - Performing Atomizing air system maintenance (air compressor, air cooler, valves and air filter). - Performing Instrument air compressor and air dryer system

maintenance.

- Performing Air process unit system (APU) maintenance.
- Performing Filter house inspection and replacement filters.
- Performing Closed cooling and water service systems maintenance (pumps, filters, valves and heat exchangers).
- Performing inspection and maintenance for 2 overhead cranes (120 tons).

Dates : From 2005 till 2008
Employer : West Delta Electricity Production Company
Project : Nubaria Combined Cycle Power Plant
Job title : Mechanical Construction & Commissioning Engineer
Job Description :

- Follow up all site mechanical construction activities for the contracts.
- Reviewing and revise all submittals with the contracts.
- Attend mechanical activity progress meetings and make sure that site activities are in line with project schedule.
- Monitor and attend all Types of NDT's (Non-Destructive Tests) & Hydrostatic Tests.
- Monitor and attend shaft alignment for CTG & STG Rotors.
- Calibration of all steam turbines control valves with main contractor.
- Review and approve MRR' s (Material Receiving Reports).
- Review and approve contractors' progress invoices.
- Coordinate all mechanical activities (Mechanical Equipment and piping installation) with other disciplines i.e. Civil, Electrical.
- Review and check As-Built drawings.
- Carry out all commissioning activities as per manufacture recommendation.
- Commissioning, start-up and operation for steam turbine (MITSUBISHI 250MW).
- 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 for Heat Recovery Steam Generation (Alstom HRSG), feed water pumps (HP/IP, LP), CPH pumps, control and electrical valves.
- Commissioning for pump house equipment (circulating, service pumps, Dual Flow Band Screens and Wash water Systems).
- Commissioning for firefighting system.

Dates : From 2003 till 2005
Employer : SIEMENS
Project : Nubaria Combined Cycle Power Plant
Job title : Mechanical Construction Engineer
Job Description :

- Construction supervision on site activates for CTG 4x250MW (V94.3A) manufactured by SIEMENS including providing redesign solutions for the field Problems or changes.
- Responsibility for monitoring piping construction and fabrication activities insuring quality and taking necessary actions to maintain satisfactory

standards.

- Preparing work packages with all design documentations and method statement for work permits approval.
- Witnessing all field tests including hydrostatic test and all NDT tests.
- Reviewing all site work and prepare the punch list for the construction contractor.

Dates : From 2002 till 2003

Employer : STAR TEX (Spinning & Waving)

Job title : Maintenance Engineer for spinning and weaving equipment

Job Description :

- Follow up the all maintenance activities for the spinning and weaving equipment.
- Co-ordinate between the department and arrange the requirements.
- Management and planning for all maintenance document spare part, purchase request, Cost effective, safety policy.
- Prepare weekly and monthly routine and preventive maintenance.

Field of experience : Expertise in maintenance of combined cycle power plant (steam / gas turbines, generators, rotating equipment, pumps, compressors and BOP. In addition, I work as a Construction, Commissioning and Start-up Mechanical Engineer for the equipment mentioned above and I have good experience in preparing maintenance procedures.