

Holds a B. Sc. in Mechanical Engineering and has over 19 years hands-on experience working in Steam Power Plant, water desalination plants (Operation & Maintenance), water projects (mechanical construction, operation, maintenance, commissioning and start-up), Performance monitoring and technical supervision of the implementation of various maintenance of steam and gas power plants (Preventive M., Corrective M., Warranty inspection, Major inspection, combustion chamber, hot gas pass inspection, Borescope inspections), manufacturing and testing of plastic injection molds, as well as troubleshooting.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 28/10/1973
Gender : Male
Residence : Eastern Province of Egypt

EDUCATION

: B. Sc. in Mechanical Engineering, Zagazig University, 1998

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

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

TRAINING COURSES AND CERTIFICATIONS

: Operation and Maintenance of Centrifugal Pumps, KSP - in Egypt, East Delta Electricity Production Company (EDEPC).
: Operation and Maintenance of Multi stage flush evaporator (MSF) Desalination plants, HITACHI - in Egypt, East Delta Electricity Production Company (EDEPC).
: Operation and Maintenance of Steam Turbine, SIEMENS - in Egypt, East Delta Electricity Production Company (EDEPC).
: Training courses in the water treatment of sea water, industrial waste water, sewage water plants.
: Training courses in the field of Industrial safety.
: Training courses in the field of transformers.

- : Boiler operation and maintenance in a steam power station by B&W Co.
- : Operation and Maintenance in the area of condenser and feeding, cooling water system, the low and high pressure heaters and dearator, the field of valves and stop valves and control valves, the field of compressors and fans, the fire fighting systems, Fire protection systems and fire brigade training.
- : Training in Middle Delta Electricity Production Company (MEDPC) in operation and maintenance of combined cycle station unit by Training Center.
- : Turbine operation in a steam/gas power station.
- : Maintenance of Rotating equipment.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Feb. 2017 till now
- Employer** : Egypt Electricity Holding Company
- Project** : Banha Power Plant Combined Cycle 750MW
- Job title** : Director of Technical Affairs Department
- Job Description** :
- Supervising the implementation of the periodic maintenance plan and emergency maintenance of gas and steam turbines with a capacity of 3x250MW.
 - Supervise the implementation of the work of the Borescope for gas turbines 2x250MW and the work of technical reports of the summary of the work that was made and show the positive and negative points and presented to the head of the sector to take appropriate action with the turbine contractors.
 - Supervising the maintenance work at the end of the warranty for the steam turbine and the generator and the work of the final report summary and identify the positive and negative technical points and presented to the head of the station sector to take appropriate action.
 - Supervising the implementation of combustion chambers (C.I) and hot gas bus inspection (H.G.B.I) for the Gas turbines and recording the readings of turbines before and after and calculate the performance indicators of the unit and the work of technical reports summarized for the Heavy maintenance and presented by the head of the station sector to take appropriate action with the turbine contractors.
 - Follow up the implementation of daily faults with different maintenance departments and rates of achievement and follow-up daily performance indicators and the rate of consumption and adequacy and self-consumption rate of the station and study the solution to the problems to access the performance indicators of the station.
 - Continuously reviews the work as it is performed for quality, accuracy and completeness.
 - Perform Engineering activities to enhance power plant efficiency (Firefighting, Water Supply, Drainage & Irrigation).

- Dates** : From May 2011 till Feb. 2017
- Employer** : Egypt Electricity Holding Company
- Project** : Ayoun Moussa Thermal Power Plant 2x320MW
- Job title** : Section Head of Mechanical Maintenance Department

- Job Description** :
- Prepare the Maintenance program plan for the outage, planned and forced.
 - Develop & select the applicable Lessons Learned, best practices BPs and tooling per every PM/CM/MI outage for better execution plan and less manhours/cost per outage.
 - Prepare spare part and Lubrication list & purchase order.
 - Advise the Maintenance management of any dysfunctional equipment or operating parameters at variance with normal levels during operation, Recording activities or defects.
 - Follow up and plan the day to day maintenance activities, review spare parts for annual shutdown.
 - Maintenance of rotary and static equipments & controls related and operational problems.
 - Lead a team to carry out the corrective, preventive, overall mechanical maintenance to monitoring of all mechanical equipment plant as following:
 - Siemens steam turbines and its auxiliaries such as lifting and lubricating oils, control oil, valves, seal steam, vacuum, boiler feed water pumps, turning gear motor, cooling water, inlet air fans, heat exchangers, blowers, Steam condensers, water heaters, Pumping stations system.
 - Emergency diesel generators and its auxiliaries as fuel tanks and cooling water systems.
 - Power generation unit utilities such as, fire fighting system, plumbing and other.
 - MSF water desalination unit's, auxiliaries as pumps, heaters, condensers, chemical injection systems, water tanks, compressed air, Ball cleaning system.
 - Underground feed water supply system and its auxiliaries as lifting submersible pumps, storage tanks and feed pumps.
 - Fire fighting system and its auxiliaries as fire pumps, jokey, fire hydrant and valves.
 - Prepare / Perform the required STG inspection, Overhaul & Major Overhaul activities maintenance plans depending on STG Firing hours and actual running condition concerning turbine performance and historical analysis data as per Manufacture recommended scope of work with the required spare parts/consumable list (with respect to spare parts availability at Company Warehouse). rotor alignment, make welding test.
 - Directly involved in Siemens Turbines. 1 Major overhaul, All STG disassemble work performed under Siemens Rep. Supervision / attendance, Rotor with turbine blades have been sent to Work Shop to conduct rotor blades dismantle work for proper cleaning and crack inspection, which blade can be reused, repairable or rejected according to Vendor limits/recommendation, Spare Parts list/purchase order has been decided according to the actual inspection results, the said procedures positively affecting/reducing STG total overhaul cost.
 - Directly involved in KSB pumps. 2 Major overhaul for feed water pump turbine (FWPT). 1 Major overhaul for water cool air compressor, hydrogen gas compressor.

Dates : From Jun. 2010 till May 2011
Employer : Saudi Service for electromechanical works
Project : Saline Water Conversation Cooperation (SWCC) - RAS AL KHAIR Riyadh Water Transmission System, Package C: The scope of the Ras Al Khair - Riyadh Water Transmission System is to transport (900000m³/day) potable water produced at the new desalination plant located in Ras Al Khair, at the east coast Saudi Arabia with Chlorination System, to the City of Riyadh
Job title : Senior Mechanical Engineer
Job Description : Preparing the mechanical works, supervision, installation, fabrication, welding, hydrostatic test, pre-commissioning and commissioning as the same my works, mentioned below in last project (SHOAIBA phase 3 - Water Transmission Systems).

Dates : From Jun. 2009 till May 2010
Employer : Saudi Service for electromechanical works
Project : Minstry of Water & Electricity in Riyadh - (Zam Zam well No. 1 Makah Al-Mukarramah), Purification plant 5000m³/day capacity, Bottling plant 200000 bottle/day (10 liters each),Stainless steel pipe line from well 1 to purification plant in kudai (φ200 mm, 9000meter), (3. Replacement of 2 well pumps)
Job title : Senior Mechanical Engineer
Job Description :

- Preparing the mechanical works, supervision, installation, fabrication, welding, hydrostatic test, pre-commissioning and commissioning as follows:
 - Bottling plant (Belowing, conveyors ,printing, washing, filling, rebot machines and other utilities).
 - Main Ultra Vilot (U.V) unit and relate auxiliary systems (piping, pumps, tanks, U.V skid).
 - Pipe lines construction (Installation / fabrication / welding / NDT / hydrostatic test).
 - Air compressors unit and relate auxiliary systems (cooling water system, reduction station, air receive tank, air dryers).
- Coordinate all mechanical, electrical, plumbing, drainage, lifts, etc. with civil activities.
- Determine the best consistent method for erection to permits efficient and economical performance.
- Provide management reports as required.
- Apply field test for the equipment and fill the related performance sheets and performance data for comparison with the required approved performance of the equipment.

Dates : From Jun. 2008 till Sep. 2009
Employer : Saudi Service for electromechanical works
Project : Saline Water Conversation Cooperation (SWCC) - Saudi Arabia / SHOAIBA phase 3 - Water Transmission Systems consists of: SHOAIBA-JEDDAH pipe line system (120.7 km, transporting 60MIGD through 60" CML), SHOAIBA-QUIZA pipe line system (109 km, transporting 60MIGD through 76" CML), SHOAIBA-MINA pipe line system (112 km, transporting 100MIGD through 80" CML), MAKKAH-TAIF pipe line system (42.5 km, transporting 40MIGD through 44" CML), Project includes Air Compressor System and Chlorination System

- Job title** : Senior Mechanical Engineer
- Job Description** :
- I had several positions in the potable Water transmission systems two pipelines, pumping stations, buildings and storage tanks for potable Water Transmission between cities in Saudi Arabia, that give me experience from different angles as followed:
 - Site Piping Engineer (Construction – Hydro Test & Technical support).
 - Arrange all facilities like tools, equipment & man power, piping material, scaffolding, rigging, fabrication, erection and welding to keep work going smooth.
 - Electro-Mechanical Engineer (firefighting - plumbing - HVAC).
 - Sr. Mechanical Engineer (piping, pipe supports & valves and pumps).
 - Make many requests for inspection of the mechanical works like RFI, MRI, SCC, ECC.
 - Oversee and support a good working relationship between management and employees.
 - Support Site Manager to manage construction of Equipments and Piping.
 - Preparing the monthly manpower and equipments chart for the site activities requirements.
 - Preparing the preliminary Material Take-offs (MTOs) & tools for all mechanical activities, Review, inspect, supervise and approve material and works for mechanical equipment prior to installation.
 - Review / modifications relate to sites layout and drawings, Preparing the FCN (field change notice) for any required deviation from the design drawings.
 - As Piping Engineer (Construction):
 - Piping Works reviewing ISO & P&ID otherwise submit as built drawings.
 - Visual inspection of piping, Make the test for welding joints NDT (VT – MT – PT – UT & RT) as per contract and consulting recommendation and make the required repairing.
 - Daily progress report of piping fit up, bolting and screwed connections required by management.
 - Continuously reviews the work as it is performed for quality, accuracy and completeness, Submit of erection problems and comments related to mechanical works, suggested solutions to management, etc. to head office / chief technical manager.
 - Inspect the completed foundations / pipe supports / structural steel works for equipment in order to ensure compliance with the equipment design (field dimensional checking as required).
 - Supervisor for Workshop on piping fabrication and erection works.
 - Provide supervision, direction and support for all Piping personnel with complete observation for their performance and obligation and safety requirements.
 - Acceptance of systems from construction phase for release to pre-commissioning & commissioning activities. Walk down and generate punch list items.
 - Follow up the project time schedule.
 - To ensure that pump stations units and its related auxiliary equipments

(Cooling water system, air compressor system, lube oil system, surge vessel system, fire fighting system, etc.) assembly / installation / erection and alignment inspection, commissioning & testing done as per manufacture requirement & Company's specification, Motors soft check.

- Provide technical support for construction and Mechanical completion inspection of piping and Pumps erection as per drawings, pre-commissioning, flushing.
- Coordination of mechanical works with other disciplines (i.e.: civil and electrical).
- As Hydro-Test Engineer:
 - Prepare Plan and execute piping hydro test as per test pack limits and specifications.
 - Prepare required materials and fabricate fittings required for the test according to Standard code and test pack specifications.
 - Make requests for inspection (RFI) for hydrostatic test.
 - Checking & recovering of fluid leakage for retest.
 - Prepare schedules, reports and update test pack status, Complete test pack documentation related to pressure test.
 - Pipe flushing and reinstatement of the pipeline after finalize the testing.
- Installation of fire fighting systems including the following mechanical systems:
 - Firefighting system for site equipment's (Water deluge spray systems for the oil filled transformers - Water sprinklers system - Fire water hydrants (150 mm) assembly and installation - Fire water network - Fire hose storage cabinet outdoor location - Fire hose rack cabinet - drainage).
 - Fire water pump set which consists of Electrical driven pump, Diesel engine driven pump and its fuel storage tank, Electrical driven Jockey pump.

Dates : From May 2002 till May 2008
Employer : Egypt Electricity Holding Company
Project : Ayoun Moussa Thermal Power Plant 2x320MW
Job title : DCS Operation Engineer & Shift Operator Engineer
Job Description :

- Shift Operator Engineer for the steam power plant units 2x320MW, responsible for the plant system safe start-up, safe shut down using Bailey DCS control system.
- Operation, control and monitoring of all mechanical equipment plant as following:
 - Start-up and operation for the steam power plant auxiliary systems, Treatment water system, Firefighting system, Chemical injection system, Condensate storage and transfer system, Water cool air compressor (a, b, c), Condensate water system, Seal steam system, Feed water pumps (MFWP-FWPT), Emergency air cool Air compressor, Auxiliary boiler Circulating water system, Closed cooling water system, Mazot oil pump system, Low and high pressure heaters, Lube oil/ control oil system, Vacuum system, Duration system, Emergency diesel generator, Re-boiler system, Traveling water screen/pumps house, Oil heating system, circulate water system, service water system Unloading station.

- Start-up and shut down and follow up operation of Hitachi Sea Water Desalination plants (MSF – 2 x 5000 M3/day) and its auxiliaries.
 - Start-up and shutdown and follow up operation of the Babcock & Wilcox Steam Generators within high steam flow rate 1090 t/hr and its auxiliary systems, forced draft fans (FDF), gas recirculation fans (GRF), air heater, seal air fan, flame scanner, gas firing system, oil (Mazout / Solar) firing system, high and low pressure parts, air heaters, soot blowers, dampers & valves, etc.
 - Start-up and shut down and follow up operation of the Siemens Steam Turbine 2x320MW with auxiliary systems.
- Checking up the Equipment electrically and mechanically before the operation.
 - Supervising the Equipments after operating and making sure that all Auxiliaries in the normal operation and change over.
 - Securing the field and safety of the Equipments after shutdown.
 - Performing the isolation procedure for the mechanical and electrical equipments prior to maintenance work.
 - Tie between operator in main control room and technician in the field.
 - Operation for the firefighting system of (CO2, foam deluge fire water pumps systems).
 - Make many effective modifications to make effective operation of plant equipment.
 - Maintain an electronic log of all significant events during the shift and to interpret and analyze sequence events, process trends, alarms and trips.
 - Dealing with O&M manuals and procedures.
 - Assist in the training and development of Operation.
 - Ensure ease of operations and maximize plant efficiency.

Dates : From Jan. 2000 till May 2002

Employer : Ministry of Housing / New Urban Communities Authority in 10th of Ramadan City, Egypt

Project : Belbais / 10th of Ramadan city potable water transmission system, line with a diameter of 1500 mm and the implementation of the project by the main contractor, Industrial and Engineering Projects Company, Egypt

Job title : Site Mechanical Engineer

Job Description :

- Construction and installation of pipe lines and valves shaft, pump stations and all the requirements which we need to finish the mechanical works.
- Conduct and install the pipe lines with source pump station - compression improving pump stations - filtration station and distribution / transportation pump station.
- Prepare Plan and execute piping hydro test as per test pack limits and specifications.
- Pipe flushing and reinstatement of the pipeline after finalize the hydro test.

Dates : From Jul. 1999 till Jan. 2000

Employer : International Company for Complementary Industries, 10th of Ramadan City, Egypt

Job title : Mechanical Engineer

- Job Description** :
- Workshop fabrication for everything mechanical and also maintenance.
 - Optimization of Manufacturing Processes and uses of Resources including Labors, Machines, Materials and Energy.
 - Providing Technical Advice during manufacturing, assembling and quality control.
 - Execution of workshop drawings, leading the team of technicians.
 - Studying New Products & Developing of Current Products, estimation, pricing of new products.
 - Providing General Maintenance Plan for each Machine within the Production Line to achieve max Productivity with Best Quality Required.
 - Ensure that the works are performed at the required quality standards.
 - Ensure availability of materials.