

100322-MEC-1CMOY-E-2001

Senior Mechanical Maintenance Engineer

Holds a B. Sc. in Mechanical Power Engineering and has over 19 years' experience in construction, commissioning, operation and maintenance (of all equipment's in Thermal Power Plant and Combined Cycle heat Recovery System Generated & heavy oil tanks, all Drain system, all pumps, Pipeline structure, all tanks, boiler design, water network and waste water, treatment plants and verification of project carried out by Design Build Contractor. Coordination and integration of Plumbing and Firefighting systems with other disciplines.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 22/01/1977
Gender : Male
Marital Status : Married
Residence : Beni Suef

EDUCATION

: B. Sc. in Mechanical Power Engineering, Al-Minia University, 2001

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

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

TRAINING COURSES AND CERTIFICATIONS

: Training performed at SERAING (Belgium) in C.M.I ENERGY Company in Heat Recovery Systems to El-Kureimat III 750MW Combined Cycle Project Contract 10042 CP-105 (Apr./May 2009).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jun. 2020 till now
Employer : Upper Egypt Electricity Production Co.
Project : South Helwan Supercritical Thermal Power Station 3x650MW 2260 T/HR Steam, 565 C, 243 Bar natural circulation, N.G / HFO fire Contract no. 10071-CP-105

- Job title** : Senior Mechanical Maintenance Engineer
- Job Description** :
- Forced Draft Fan:
 - Axial fan PTF2450 Howden Type.
 - Bitch Blade: Blade Bearing.
 - Hub: Hydraulic Cylinder.
 - Guide Vanes: Diffuser.
 - Mean Bearing: Spherical roller bearing and toroidal roller bearing.
 - Lubrication System and Hydraulic Oil System.
 - Check the rotating union for any oil leak, alignment.
 - Regenerative Air Preheater: Check Basket damage (hot, intermediate, cold), Soot blower nozzle and feed tube, all seal Axial Redial, Upper, Lower and Circumferential seal, check stander clearance between sector and seal, Check Support bearing, bottom bearing and air motor emergency, soot blower lance tube feed tube and washing tube, chemical skid check.
 - Gas Recirculation Fans: Check Bearing (D.N & N.D.E), oil leakage from Lybrince seal, seal air, turning gear clutch and free wheel, Check the clearance between shaft and groves, Check crack, fan plade.
 - BCP: Boiler Circulation Pump Check inlet and outlet warmup line Check Diffuser, main impeller, casing wear ring, impeller and diffuser wear ring, heat exchanger, cooler and strainer.
 - Damper: All damper check for (seal strips, flange bearing, packing, greasing, open and close, link rod, actuator) for (air and gas damper).
 - Burner heater: Check shell and tube leakage.
 - Soot blower system: check for all soot blower, steam leakage, high sound, adjusting pressure and flue according to level and lance bending or damage.
 - Cooling fan and flame scanner systems: Check for alignment, any vibration, greasing for bearing according to schedule.
 - Spray water system: Check any steam leak form nozzle.
 - All silencer FDF, Safety valve Silencer:
 - Check for all chamber inside silencer, any cricks, holes.
 - Heavy Oil System and Natural gas: Check for all transfer pump, valves, filters.
 - Purge and Atomizing Systems: Check all purge and atomizing valves.
 - Flash tank and Blow down Check.
 - All bank tube (primary & Secretary & and Reheat Coils Check by Hydrostatic Tests.
 - Reboiler Systems Check (pumps, shell, tube and safety valves).
 - Washing pump and Chemical Skid Check before start washing.
 - Additive Systems Check.
 - All damper inspection open and close 100%.
 - Steam coil Air preheater Check by hydrostatic test.
 - Chemical injection system check.
 - Closed cooling system check.

Dates : From Nov. 2013 till Nov. 2019

Employer : Kharafi National

- Project** : Doha West Thermal Power Station 8x300MW
(1026 T/hr steam, 542 C & 205 bar, natural circulation, N.G /HFO fire)
- Job title** : Senior Mechanical Maintenance Engineer
- Job Description** :
- Annual Maintenance work for Mechanical Equipment's at Doha West Power Station.
 - Boiler Drum: Cleaning and repair of drum internal part's, scrapers, cyclones, buffel plate, inspection for chemical feed tube, check crack for anchor bolt, water feed tube.
 - Boiler Deaerator: Cleaning and inspection of interior & crack detection & cleaning of spray nozzles & crack check anchor bolts & level gauges maintenance.
 - Critical and non-critical pipeline: carbon steel & chrome & Corten Steel Type A, B & stainless steel & SA182F22 & SA335P12, P22 & SA105NGR A, B & 13CrMo44 & 12CrMo44 & X20 & 15Mo3, ...etc.
 - NDT Technician: Hydrostatic Tests (initial and final test to SH&RH Banks).
 - Heat exchanger: hydrostatic test leak for tube (high pressure for all heater) and repair the leak tube.
 - First pass and second pass: Repair of burners for gas nozzle, Swirled, Barra, Supports, Brakes, Refractory, Mechanical cleaning, Hydro Jet washing machine for first pass and second pass cleaning, Hydrostatic Tests for H.P & R.H parts.
 - Valves:
 - Gate, valves as per list maintenance and inspection.
 - Glob, valves as per list maintenance and inspection.
 - Safety, valves as per list maintenance and inspection.
 - Tank: Cleaning and inspection of interior & crack detection & cleaning of spray nozzles & crack check anchor bolts & level gauges maintenance.
 - Expansion Joint:
 - Maintenance for Metallic expansion joint.
 - Replacement expansion joint if required.
 - RAP I & II: Washing Chemical cleaning for Basket and cleaning that by service water, Full maintenance for hot end and cold end bearing, Rap balancing, maintenance for basket, Soot blower system inspection, Redial seal, axial seal, circumferential seal inspection and replacement if need.
 - Oil & Gas firing system:
 - Burner air dumper maintenance.
 - Burner air register maintenance.
 - Burner swirled inspection, Gas & Oil Lance inspection.
 - Soot blower maintenance:
 - Feed, Lance tube inspection.
 - Sealing air system inspection.
 - Nozzle holes standard inspection.
 - Ducts:
 - Cleaning of duct from inside.
 - Crack inspection.
 - Sealing damper inspection.
 - Impulse line inspection.
 - Forced Draft Fan:

- Vane plate inspection.
- Suction filter, silencer.
- FDF hydro Reviewed and issued comments on Concept Design Drawings.

- Dates** : From May 2004 till Nov. 2013
- Employer** : UEEPC
- Project** : El-Kureimat I (2x627MW)
(El Paso design boiler 2063 T/hr steam, 542 C, 205 bar, natural circulation, N.G/HFO Fired)
- Job title** : Mechanical Maintenance Engineer
- Job Description** :
- Valves: Valves design and selection review according to ANSI B16.34, and all types of valve (ball valve, gate valve, globe valve, check valve, butterfly valve, piston valve, needle valve, poppet valve, safety valve, pneumatic valve) inspection and repair for disc, plug, seat, stem, and lapping if need.
 - Pumps: centrifugal pumps, Reciprocating pumps - piston, plunger and diaphragm, Steam pumps, Rotary pumps - gear, screw, vane inspection and repair for impeller, mechanical seal, casing, diffuser, shaft, alignment, Fuel oil transfer and high-pressure pumps stations.
 - Dampers: All Dampers inspection and repair, for rode, link, motor, packing, crake, seal isolation, fix diffuser, shut off and control dampers.
 - Tank: inspection and repair for cyclones, scrapers, buffel plate, crake check for anchor bolt, chemical feed tube, crack check for feed water inlet pipe nozzle.
 - Heat exchanger: Types: Steam water / Oil water – lube oil pump, lube oil tank, filter, heat exchanger, level glass.
 - Construction phase: BOILER and AUX:
 - Sealing and cooling air system.
 - Test for the safety valves.
 - Chemical injection system.
 - Natural gas system.
 - Soot blower system.
 - Attemperation water system.
 - Fuel Oil system.
 - Natural gas system.
 - Flue gases system.
 - Soot blower system.
 - Fuel oil transfer and high-pressure pumps stations.
 - Gas Recirculation Fans.
 - Forced Draft Fans.
 - Steam coil Air preheater.
 - Regenerative Air Preheater.
 - Shut off and control dampers.
- Field of experience** :
- Boiler Mechanical Maintenance Engineer.
 - Skills:
 - Directory, leadership, tacking decision, carry the responsibility.
 - Writing letters to the contractor.
 - Making the reports.

- Design review for the contractor submittals according to the contract and relevant Application of ASME, ASTM, ANSI, Standards.
- Rotating and Stationary Equipment's, pressure parts, module, fans, pressurizing / atmospheric vessels.
- Valves design and selection review according to ANSI B16.34.
- Reporting to the Project Residence Engineer.
- Systems, flushing, hydrostatic and pneumatic tests, safety valves set pressure.
- Spare parts review and receiving.
- Refractory (thermal bricks, thermal cement) & Insulation (rock wool, cladding sheet).
- Make F.M.R field material request for spare parts.
- Valves design and selection review according to standard code.
- Critical and noncritical piping, cooling water system and pumps station, lube oil system.
- Hydrostatic and pneumatic tests, safety valves set pressure.
- All fans axial and centrifugal for forced draft fan.
- All regenerative air preheater vertical and horizontal shaft (two layer and three layer).
- Tanks, boiler design, water network and wastewater.
- Supercritical Thermal Power Station 3x650MW (Egypt).
- Thermal Power Station - Doha East Power Station 7x150MW (Kuwait).
- Thermal Power Station - Doha West Power Station 8x300MW (Kuwait).
- Thermal Power Station El-Kureimat I 2x627MW (Egypt).
- Heat Recovery Systems to El-Kureimat II 2x750MW (Egypt).
- Application and supervision of the flowing NDT tests:
 - Hydrostatic Tests.
 - Pneumatic Tests.
 - Liquid Penetration Tests (LPT).
 - Magnetic Particle Tests (MPT).
 - Metallographic Replica Test (MRT).
 - Mechanical cleaning for coil (Bank).
 - Chemical cleaning (inside & outside) tube (Bank).
- Approvals:
 - Approved Engineer from (Ministry of Health) (Kuwait).
 - Approved Boiler Engineer from (Ministry of Electricity and Water) (Kuwait).