

100659-MEC-1MOYq-E-2002
Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and a Diploma in Power Plant Engineering. Has about 20 years' experience, mainly working in maintenance and operation of Talkha Combined Cycle Power Plant.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 07/02/1977
Gender : Male
Marital Status : Married
Residence : Mansoura

EDUCATION

: B. Sc. in Mechanical Power Engineering, Menoufia University, 2002
: Diploma in Power Plant Engineering, Mansoura University

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoCAD 2D

TRAINING COURSES AND CERTIFICATIONS

: Gas turbine power plants with combined cycles and in Distribution System.
: General English course.
: Mechanical alignment course.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From 2022 till now
Employer : Middle Delta Electricity Production Co.
Project : Talkha Combined Cycle Power Plant
Job title : Mechanical Maintenance Engineer
Job Description :

- Responsible for corrective, preventive, predictive, periodic maintenance activities and major inspections in the power plant.

- Major inspections SIEMENS gas turbine SGT5-4000F.
- On the basis of programmed activities and operating conditions, prompt notification of spare part requirements to compensate deviations from routine and special maintenance demands.
- Assist in the preparation of predictive, preventive, modification and major shutdown maintenance program for mechanical equipment in the plant.
- The quality of machine, equipment or plant maintenance operations, including those carried out by third parties, is in line with reference standards.
- Participator and follow up & Major Inspection SIEMENS gas turbine SGT5-4000F, Perform the following:
 - Finding (C.P.H & C.V.C & Outer Shell & T.V.C & I.G.V & Rotor ...etc.).
 - Follow up Commissioning for (Lube oil system & Turning Gear system & Hydraulic oil system & Diver damper ...etc.).

Dates : From 2015 till 2022

Employer : Middle Delta Electricity Production Co.

Project : Talkha Combined Cycle Power Plant

Job title : Mechanical Maintenance Engineer of GE Steam Turbine

Job Description : Performing all necessary maintenance for steam power plant machinery (steam turbine and its auxiliaries):

- Receipt of new diaphragms.
- Lower half and upper half casing thorough cleaning.
- NDT of lower half and upper half casing.
- Assembly of new diaphragms, correction (machining) if required.
- Check diaphragms crush pin and side slip check and adjust as required.
- Assemble the lower half bearing bearing and place rotor in position.
- Check rotor run out interstage and also journal.
- Assemble thrust bearing and ensure thrust float.
- Machining thrust shim if required.
- Diaphragm Alignment with piano wire.
- Check joint check for lower half diaphragms after alignment.
- Overtum upper half casing and place all the U/H diaph. in casing.
- Transfer joint check readings of L/H diaph. to U/H diaphragms.
- Overtum upper half casing after locking U/H diaph. with casing.
- Remove the rotor from position and thorough cleaning of lower half casing.
- Final placement of rotor and check final steam flow path, correction if any.
- Place U/H casing finally in position and tighten H/J bolts hot tightening.
- Alignment with generator and coupling.
- Bearing final clearance and pinch check.
- Oil flushing and normalize brgs after achieving oil sampling result.
- Test machine on turning gear.
- Rolling FSNL and loading machining up to 30% load.
- Trip machine & monitoring vibration parameters go for actual O/S.
- After successful O/S, reroll the unit and synchronize the unit.

- Performing daily maintenance and solving troubleshooting turbines.
- Co-operating in spare parts tenders.
- Writing weekly, monthly and annual reports about gas turbine performance.
- Good dealing with AMPLISSMA program.
- Maintenance of Pumps, valves and Reciprocating Compressors.
- Finding and commissioning of components steam turbines.

Dates : From Feb. 2012 till 2015
Employer : Middle Delta Electricity Production Co.
Project : Talkha Combined Cycle Power Plant
Job title : Mechanical Maintenance Engineer of GE MS 5001P Gas Turbine
Job Description :

- Combustion Chamber Inspection.
- Hot Gas Path Inspection.
- Major Overhaul Inspection.
- Performing daily maintenance and solving troubleshooting of gas turbines.
- Co-operating in spare parts tenders.
- Attending seminars of spare parts resources companies and dealing with them.
- Writing weekly, monthly and annual reports about gas turbine performance.
- Good dealing with AMPLISSMA program.
- Maintenance of Pumps, valves and Reciprocating Compressors.
- Finding of (Compressor & Combustion Chamber & Turbine Accessory Gear Box & Redaction Gear Box & Couplings & Exhaust Hood ...etc.).
- Commissioning (Lube oil system & Ratchet system & Hydraulic oil system & Cooling system).

Dates : From Jan. 2007 till Feb. 2012
Employer : Middle Delta Electricity Production Co.
Project : Talkha Combined Cycle Power Plant
Job title : First Shift Operator Engineer
Job Description :

- Talkha Combined Cycle Power Plant consists of:
 - 8 HRGS - Vogt Co. (47 T/Hr, 52 bar), DMC controlled.
 - 8 Feed water pumps (250 HP, 82 bars).
 - 2x50MW GE Stag turbines 405 w/ Speedtronic & MK3 control.
 - The steam turbine can be controlled:
 - ❖ Automatically by DMC.
 - ❖ Manually by steam turbine control panel.
 - 3.3KV switchgear room consists of:
 - ❖ Sf6 Circuit Breakers.
 - ❖ Two feeder line 3.3KV which feed pump house and Tow step down Transformers (3.3KV/380V) to feed the mechanical Auxiliaries of plant.
 - Pump House Consists Mainly of:
 - ❖ 3 Circulating pumps.
 - ❖ Each pump is 750 HP, 3.3KV and SF6 C.B.

- Talkha Gas Turbine Power Plant consists of:
 - 8 Gas Turbines Frame 5 with control system (Speed Tronic Mk VIe):
 - ❖ The Base Load of Every Unit is 25MW.
 - ❖ Gas Turbine Can Be Controlled.
 - ❖ Locally from Unit Control Room.
 - ❖ Remote from Plant Main Control Room.
 - ❖ Remote from Combined Cycle Control Room throw Station Control Monitors.
 - High Voltage Switchyard consists of:
 - ❖ 6 Step-up Transformers with Oil and Two SF6 Circuit Breakers.
 - ❖ Switchgear Operation with National Control Center Power To Connect and Disconnect 220KV Unified Grid Functions.
 - ❖ Transformers: 4x60 MVA, 11.5/11.5/220KV - 2x65 MVA, 11.5/220KV.
 - ❖ Isolators & Circuit Breakers of 220KV.
- Tasks Assigned for the Operator Engineer in Talkha Power Station:
 - The Operating of Gas Units (8x25MW).
 - The Operating of Boilers and Steam Turbines.
 - The Training of Recent Engineers & Technicians.

Dates : From Dec. 2004 till Dec. 2006

Employer : Gravena Egyptian Sanitary Ware Co.

Job title : Maintenance Head Assistance Engineer

Job Description :

- Follow up the station (Air, Gas, Water).
- Achieve preventive Maintenance as plan.
- Set Maintenance documentation.
- Singe Maintenance Material requests.
- Contact department (production, Secretary, purchasing, planning).
- Schued and load Machines in the work shop.
- Hopping according to Maintenance and Manufacturing plan.
- Turring.
- Milling.
- Solve problems arising.
- Maintenance power arrangement.
- Design of port for Maintenance and new installing.
- Maintenance pumps (Electrical – Air).
- Staling, building and combined furnace (kiln).
- Contact departments (planning, production Maintenance, secretary purchasing and Q.A).
- Sign up department documentation.
- Sign Maintenance purchasing.
- Follow up furnace.

Dates : From Jan. 2004 till Nov. 2004

Employer : Middle Delta Electricity Production Co.

Project : Talkha Combined Cycle Power Plant

Job title : Operator Engineer in water station, pumps workshop and engines station

- Job Description** :
- Electrical pumps maintenance.
 - Diesel Engine maintenance.
 - Electrical motor and gearbox Maintenance.
 - Follow up instructions.
 - Manpower arrangement.
 - Solve any emergency problems.
 - Contact the head maintenance.