

105801-MEC-14CMSY-E-2014
Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 6 years hands-on experience working in construction, maintenance and commissioning.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 30/06/1992
Gender : Male
Marital Status : Single
Residence : Alexandria

EDUCATION

: B. Sc. in Mechanical Power Engineering, Alexandria University, 2014

LANGUAGES

Arabic : Native Language
English : Excellent
German : Basics

COMPUTER SKILLS

: Windows, MS Office, Internet
: AutoCAD
: Solid Works

TRAINING COURSES AND CERTIFICATIONS

- : ISO Category II / ASNT Level II (CAT II) Vibration Analysis Training Course, Certified from MOBIUS INSTITUTE.
- : Training of Vibration Analysis (Bentley Nevada 3500 & 1900 system) (Oct. 2018).
- : Training of Pumps (Design, Operation and Maintenance) from HYOSUNG GOODSORINGS INC especially in (feed water & Condensate pumps) (Sep. 2018).
- : Project Management Professional (PMP), Certified from Egyptian Engineers Syndicate.
- : Refineries Commissioning and Start-up of Mechanical Equipment, Certified from ESS of The American University in Cairo (AUC):
 - Pre-commissioning & commissioning (procedures, preparation, required tools, safety precautions, etc.).
 - Stationary Equipment (Towers, Reactors, Heat Exchangers, Vacuum

- Towers & Vessels, Storage Tanks, etc.).
- Rotating Equipment (Pumps, Compressors, Drivers, Electrical Motors, Diesel Engine, Steam Turbine, etc.).
- Isolation Standards.
- Rotary Equipment Alignment.
- : Non-Destructive Testing (NDT) Methods level I & II (PT, MT, UT, VT and RT), Certified from American Society for Nondestructive Testing (ASNT).
- : Gas Turbine Operation, Selection and Maintenance, Certified from Oil & Gas Skills (OGS).
- : Vibration Analysis, Certified from Oil & Gas Skills (OGS).
- : Compressors, Certified from Science & Technology Engineering Center.
- : HVAC Diploma, Certified from Egyptian Engineers Syndicate.
- : Instrumentation Diploma, Certified from Egyptian Engineers Syndicate.
- : Turbo Machinery Diploma, Certified from Egyptian Engineers Syndicate:
 - Pumps and Compressors.
 - Steam and Gas Turbines.
 - Bearings and Alignment.
 - Seals and Couplings.
 - Heat Exchangers.
 - Piping and Valves.
- : Trainings at:
 - Al-Mansour Automotive (Mansour Chevrolet) (Aug. 2013).
 - Abu Qir Fertilizers Company (Jul./Aug. 2012).
 - Mantrac Egypt, Alexandria branch (Jul. 2012).
 - Abu Qir Fertilizers Company (Jul./Aug. 2011).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Oct. 2019 till now
- Employer** : Egyptian Maintenance Company (EMC) for Petroleum Services
- Projects** :
 - ZOHR Natural Gas Field Project (EniProgetti & Belayim Petroleum Company (Petrobel)) (from Jul. 2021 till now)
 - TCI Sanmar Petrochemicals SAE - Port Said, Egypt (from Oct. 2019 till Jul. 2021)
- Job title** : Mechanical Maintenance Engineer (Rotating & Static Equipment)
- Job Description** :
 - Perform corrective, preventive and predictive maintenance activities for rotating and static equipment.
 - Participate in maintenance plans management (Master Plan & MWI) using CMMS software.
 - Plan, Schedule & Coordinate planned and corrective maintenance and estimate recommended manpower, spare parts and timeframe.
 - Participate in material control management based on inventory parameters
 - Troubleshooting and root cause analysis (RCA) for equipment.
 - Commissioning and start-up for mechanical equipment.
 - Manage work activities based on safety standards and preparing different types of work permits attached with risk assessment, TBT, SWI, MSDS and marked P&ID.
 - Participate in creating lifting plans of equipment.
 - Condition monitoring and reliability activities like vibration analysis, oil

analysis, RCA, MTBF, KPIs, etc.

- Equipment overhauling and maintenance activities including inspection, clearances measurement, shaft run out & end play, balancing (static & dynamic), alignment (laser & dial indicator), flushing & jet pump cleaning, hydro & pneumatic testing, preservation, etc.
- Responsible for rotating equipment such as pumps (centrifugal (single & multi stages) & positive displacement (piston, gear, diaphragm, plunger and screw)) which are compatible with acidic, caustic, flammable and Toxic liquids (M/S.API Plan 23, 31, 32, 53A & B, 54, 62), Compressors (Screw, liquid ring (single & multi stages), reciprocating and centrifugal), Gas Turbines (Siemens-SGT-400), Fans & Blowers, Centrifuges and Agitators & Gearboxes.
- Responsible also for static equipment such as Pressure Vessels, Columns & Towers, Reactors, Hydrolyzers, Clarifiers, Heat exchangers (shell & tube (fixed, U tube and float type), plate and spiral), Valves (isolation, control and safety) and piping fabrication & welding activities.
- Maintenance Activities for Utilities such as (Boilers (water & fire tube), Cooling Towers, Chilled water & glycol systems, Incinerator area and ZLD water treatment plant), Pneumatic & Hydraulic systems and finally Bagging Machines & Conveyors Systems.

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| Dates | : | From Nov. 2017 till Oct. 2019 |
| Employer | : | ORASCOM CONSTRUCTION |
| Project | : | New Assiut Combined Cycle Power Plant 1500MW |
| Job title | : | Mechanical Commissioning & Maintenance Engineer (Rotating & Static) |
| Job Description | : | <ul style="list-style-type: none">• Maintenance Period:<ul style="list-style-type: none">- Preventive, Predictive and Corrective Maintenance for Rotating and Static Equipment such as Steam Turbine (GE), Lube & Seal oil skid, Boiler feed water & Condensate pumps (HYSOUNG), Closed Cooling & Demin pumps (Garbarino), Drain pumps (KSB), Vacuum pumps (NASH), Oil Free compressors (Atlas Copco), ACC (B&W SPIG), Boilers (Doosan), Pressure vessels, Heat exchangers, valves, etc.- Overhauls and maintenance activities for some equipment:<ul style="list-style-type: none">❖ Boiler feed water pump overhaul (HYSOUNG) / (12 stages) including rotating & stationary parts tolerance check such as (impellers, balance disc, balance piston, mechanical seals and static guide vanes), shaft run out, journal bearing & thrust ball bearing change and bearing alignment.❖ ACC fan unit including motor bearings change and pitch angle adjustment of fans blades.❖ Mechanical seals change for some pumps such as boiler feed water & recirculation pumps (HYSOUNG) and closed cooling pump (Garbarino).❖ Fully overhaul for submersible pump (Argal).❖ Fully dismantling of thrust journal bearing for steam turbine.❖ Overhauls for some valves (isolation, control and safety valves).❖ Repairing for some tubes of boiler evaporator (Doosan).❖ Participating in HP Steam Turbine (GE D202) (250MW) overhaul with GE team.- Making RCA reports and participating in conditioning monitoring |

- analysis for rotating equipment.
- Responsible for equipment & systems preservation in outage period.
- Commissioning Period:
 - Punch lists for systems before commissioning activities.
 - Chemical cleaning activities for Boilers (HRSG) (Doosan Boiler), Feed water and Condensate systems.
 - Installation activities after chemical cleaning such as internal parts of valves, flow meters, etc.
 - Final alignment of coupling and flanges for mechanical equipment.
 - Preservation of the Boilers by Nitrogen gas (dry and wet).
 - Stroke adjustment for motorized and control valves Such as AUMA valves with I&C team.
 - Solo run and mechanical load tests for equipment.
 - Flushing and commissioning procedures for systems.
 - Air blowing & flushing activities for systems like C.C.W, condensate, boiler feed water, lube oil, hydraulic, etc.
 - Steam blow activities and target plate inspection for each steam path.
 - Vacuum system commissioning and decay test.
 - Hot Cleaning activities for Air Cooled Condenser (B&W SPIG)
 - Commissioning activities for auxiliary skids of steam turbine and generator such as lube & seal oil, hydraulic, steam seal, gland steam condenser, and gas analyzer skid (H2, Co2 and N2).
 - Steam turbine (GE D202) (250MW) commissioning activities.
 - Participating in DCS operation (Mark Vie Control).
 - Participating in performance tests for Gas Turbines (GE-9E.03) (125MW).
 - Combined cycle plant performance and reliability tests.

Dates : From Feb. 2017 till Nov. 2017
Employer : ELSEWEDY ELECTRIC (PSP)
Project : Beni Suef Combined Cycle Power Plant 4800MW
Job title : Mechanical Construction Engineer (Piping & Mechanical Equipment)
Job Description :

- Construction activities such as fabrication and erection of (piping & supports) for boilers (NEM Boiler), BOP and STG scope.
- Visual inspection for fabrication and welding.
- Hydro test activities for piping loops including test preparations such as valves internals replacement with hydro plugs.
- Walk down for systems using P&ID and isometrics.
- Mechanical equipment (static and rotating) installation.
- Participate in creating lifting plans of equipment.
- Pre- & final alignment of mechanical equipment (coupling & equipment flanges (stress free of bolts)).
- Plan & report of daily progress and implementation of punch lists.

Dates : From Jun. 2016 till Feb. 2017
Employer : Alexandria Company for Industrial Packages (ACIP Egypt) - one of ABCO United Group for Plastics & Chemicals
Job title : Mechanical Maintenance Engineer

- Job Description** :
 - Operation and maintenance activities for Injection Molding Machines, Pet preform Injection Molding Machines, Pet preform blowing machine, Hydraulic systems, Air Compressors (Screw & Reciprocating), Pumps (centrifugal & Positive displacement), Chillers and Cooling Towers.
 - Creating maintenance plans (PM & master plan) for each machine according to machine manual and manufacturer instructions.
 - Reporting breakdown root cause and equipment faults to management.
 - Carrying out preventive maintenance schedules at the exact time and according to work conditions.
 - Carrying out monthly key performance indicator (KPI) and annual maintenance budget for factory.
- Dates** : From Dec. 2015 till Jun. 2016
- Employer** : Al Sakr Group for Food Industries
- Job title** : Mechanical Maintenance Engineer at Utilities Department
- Job Description** :
 - Operation and Maintenance for Water Treatment Plants (RO & softening plant), Fire Tube Boilers, Pumps, Air Compressors, Cooling Towers, Refrigeration Systems and HVAC Systems.
 - Achievements: The best achievement during my period is to save about 35000 Egyptian Pound per month by reducing the fuel consumption of the Boilers with generating the same steam demand.