

Holds a B. Sc. and a M. Sc. in Mechanical Power Engineering. Has over 11 years hands-on experience working in operation, commissioning, start-up and maintenance of Power Plants.

## **PERSONAL DATA**

Nationality : Egyptian  
Birth Date : 01/01/1983  
Gender : Male  
Marital Status : Married  
Residence : Damanhour

## **EDUCATION**

: B. Sc. in Mechanical Power Engineering, Alexandria University, 2004  
: M. Sc. in Mechanical Power Engineering, Alexandria University, 2011

## **LANGUAGES**

Arabic : Native Language  
English : Very Good

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Access, Power Point), Internet  
: AutoCAD 14 & AutoCAD 2000

## **TRAINING COURSES AND CERTIFICATIONS**

: Training at Damanhour Power Station (65MW x 3 units).  
: Training at Damanhour Power Station (325MW).  
: Training course in operating of power station at Abu Qir Training Center.  
: Training course in power generation portal (PGP) base and configuration & advanced configuration of ABB Co.  
: Training course in MICROSOFT ACCESS at Abu Qir Training Center.  
: Training course in VISUAL BASIC 6 at Abu Qir Training Center.

## **CHRONOLOGICAL EXPERIENCE RECORD**

**Dates** : From Sep. 2014 till now  
**Employer** : West Delta Company for Electric Generation  
**Job title** : Mechanical Maintenance Engineer

- Dates** : From Jan. 2014 till Sep. 2014
- Employer** : [EGYPTROL](http://www.egyptrol.com), SAMSUNG C&T Subcontractor
- Project** : Qurayyah Independent Power Project (6x750MW) – Combined Cycle
- Job title** : Commissioning & Operation Engineer
- Job Description** :
- The Qurayyah IPP Project is approximately 100 km south of the port of Dammam on the coast in the Eastern province of the kingdom of Saudi Arabia. The facility is a 2 on 1 combined cycle configuration consisting of twelve (12) Siemens SGT6-PAC 5000F gas turbine generating units (GTGS), twelve (12) heat recovery steam generators (HRSGs), six (6) Siemens SST6-4000 steam turbine generators (STGs), and six (6) sea water condensers.
  - The Siemens Energy, Inc. SGT6-5000F (5) Gas Turbine includes a 13-stage high efficiency axial flow compressor with variable inlet guide vanes (IGVs) and three rows of variable guide vanes (VGVs). It also includes a combustion system featuring advanced cooling and multi-fuel capability. Within this system is an installed combustion chamber, which houses 16 individual combustors. These combustors are arranged in a circular pattern around the circumference of the turbine assembly. The four-stage reaction-type turbine incorporates an advanced cooling design. Corrosion resistant coatings and thermal barrier coatings are also integrated into the SGT6-5000F (5) turbine design in order to improve part longevity.
  - Carry out all commissioning activities of gas turbine (SIEMENS SGT6-PAC 5000F) for:
    - Fuel gas system air blowing and leak test.
    - Fuel oil system. Flushing, nozzle test, bucket test, flow test, leak test and flow divider skid Test.
    - Water Injection System (Dry Low NOX– Dual Fuel), Flushing and tests.
    - Lube oil system. Flushing and test and pressure Adjustment.
    - Control oil system. Flushing, pressure Adjustment for control oil and accumulator N2 pressure.
    - Instrument air system. Compressor heat run test, instrumentation air blowing.
    - Inlet guide vane IGV and variable guide vanes VGVs adjustment.
    - Gas turbine Fire Protection System.
    - Turning gear system. Low speed, high speed turning gear motor solo test and heat run test.
    - Air intake system. Pulse air filter self-cleaning system commissioning and puff test.
    - Generator and collector blower commissioning.
    - PCC package and SFC package HVAC commissioning and start-up.
    - Kettle Boiler and Rotor Cooling System. Air blowing by start-up frequency convertor (SFC) at speed 850 RPM.
    - Cooling Air /Compressor Bleed System and Disc Cavity Cooling System. Air blowing by start-up Frequency convertor (SFC) at speed 850 RPM.
    - Compressor Water Wash System. Flushing and tests.
    - High load Purge Air System. Air blowing and tests.
    - Pre-start Simulations (SFC/Gas).
    - Start-up Tasks: Initial Roll test, Over speed Trip Test, Start-up

Sequence: Pre-synchronous Turbine Check at 3600 rpm, Start-up tasks Full Speed No Load, Start-up Tasks Initial Synchronization (Base Load), Start-up Tasks – Performance Test.

- Operate the gas turbine SiemensSGT6-5000F (5) from DCS using SPPA T3000 Control System.

**Dates** : From May 2013 till Dec. 2013  
**Employer** : Toshiba Company  
**Project** : Sidi Krir Combined Cycle Power Station (750MW)  
**Job title** : CP-118 Mechanical Warranty Engineer

**Dates** : From Jul. 2012 till Apr. 2013  
**Employer** : West Delta Company for Electric Generation  
**Job title** : Mechanical Maintenance Engineer

**Dates** : From Jan. 2012 till Jun. 2012  
**Employer** : Ansaldo Company  
**Project** : 6th October Power Plant 600MW Simple Gas Turbine (4x150MW)  
**Job title** : Shift Engineer  
**Job Description** :

- Full commissioning procedures and start-up for AE94.2 Siemens gas turbines 150MW:
  - Air blow for air lines.
  - Air blow for gas fuel lines.
  - Flushing for oil fuel lines.
  - Dummy test.
  - First fire.
- Commissioning and start-up for (Closed Cooling Water, Hydraulic, Lubrication, Instrument air, service air, Gas fuel & Fire fighting systems).

**Dates** : From Sep. 2010 till Dec. 2011  
**Employer** : West Delta Company for Electric Generation  
**Job title** : Mechanical Maintenance Engineer

**Dates** : From Sep. 2009 till Sep. 2010  
**Employer** : Toshiba Co.  
**Project** : Sidi Krir Power Station 750MW Combined Cycle:

- 2x250MW Mitsubishi Heavy Industries (MHI) Gas Turbine
- 1x250MW Steam Turbine (ANSALDO)
- Heat Recovery Steam Generators &DCS (NEM)
- METITO Water Treatment Plant

**Job title** : Mechanical Commissioning & Start-up Engineer  
**Job Description** :

- Following and supervising installation, pre-commissioning and commissioning tests of 3 Atlas Copco Gas Compressors including: trial tests and runs, Surge Region Setups for each compressor and Compatibility with Gas turbine demands and abnormalities.
- Following and supervising installation, pre-commissioning and commissioning tests of 2 Mitsubishi's 701F Gas turbines, Power

Generators and it's auxiliaries including: trial tests, simulation and interlock tests, trial run ups, load rejection tests, load runback tests, trip tests and house load test and that's for Gas and Oil Firing.

- Following and supervising installation, pre-commissioning and commissioning tests of 2 Nem's Heat Recovery Steam Generators including doing steam blowing of main steam lines.
- Following and supervising installation, pre-commissioning and commissioning tests of Ansaldo Energia's Steam Turbine, Power Generator, Steam Condenser and Steam Bypasses and it's auxiliaries including: trial run up, online and offline tests, simulation tests, load rejection tests, load runback tests and trip tests.
- Following and supervising installation, flushing, pre-commissioning and commissioning tests of main plant auxiliaries systems: Service water system, Circulating water system, Vacuum System, Condensate System, Closed Cooling System, Compressed Air System, Service Gas System, Fuel Oil System and filling System.
- Worked as a Process Engineer in reviewing and modification of plant logic with instrumentation and control department to achieve maximum compatibility of plant logic.
- Reporting any new activities on site, following commissioning tests, coordinating with several contractors to achieve minimum time with maximum progress step by step with project consultant (PGESCO.).

**Dates** : From Oct. 2004 till Aug. 2009  
**Employer** : West Delta Company for Electric Generation  
**Job title** : Shift Engineer  
**Job Description** : Safe operation of 1 Module of combined cycle power plant, the module consists of:

- 4 Hitachi Gas Turbine Units.
- 4 NEM Heat Recovery Steam Generators.
- 1 General Electric Steam Turbine & its Auxiliaries.
- DCS Control System.
- Mark II Control System.
- Mark V Control System.