# 103635-MEC-145MQ-E-2006

Reliability Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 16 years hands-on experience working in maintenance field.

# **PERSONAL DATA**

Nationality : Egyptian Birth Date : 05/10/1982

Gender : Male
Marital Status : Married

Residence : Nasr City, Cairo

# **EDUCATION**

B. Sc. in Mechanical Power Engineering, Helwan University, 2006

Secondary Education: El-Sedeek School, Nasr City, Cairo, 2000

# **LANGUAGES**

Arabic : Native Language

English : Very Good

German : Fair

# COMPUTER SKILLS

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

: AutoCAD : Revit 2016

HAP (hourly analysis program) Load estimationMachinery health management software MHM

# TRAINING COURSES AND CERTIFICATIONS

: Certified Advanced Vibration Analysis category III, Vibration Institute.

: Certified Basic Machinery Vibration Analysis category II, Vibration Institute.

: Certified Non-Destructive test level II in accordance with ASNT (Magnetic particles inspection, liquid penetrant inspection).

: Certified MLA I machinery lubrication analyst I (ICML).

: Training at the Machine Shop of VALVE & TOOLS S.A.E. (Free Zone).

: Training at the Workshop of the Egyptian Drilling Company (EDC).

: Pump Operation & Maintenance Course (Mechanical and Electrical) at

Technology Competency Center.

- : Hydraulic & Electro-Hydraulic Systems Course at Technology Competency Center.
- : Fundamentals Air System Design at ASHRAE.
- : Off-shore Safety Training (BOSIET OPITO).
- : ABC's of H2S and SCBA training.
- : HVAC design course certificate from Egyptian Syndicate:
  - A/C Load estimation.
  - A/C System selection.
  - Sheet metal air duct design.
  - Air out let Selection.
  - Ventilation System design.
  - Cold room and freezing Store Cooling Load estimation.
  - Fans selection.
  - Pumps selection.
  - Chilled water System Design.
  - Building Management System (BMS).
- : Fire Fighting & Plumbing course certificate from Egyptian Syndicate.

# CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Oct. 2019 till now

Employer : Bonatti Ltd

Dates : From Jun. 2018 till Oct. 2019 Employer : WEIR Solution (Oil & Gas)

Project: O&M for GTPP - Gas Turbine Power Plant) LUK OIL Company, West

Quern-2 BASRA OIL Company - IRAQ

Job title : Reliability Engineer

Job Description : • Attending tool box meetings to establish the scope of work, HSE requirements & permit to work special tools and material on daily basis

requirements & permit to work, special tools and material on daily basis.

 Establishing database for CBM in software (Omni trend), scheduling routes for new units/ plants as situation arises.

- Conducting online and offline vibration analysis as set out by the planned preventive maintenance program using pruftechnik VIBEXPERTII & OMNITREND software.
- Advise mechanical supervisor by any abnormalities and condition.
- Carry out borescope inspection OLYMPUS (IPLEX) of all turbo machinery in accordance with OEM procedures.
- Provide recommendation for faults found, supply information and data to support decisions.
- Take ownership and responsibility for the "lubrication sampling" database ensuring that it is up to date.
- Carry out acceptance tests and commissioning for new/repaired rotating equipment in accordance with international standards.
- Preparing and issue of monthly condition monitoring reports.
- Participation in failure root cause analysis (FRCA) studies.
- Engineering supervision alignment (pruftechnik ROTALIGN), inspection, repair and replacement of couplings and bearings and other component of rotating equipment where a poorly performed maintenance could

cause the equipment excessive vibration.

- On-site dynamic balancing single and 2 plane balance.
- Close co-operation with instrumentation team and Bentley Nevada service engineers to ensure correct performance of machinery monitoring system.
- Carry out all laser alignment activities.
- Participate in plant turnaround/shutdown activities as when required (minor and major overhaul for gas turbines and gas compressors).
- Maintaining equipment files that contain equipment data sheet, and maintenance history, etc.
- Actively working in CMM systems to get the equipment overhaul history, PM plans (SAP, MAXIMO).

Dates : From Dec. 2017 till May 2018

**Employer** : RAWEC – Rabigh Arabian Water Electric Company (KSA)

Rabigh Arabian Water Electric Company (RAWEC), is a start-up project for condition base monitoring department for a power plant that provides Petrorabigh refinery & complex with electric and water.

Project: Running Project PETRORABIGH PETROCHEMICALS COMPANY, Saudi

Arabia, reliability CBM department

Job title : Condition Monitoring Services Engineer CAT III

**Job Description**: • Conducting the duties of the CM Unit Head as condition base Maintenance Engineer and acting as a Mechanical Rotating Engineer.

- Aware of all types of equipment especially the rotating equipment with their lube oil & control systems, operating criteria and the corrective actions taken for maintenance.
- Conduct equipment troubleshooting for all rotating equipment.
- Review then Redesign for the equipment that have design problems for optimum design solution.
- Prepare Maintenance Plans for the Turnaround listing the equipment which will be overhauled with detailed maintenance actions (Based on the OEM recommendations & based on the condition (CBM)), also preparing the material list for that.
- Root Cause Analysis (RCA) team member for investigating the nature of failure and identifying the physical, Human & latent causes of failure.
- Create a Condition Monitoring Standard Procedures for the CM unit.
- Design and implementation of Condition Monitoring systems as a part of the Predictive Maintenance Programs.
- Assist the Predictive Maintenance Specialist to develop Condition monitoring routes and checks for Plant equipment.
- Ability to carry out bearing condition monitoring program using updated software and its associated instrument.
- On-site balancing single phase and 2 phases and over hung fans also performing laser alignment for different machines.
- Carry out equipment performance analysis and check for equipment deterioration and their causes and recommend the solutions.

Dates : From May 2010 till Dec. 2017

Employer : PetroRabigh for Petrochemicals Company, Saudi ArabiaJob title : Senior Condition Monitoring Services Engineer CAT III

### Job Description

- Conducting the duties of the CM Unit Head as condition base Maintenance Engineer and acting as a Mechanical Rotating Engineer.
- Data base modification and creation by using (AMS) Machinery Health Manager which is the application software for the CSI-2130 data collector.
- Design and implementation of Condition Monitoring systems as a part of the Predictive Maintenance programs.
- Performing diagnostic vibration analysis, provide technical reports (CM reports) and maintenance recommendations, also ensure implementing of this recommendations with high quality through QC reports.
- Performing root cause analysis for the repeated failure equipment, chronic problems and study the upgrading of the failed component and the mechanical seals.
- Issuing investigation report for the sudden failed equipment to indicate the root cause of failure in order to prevent repeated failures.
- Issuing condition monitoring reports for the equipment in the field of Oil/Gas & Petrochemicals.
- Performing all vibration measurements for all types of rotating machines with process data collection then compare them with the datasheet.
- Checking the online equipment's status through system 1 software.
- Utilizing the Exa-Quantum software and the DCS display to keep monitoring the vibration and process trends for all equipment.
- Dealing with the SAP system with different intersections to identify the equipment criticality and information's and also checking the notifications and work orders and creating all maintenance plan work orders for the vibration survey.

Dates : From Mar. 2008 till May 2010

**Employer**: Weatherford Oil Field Service Company

**Project**: Salam Gas Plant located at Western Desert of Egypt

Job title : Site Mechanical Maintenance Engineer for rotating equipment

**Job Description** 

- Field Maintenance Engineer, responsible for the continuous running of equipment's and machinery. Using computerized systems to oversee routine maintenance and organize repairs. Work with other professionals in order to improve production facilities, reduce the incidence of costly breakdowns and develop strategies to improve overall reliability and safety of plant, personnel and production processes.
- Carrying out and supervising the execution of the preventative, predictive, Corrective maintenance and Carrying out major overhauls for the rotating equipment like:
  - Multi-Stage Gas compressors (Centrifugal, reciprocating) like (Man-Turbo and Mitsui).
  - Multi-Stage Pumps (Centrifugal, reciprocating, gear and diaphragm) like (Gould's, Ingersoll- Rand, Dresser, Sulzer and Flowserve).
  - Air compressors (Screw) like (Atlas Copco, compare and Ingersoll-Rand).
- Using SPM device for detecting some problems like bearings fault and gears problems.
- Conduct thermograph camera, thermal analysis then recommendations, also gas leak test by using gas leak FLIR camera.

(Turbo – Expander) Package.

- Monitoring for all rotating equipment's to achieve the required performance, prepare an evaluation and history sheets for all equipment in the plant to improve of Plant equipment availability and reliability.
- Participate in commissioning and start-up of new plants like Qasr new compression station.

Technical studies of spare parts offer.

Dates : From Jun. 2006 till Feb. 2008

**Employer** : Delta Service Company

Job title : Junior Predictive Maintenance Engineer

Job Description

- Vibration analysis experience in large rotating equipment's used in Power industry, such as Gas and Steam turbine, Pumps, compressors, blowers and Fans.
- Assist the Predictive Maintenance Specialist to develop Condition monitoring routes and checks for Plant equipment.
- Experience in the use of vibration monitoring systems using diagnostic software Expert alert, DLI.
- Ability to carry out bearing condition monitoring program using updated software and its associated instrument.
- Ability to conduct vibration analysis / rotor orbit analysis / phase analysis as and when required.
- Carry out equipment performance analysis and check for equipment deterioration and their causes and recommend the solutions.

#### **Projects:**

- El-Kureimat Power Plant impact test for turbine bearing "resonance check at critical speed".
- Egyptian Fertilizers Company (EFC).
- United Gas Derivatives Company (UGDC).
- Fine Papers Mills.
- Rexam.
- Kandil Steel.
- Ezz El Dkhila Steel.