102970-MEC-14GOS-E-1990
Operation Engineer

Holds a B. Sc. in Mechanical Power Engineering and has about 31 years hands-on experience working in operation and start-up.

PERSONAL DATA

Nationality	:	Egyptian
Birth Date	:	18/07/1968
Gender	:	Male
Marital Status	:	Married
Residence	:	Ismailia

EDUCATION

: B. Sc. in Mechanical Power Engineering, Suez Canal University

LANGUAGES

Arabic	:	Native Language
English	:	Excellent

COMPUTER SKILLS

: Windows, MS Office, Internet
: Visual Basic

TRAINING COURSES AND CERTIFICATIONS

: Furnaces inspection training course at KT Roma Italy.
: Authorized to operate gas turbine and auxiliaries from "Siemens".
: Authorized to operate gas turbo compressors from "Siemens".
: Training course for two weeks "engineering and design" at Roma Italy.
: HYSYS program (Aspen technology) for equipment design and thermo dynamic calculations at KT Roma Italy.
: Authorized from the American institute OSHA (Occupied Safety and Health Administration); I am recorded in OSHA site at the internet (No. 600388357 and No.900163968).
: SCADA system by Technip KTI.
: Operation of gas compression station "Technip KTI".
: DCS system at Honeywell "United States of America".
: Operation of power plant at Abu Sultan.
: DCS system Abu Sultan Power Plant.
: Safety, fire fighting and first aid "Petro Safe Company".

: Maximo 6.0 for work orders and warehouse management by Technip.
: ISO system.
: Hydraulic system.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2019 till now
Project : Sheikh Zuweyeid natural gas compression station
Job title : Operation Engineer
Job Description :

- Responsible for safe and economic operation of plant, start up, shut down and carry out the trouble shootings of the plant including (gas turbines, gas turbo compressors, air compressors, fire fighting system, desalination unit).
- Make the Gas calculation, material balance and the operation strategy.
- Pre-commissioning with TECHNIP KTI company of the plant including Installing, blowing, flashing and Hydro test of pipe lines.
- Leak test of plant by (air, nitrogen, natural gas).
- Commissioning and handover all equipments from vendors including Gas turbines “SIEMENS”.
- Turbo compressors (each 450,000 m*3/h) “SIEMENS”.
- Air compressors “Atlas Copco”.
- Fire fighting and raw water pumps.
- Diesel generator(380V -2 MW).
- Transformers (22KV/400V).
- Desalination plant (R.O).
- Gas turbine operation.

Dates : From Jan. 2017 till Sep. 2019
Employer : TECNIMONT KT
Project : CSP Concentrated Solar Power at Borg El-Arab, Alexandria:
Consists of:

- Solar Field.
- Molten Salts Storage Tank and Steam Generator.
- Steam Turbine.
- Demi water / Deaerator.
- Water Circuits.
- Steam Generator.
- MED (Multiple Effect Distillation).
- Backup System.

Job title : Operation Engineer during guarantee

Dates : From Oct. 2007 till Jan. 2017
Employer : TECNIMONT KT Rome
Job title : Operation Engineer
Job Description :

- Mechanical / Operation Inspector for ANRPC Furnaces/Gas Turbines (five units):
  - Perform Mechanical and process inspection and data analyses, include the following activities:

        - Visual inspection of radiant and convection coil (tubes and fittings).
        - Coil thickness, hardness LRUT and Replica measurements/analyse data.
        - Coils scales sampling and collection.
        - Burners inspection.
        - Inspection of heater structure.
        - Inspection of refractory layer.
        - Inspection of radiant and convection coil supports.
        - Dampers check.
        - General heater visual inspection (coils, burners, spacers, guides and lining…etc.).
        - Check of the interconnecting lines.
        - Check burner flame as following:
            - Visual inspection.
            - Primary air.
            - Secondary air.
            - Fuel gas.
            - Excess air.
- Qatar Petroleum (QP) as Mechanical and Process Inspector:
    - Implement performance test and data analysis to improve the incineration plant performance.
    - Perform Mechanical and process inspection and data analyses.
    - Propose for unit modifications to increase the duty and efficiency.
- BMS – Bulk Pharmaceutical Plant & CRUISERATH – IRELAND:
    - Design and execution of improvements on the incineration plant of multiple upgrades as described below:
        - HCV Waste Capacity Increase and Natural Gas Consumption Reduction.
        - Salt Burners Modifications & New Salt Burners Muffle Blocks Engineering.
        - PLC Software Changes Design & Implementation.
        - Functional Design Specification for DCS Control Changes.
        - Heat Shielding Upgrade with adjustable windows Engineering.
    - Design modification of the incinerator & heat recovery to decrease the natural gas consumption to minimum limits as described below:
        - Ultra Low Natural Gas consumption (only pilots firing).
        - Flue gas to stack heat recovery.
        - SCR Fuel Gas Reduction to consider the burners modification for low capacity and alternative solution be found for flue gas heating.
        - Possibility of recycling this flue gas into a counter current heat exchanger with the incoming stream to SCR heat exchanger.
        - Recycling of this flue gas to preheat the combustion air on the SCR.
        - Investigate opportunity for Excess steam production recovery within the incinerator process.
        - Calculation of the energy that could be recovered from the scrubber within a temperature range of the heat recovered.
- LMG refinery project in Poland (Sowia Gora):
  Reviewing the process and writing the operation procedure and Training the crew on the process tips for the following items:
    - LPG molecular sieve unit: LPG treaters, regeneration air cooler,

regeneration electrical trim heater, regeneration steam heater, regeneration separator.
  - NG molecular sieve unit: NG treaters, regeneration air cooler, regeneration electrical trim heater, regeneration steam heater, regeneration separator.
  - Sulfinol unit: Regeneration gas inlet separator, regeneration gas absorber, sulfinol regenerator, sulfinol reflux pump, Regeneration Gas Compressor, sulfinol reboiler, lean/rich sulfinol exchanger, lean sulfinol pump.
  - Sulfur recovery unit: Thermal reactor, waste heat boiler, reactors, condensers, degassing system, incinerator, sulfur loading, burners.
  - Amine unit: Rich amine flash drum, amine absorber, corrosion inhibitor package, flash gas scrubber, amine reboiler, amine regenerator, lean amine pump, reflux pump, amine circulation pump.
- Operation Engineer at TECNIMONT KT compression station of natural gas (I was promoted from Shift Leader):
  - Responsible for safe and economic operation of plant, start-up, shut down and carry out the trouble shootings of the plant including (gas turbines, gas turbo compressors, air compressors, fire fighting system, desalination unit).
  - Make the Gas calculation, material balance and the operation strategy.
  - Pre-commissioning with TECHNIP KTI Company of the plant including installing, blowing, flashing and Hydro test of pipe lines.
  - Leak test of plant by air, nitrogen, natural gas.
  - Commissioning and hand over all equipments from vendors including Gas turbines (SIEMENS).
  - Turbo compressors (each 450,000 m*3/h) (SIEMENS).
  - Air compressors (Atlas Copco).
  - Fire fighting and raw water pumps.
  - Diesel generator (380V - 2MW).
  - Transformers (22KV/400V).
  - Desalination plant (R.O).
  - Gas turbine operation.

Dates : From May 1997 till Oct. 2007

Project : Abu Sultan Power Plant (DCS system) (4x150MW – steam turbine), Ismailia

Job title : Shift Leader Operation Engineer

Job Description :

- Responsible of safe operating of plant, start-up, shut down and troubleshooting of the plant including (boiler, auxiliary boiler, steam turbine, generator, pumps, compressors, condensate pumps, hydraulic circuits, Seal oil & Seal steam systems and Turbine extraction & drain systems) through DCS system.
- Start-up, shut down and safe operation of desalination plant through DCS system.
- Manoeuvring and processing unit of (switchyard 220KV – one & half C.B. type, switch gear, rectifiers, LC, MCC and excitation control system (distance relay, over current relay, breaker failure, bus bar protection).
- Follow up power transformer.
- Generator (15KV).
- Emergency Diesel generator.

Dates : From Feb. 1994 till May 1997
Employer : Arab Aluminium Group for aluminium industries
Job title : Operation Engineer

Dates : From Apr. 1991 till Feb. 1994
Employer : Triangle Group in KSA
Job title : Maintenance Engineer

Additional Skills:

- I am authorized by Siemens industrial turbo machinery to operate the Siemens turbine unit and turbo compressors.
- I am authorized by Honeywell (United States of America) to operate by DCS.
- I am authorized by Egyptian Ministry of Electricity to operate power stations.
- I am authorized by Tecnimont KT Italy to operate by SCADA.
- I am authorized by OSHA general industry and construction.
- I am authorized by Tecnimont KT as Operation Shift Team Leader.
- I worked as a Mechanical Instructor in GISSICO.
- GROUP PETROLEUM as additional job (from Oct. 2000 till Nov. 2005).