### 103642-MEC-M-E-2010

# Mechanical Maintenance Manager

Holds a B. Sc. in Mechanical Power Engineering and has over 6 years hands-on experience working in maintenance field with a good background in Thermodynamics, Fluid Mechanics, Heat transfer, etc.

#### PERSONAL DATA

Nationality : Egyptian Birth Date : 21/08/1988

Gender : Male
Marital Status : Single
Residence : Mansoura

# **EDUCATION**

B. Sc. in Mechanical Power Engineering, Mansoura University, 2010

# **LANGUAGES**

Arabic : Native Language

English : Good

### COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet

3D modeling software: Autodesk products (Revit MEP, AutoCAD, Catia,

Solid Works)

: CFD (computational fluid dynamics) and solid mechanics analysis software

#### TRAINING COURSES AND CERTIFICATIONS

- : Training Center (DKWASC):
  - Standard operation of drinking water treatment plants.
  - Mechanical maintenance of pumps.
  - Design and hydraulic principles analysis of Drinking Water Treatment Plant.
- Egy Cet Center for Engineering Training: HVAC, Fire Fighting, Plumbing (Design Course with practical experience).
- CAD CAM CIM (Solid Works Reseller in Egypt):
  - CSWP (Certified Solid Works Professional).
  - Solid Works Advanced Sheet Metal Specialist.
  - Solid Works Advanced Weldments Specialist.
  - Solid Works Advanced drawing tools.
  - Solid Works Advanced surfacing professional.

- : 2010: Algamaliaa Drinking Water Treatment Plant & Port Said Treatment Plant (Suez Canal Authority): 2 weeks training in the plant in different departments from the water intake, low lift pumps, mixing coagulation and sedimentation basins, filtration, disinfection and finally storage.
- 2009: Abu Sultan Power Plant: Attended sessions about the working cycle inside the plant & introduced to different zones specially control room.
- : 2008: Talkha Combined Cycle Power Plant: The 750MW Power Plant consists of 2x250MW gas turbines powered by natural gas + 1x250MW steam turbine powered by exhaust gas, attended sessions about the working cycle inside the plant, the production, transmission & distribution of electric power, introduced to different zones: boilers, turbines, transformers & the control room.
- : 2006 & 2007: Mansoura's summer training: 1 month training at the workshops & labs in faculty.

: ICDL

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Feb. 2016 till now

Employer : Daqahliyah Water and Sewer Company (DKWASC) - El-Gamaliya water

treatment plant

Job title : Mechanical Maintenance Manager

Job Description : • Responsible of the mechanic

- Responsible of the mechanical maintenance of the whole plant with capacity of 103.000 m3/day of treated water, Ensure maintenance and efficient day to day operations of all plant departments from the water intake to Raw water pumping station then the treatment operation by the addition of aluminum sulphate dosing in clarifloculators with associated flash mixing tank and the filtration process in rapid sand filters then the chlorine dosing in treated water tank to pump water in the local network with treated water pumps.
- Operate and maintain three diesel generators with capacity of 1500 KVA to operate some units in emergency cases.
- Develop and implement Preventive and predictive maintenance programs for all plant using Master program.
- Achievements:
  - Activation of the preventive maintenance plan, which led to the reduction of sudden faults.
  - The Plant receives a certificate of sustainable technical management (TSM) from the German Society for International Cooperation (GIZ).

Dates : From Jan. 2015 till Jan. 2016

**Employer** : Zanussi Manufacturer Compressors (ZMC), 10th of Ramadan

Job title : Maintenance Engineer (Utility Dept.)

Job Description : • Manage and direct all utility operations to assure low cost reliable utilities are provided.

- Ensure maintenance and efficient day to day operations of all plant boilers, cooling towers, Water treatment, electrical power station, air compressors, central Air conditioning system (chillers, AHU) and forklift:
- Develop and implement preventive and predictive maintenance programs for all key utility equipments such as Boilers, air compressors

and forklift.

Dates : From Jan. 2014 till Jan. 2015

**Employer** : Zanussi Manufacturer Compressors (ZMC), 10th of Ramadan

Job title : R&D Engineer (Mechanical Design Engineer)

Job Description : • Mechanical design of compre

Mechanical design of compressor components and component assemblies with specific applications to Fluid-dynamics and Thermal analysis problems, using state of the art CFD/Thermal analysis tools for detailed investigations and process of optimization, Applied also to fluid-structure interaction problems. Economic analysis of identified Solutions. Assembling and testing prototype of new design with Solid Works 3D CAD software, design tests set-up and test verifications to evaluate and support components design.

Achievements:

- ZMC new valve group design for hermetic compressor AZ models (AZ Marketed last year 6 million Egy pound).

 Modeling and Mechanical analysis for mechanical components with Solid Works FEA Simulation and replacing the upper bearing compWnent with increasing the crank case hub compensating the difference in balance and analyzing CFD for suction line with ansys fluent.

- Dynamic analysis for moving mechanism in compressor (Crank Shaft, Connecting Rod, Piston) and optimization study minimizing reaction forces on shaft bearing (crank case) and mass with the most stress loading due to motion.

- Research and development lap construction, new machines setup and experiment's procedures preparation and analyzing.

**Dates** : From Jul. 2012 till Sep. 2013

**Employer**: NSPO, Egyptian Armed Forces, Qasassin – Ismailia

Job title : Maintenance Engineer

**Job Description**: Operate and maintain of military engineers vehicles.

**Dates** : From Apr. 2011 till Oct. 2013

**Employer** : NSPO, Egyptian Armed Forces, Qasassin – Ismailia

Job title : Maintenance Engineer

Job Description : • Operate and maintain automated milking machine for dairy (capacity

5 ton/day).

 Maintain vacuum pumps, air compressors, compressed air lines, pneumatic system of production line and cooling tanks of milk.