

101545-MEC-MOS-E-2002
Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 15 years hands-on experience, including 9 years working in maintenance of HRSG, water treatment, fire fighting and turbines.

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 : Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoCAD

TRAINING COURSES AND CERTIFICATIONS

: Training course for maintenance of HRSG Boiler (STF), ITALY (2009).
: Training course for maintenance of MITSUBSHI, Egypt (Jul. 2006).
: Training course for maintenance of Fire system (CHEMTROL), Egypt (Jun. 2006).
: Training course for maintenance for combined cycle (WDPC), Egypt.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jul. 2015 till now
Employer : Middle Delta Electricity Production Company (MDEPC)
Project : Nubaria Combined Cycle Power Station (1x750MW)
Job title : Mechanical Maintenance Engineer
Job Description :

- Responsible for Material inspection of Gas Turbine AGP upgrade.
- Perform hands-on repair combustion inspection activities, baroscopic inspection..... and all auxiliary systems maintenance.

- Prepare and plan in details all inspection activities, planned maintenance, major overhauls, and maintenance jobs during planned shutdowns and forced shutdowns.
- Review maintenance procedures, job plans, standing instruction, operating manuals, and to update COMPANY manuals for safe maintenance and operation.
- Follow up all preventive maintenance for the plant Auxiliaries.
- Change accumulator bladders for diverter damper hydraulic skid.
- Follow up all Preventive maintenance for GE Gas Turbine Auxiliaries (Lube oil System, Hydraulic System, Water Injection System, Fuel System, etc.....).
- Follow up all Preventive maintenance for ALSTOM Steam Turbine Auxiliaries (Lube oil System, Condensate System, Condenser Vacuum Pumps, Tube Cleaning, etc..).
- Responsible with group on combustion inspection of GE & change of H2 seal.
- Follow up the inventory safety stock quantities.
- Review AGP, DLN 2.6 and CSA contracts for GE modification and maintenance.
- Chairman of the Committee an inventory of mechanical spare parts storehouse.
- Review and approve MRR's (Material Receiving Reports).
- Follow up instrument and service air compressors start-up and operation.

Dates	:	From Jul. 2013 till Jun. 2015
Employer	:	EGYPTROL – Commissioning Subcontractor for SAMSUNG C&T
Project	:	Qurayyah Independent Power Project (6x750MW) – Combined Cycle
Job title	:	Commissioning & Start-up Engineer
Job Description	:	<ul style="list-style-type: none"> • Carry out commissioning of fire fighting system. • Checking the completing of erection works (MECH.-ELEC.-I&C). • Supporting and follow all pre-commissioning activities as hydro tests. • Filling the fire tank from service water pumps. • All isolation points and blinds are installed. • Make sure that the spool pipe between the strainer and the pump is cleaned. • The motor bearings and Electrical fire pump are greased. • Start pipe lines filling. • Remove all fire nozzles from the systems. • Start the electrical pump. • Flushing all fire branches one by one. • Put the system in normal operation. • Start test the pressure set point of Electrical fire pump & desile fire pump. • Troubleshooting supporting and maintenance program making as per vendor recommendations. • Carry out performance tests. • Documents making and turn over all packages to owner.

Dates : From 2006 till May 2013

Employer : Middle Delta Electricity Production Company (MDEPC)

Project : Nubaria Combined Cycle Power Station (3x750MW):
 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, fire fighting system.

Job title : Mechanical Maintenance Engineer

Job Description : HRSG Maintenance Engineer:
 Follow up the maintenance activities for:

- Maintenance of 4x250MW HRSG Boiler, ALSTOM.
- Maintenance schedules (daily, weekly, monthly, etc.).
- Inspection and receiving spar parts for contracts.
- Emergency diesel generator (output 1.5 MW) consists of 12 cylinders.
- Inspection and repair for all manual and control high pressure steam valves types (gate, globe, knife, butterfly, ball and check valves) with different size.
- Make maintenance of steam sample system.
- Inspection and fix of vertical sump pump (golfs, ksp, etc.) and recirculation preheated pump.
- Make maintenance for service and instruments compressors.
- Maintenance documents.
- Breakdown maintenance.
- Inspection and fix hp and lp (feed multi stages) water pumps.
- Inspection HRSC (drums, pipes, deareator) for cracks and make treatment for all cracks.
- Make mechanical maintenance for all actuators (pneumatic, motors and hydraulic).
- Make maintenance Safety valves, Bypass valves.
- Make maintenance of steam sample system.
- HRSG water treatment (ammonia, phosphate, hydrazine dosing pumps).

Water Treatment / Distillation Mechanical Maintenance Engineer:
 Follow up the maintenance activities for:

- Demineralization plant.
- Pre-treatment plant.
- Sewage treatment plant.
- Potable water plant.
- Oil/water separation system.
- Chemical injection system.
- Steam water analysis system.
- R.O. (Reveres Osmoses Plant).
- About the following equipment:
 - Pumps, valves, compressors, blowers, filters, piping, etc.

Fire Fighting Mechanical Maintenance Engineer:

Follow up the maintenance activities for:

- Fire detection system (administrative building, solar yard, power block, colony).
- Gas package system.
- Deluge system.
- Wet pipe sprinkler system.
- Dry pipe sprinkler system.
- Pre-action sprinkler system.
- Co2 system.
- Fire pumps, inspection and maintenance.

Turbines Mechanical Maintenance Engineer:

Follow up the maintenance activities for:

- Assist in minor inspection for 4 units Siemens gas turbine V94.3A (250MW), I worked with Siemens group of that inspection in:
 - Chemical cleaning for burners.
 - Changing of ceramic tiles of combustion chamber.
 - Visual inspection of turbine & compressor blades.
- Assist in hot gas path inspection for 4 units Siemens gas turbine V94.3A (250MW), I worked with Siemens group of that inspection in:
 - Removing the outer casing in the turbine section.
 - Lifting off upper sections of the turbine stationary blades carrier.
 - Rolling out the lower section of the turbine stationary blades carrier.
 - Removing blades / vans for refurbishment / replacement.
 - Chemical cleaning for burners.
 - Changing of ceramic tiles of combustion chamber.
 - Check clearance for 1st stage compressor & 4th stage turbine blades.
 - Removing and inspection fuel oil and fuel gas stop and control valves and make passing test for all valves.
- Assist in warranty inspection for 2 Mitsubishi steam turbines (250MW), I worked with supervisor Mitsubishi Company of that inspection in:
 - Removing upper casing for HP - IP turbines.
 - Removing upper casing for LP turbine.
 - Removing the stationary blades diaphragms.
 - Removing all bearing and make NDT.
 - Lifting off the rotor.
 - Inspection for internal plates.
 - 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.
 - Oil flushing.
 - Cleaning of oil storage tank.
 - Oil transfer to oil storage tank.
 - Cleaning of main oil tank.
 - Oil transfer to main oil tank.
 - 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), I worked with supervisor Mitsubishi Company of that inspection in:

- Make oil flushing as:
 - Cleaning of oil storage tank.
 - Oil transfer to oil storage tank.
 - Cleaning of main oil tank.
 - Oil transfer to main oil tank.
- 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 major inspection for 2 units Siemens gas turbine V94.3A (250MW) in parallel, I worked with Siemens group of that inspection in:
 - 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.
 - Lifting off 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 one.
 - Dectacting 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), I worked with supervisor GE company of that inspection in:
 - 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 erection of wet compression system for 2 units Siemens gas turbine V94.3A (250MW), I worked with Globle Company of that erection in:
 - 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 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 tons.
- Assist in mechanical store as Material Control Engineer for companies (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.
 - A 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 2004 till 2005
Employer : DSD Ferrometalico – Subcontractor of Siemens Co.
Job Description : Construction Engineer for gas turbine & boiler isolation.

Dates : From 2002 till 2003
Employer : STAR TEX (Spinning & Waving) Company
Job Description : Maintenance Engineer for spinning and waving equipment.

Field of experience : • Maintenance schedules planning (daily, weekly, monthly, annual, major, etc.).
 • Define and review the commissioning spare parts & consumables.

- Prepare and modify commissioning, operation and maintenance procedures.
- Breakdown maintenance.
- Very aware all most standards (ASTM, ASME.API, ISO, AWWA.ANSI, NFPI, AWS).