

100507-MEC-1GHMY-E-2003
Director for Steam Turbine Maintenance Dept.

Holds a B. Sc. in Mechanical Power Engineering and a Diploma in refrigeration and air-condition systems. Has over 14 years experience in mechanical engineering, operation and maintenance of power plants, project management, Oil & Gas Field, and Petrochemical Industries.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 12/05/1979
Gender : Male
Marital Status : Married
Residence : Qalubia

EDUCATION

: B. Sc. in Mechanical Power Engineering, Helwan University, 2003
: Diploma in refrigeration and air-condition systems, Helwan University, 2005

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet
: AutoCAD 2D, Photoshop
: Primavera project planner v3.1
: Visual Basic

TRAINING COURSES AND CERTIFICATIONS

: Summer trainings at:

- JAC Power for air condition systems (2001).
- El Towhead for car (2002).

: Hydraulic, pneumatics and programmable logical control course, Technical Institute for Developing Industries (from Jan. till Jun. 2004).

: Refrigeration and air-condition systems course, Institute Salesian "Don Bosco" (from May till Aug. 2004).

: At Shoubra El-Kheima Power Station Training Center:

- Alignment course (Oct. 2004).
- Vibration analysis of rotating machine course (Dec. 2004).

- Vibration condition monitoring and balancing equipment course (Jan./Feb. 2005).
 - Basics and site specifics training courses, constituting a program of concentrated study of power plant equipment and system theory and application (from Mar. till Jun. 2005) (OVERSEAS BECHTEL).
- : Gas turbines maintenance course, Cairo North Power Station Training Center (Jul. 2007) (frame 701f Mitsubishi 250MW).
- : Gas turbine operation and control course (Nov. 2008) (G.E frame 5).
- : Capacity building & strengthening of thermal power generation operation and maintenance from Career Development Center (KEPECO) and JICA Kansai in Japan for 1 month.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From May 2011 till now
- Project** : Cairo North Combined Cycle Power Station (2x750MW):
- 2x250MW GE, MS 9FA Gas Turbines, Manufactured by GE Company
 - 2x250MW MHI M701F Gas Turbines, Manufactured by MHI Company
 - 4 HRSG (Heat Recovery Steam Generator), Manufactured by NEM Company
 - 1x250MW Steam turbine, Manufactured by ALSTOM Company
 - 1x250MW Steam turbine, Manufactured by Hitachi Company
 - EMIT water treatment plant and KSB (closed cooling pumps, condensate pumps, circulating water pumps, service water pumps and Boiler feed water pumps)
- Job titles** :
- Director for Steam Turbine Maintenance Department
 - Mechanical Maintenance Engineer
- Job Description** :
- Gas turbines (corrective, preventive, predictive) maintenance.
 - Steam turbines (corrective, preventive, predictive) maintenance.
 - Maintenance of turbines Auxiliaries such as: Pumps – Compressors – Valves – heat exchangers, etc.
 - Machinery Vibration Measurement and Analysis.
 - Supervise the maintenance group to inspect diagnose operational problems repair and troubleshooting for the following equipment:
 - Major overhaul inspection for Gas turbine (GE 250MW MS 9FA):
 - Borescope inspection for turbine and compressor blades.
 - Inspection axial air compressor of the unit (moving and fixed blades).
 - Replacement of turbine moving and fixed blades (3 stages).
 - Replacement of combustors, transition pieces, end caps and fuel nozzles.
 - Lifting of the turbine rotor and inspected with ultrasonic test.
 - Inspection of the bearings (thrust and journal).
 - Pull out generator rotor and inspection of stator and rotor coils.
 - Replacement of inlet tower air filters (1500 filters).
 - 6 hot gas path and combustion chamber inspections.
 - Major overhaul inspection for Gas turbine (Mitsubishi 250MW M701F):
 - Borescope inspection for turbine and compressor blades.
 - Inspection axial air compressor of the unit (moving and fixed blades).

- Replacement of turbine moving and fixed blades (4 stages).
- Replacement of combustors, transition pieces, end caps and fuel nozzles.
- Lifting of the turbine rotor and inspected with ultrasonic test.
- Inspection of the bearings (thrust and journal).
- Pull out generator rotor and inspection of stator and rotor coils.
- Disassembly of unit auxiliaries such as starting motor, torque converter, clutch, turning gear and oil pumps gear and centrifugal pump.
- Replacement of inlet tower air filters (1600 filters).
- 8 hot gas path and combustion chamber inspections.
- Major overhaul inspection for Steam turbine (Alstom 250MW at 3000 r.p.m):
 - Dismantle of High Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Intermediate Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Low Pressure turbine and inspect all fixed and moving blades.
 - Visual check of the steam condenser.
 - Inspection of all bearings (thrust and journal).
 - Disassembly of all steam valves and inspect.
 - Disassembly of cross over pipe and inspect the expansion joint.
 - Disassembly of all steam glands and change the labyrances.
- Major overhaul inspection for Hitachi steam turbine (250MW at 3000 r.p.m):
 - Dismantle of High Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Intermediate Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Low Pressure turbine and inspect all fixed and moving blades.
 - Visual check of the steam condenser.
 - Inspection of all bearings (thrust and journal).
 - Disassembly of all steam valves and inspect.
 - Disassembly of cross over pipe and inspect the expansion joint.
 - Disassembly of all steam glands and change the labyrances.
- 3 Major overhauls inspections for steam turbine (Westinghouse 315MW at 3000 r.p.m):
 - Dismantle of High Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Intermediate Pressure turbine and inspect all fixed and moving blades.
 - Dismantle of Low Pressure turbine and inspect all fixed and moving blades.
 - Visual check of the steam condenser.
 - Inspection of all bearings (thrust and journal).
 - Disassembly of all steam valves and inspect.
 - Disassembly of cross over pipe and inspect the expansion joint.
 - Disassembly of all steam glands and change the labyrances.
- 8 major overhauls of centrifugal gas compressor (MHI two stage, ATLAS COPCO one stage, SIEMENS (multi stage)):
 - Inspection of all bearings (thrust and journal).

- Inspection of dry gas seal.
- Inspection of shaft and impeller.
- Pull out rotor and change.
- 4 HRSG (NEM).
- Major overhaul inspection for gas turbine 42MW (Fiat TTG20 at 4918/3000r.p.m).
- 2 Major overhaul inspections for gas turbine (GE frame 5).
- 2 Major overhaul inspections for steam turbine (dresser rand frame: gaf.6c 1.8MW 5706/3000 r.p.m).
- N.D.T check.
- Friction type bearing, split type bearing, kingsbury thrust bearing, guide bearing and antifriction bearing).
- Surface condenser.
- Retubing Surface condenser (12800 tubes).
- Make up demineralizer plant (900 GPM, capacity).
- Remove heat exchanger and installation the new heat exchanger.
- Polisher system for 315MW steam turbine unit.
- Waste water treatment plant (500 GPM, MAX capacity).
- Boiler Feed Pumps (240 Bar, 700 Ton/Hr, 7 Stages).
- Circulating water pumps (900HP-450RPM-340,000LIT/MIN).
- Condensate Pumps (Vertical Pump, 5 Stages, 35 Bar).
- All types of pumps (positive displacement & centrifugal (horizontal, vertical)) as ALLIS-CHALMERS, KSB, GOULDS, MILTON ROY, WORTHINGTON, ENERPAC and TECNO-MATIC, WELDEN PUMPS.
- Critical control valves and heat exchangers as ITT GRINNELL DIAPHRAGM VALVE, DEZURIK, JAMESBURY, FISHER,VERSA, HAYWARD P.V.C VALVE and HITACHI.
- A lot off types of gear box as WINSMITH, SEW EURODRIVE, LIGHTNIN, LUFKIN and PHILADELPHIA DOUBLE HELICAL GEAR.
- Diesel engine (800 Hp & 700 Hp Cummins).
- Air compressors & air dryers.
- HYDROGEN Compressor (comp air180 bar) and air blower (SUTORBILT).
- Sharing in Shoubra El-Kheima Power Plant Training Center by the course in gas turbine unit.
- Working as an Instructor for four weeks with ISCOA Training Center in Saudi Arabia with the following course (machanical maintenance of power station).
- Working as an Instructor with Apex Training Center in Saudi Arabia with the following course (gas turbine maintenance).
- Review spare parts & consumable materials to be reordered.
- Working with a group of experience engineers to prepare P.I.D documents for gas and steam turbine. Analyze contracts tender document.
- Propose technical modification to improve plant (Availability & Reliability).
- Prepare Action Plan and Scope of Work for different Equipment.
- Follow up the Safety Rules and Work Permit System for the different jobs.
- Follow up both Onshore and Offshore Activities, Maintenance, Repair and Overhaul.

Dates : From Oct. 2004 till May 2011
Project : Shoubra El-Kheima Power Station (4x315MW steam turbine)
Job Description : Supervise the maintenance group to inspect diagnose operational problems repair and troubleshooting.

Dates : From Jan. 2004 till Oct. 2004
Employer : Al Mustafa Trading & Contracting (MTCO)
Job Description : Supervise the maintenance group to inspect diagnose operational problems repair and troubleshooting and design the central air-condition systems.

Field of experience :

- Highly dedicated and experienced Mechanical Engineer with extensive management skills and 14 years experience in mechanical engineering, operation and maintenance of power plants, project management, Oil & Gas Field, and Petrochemical Industries.
- Successfully managed a predictive maintenance department in great Power Station in Egypt (four steam turbines 315MW, one steam turbine 1.8MW, 10 Boiler Feed Pumps 240 Bar, 700 Ton/Hr, 5500 Rpm).
- Successfully managed an annual maintenance repair and inspection outages on many units 315MW Westinghouse steam turbines in Egypt and 250MW Hitachi steam turbine, 250MW steam turbines with ALSTOM, 250MW gas turbine GE, 250MW gas turbine MHI.
- Successfully managed an Area Maintenance Team Leader and turnaround for Rotating in Emethanex Damietta Project in Egypt.
- Successfully managed Training Courses for Engineers and Technicians in KSA.