

Holds B. Sc. and M. Sc. in Mechanical Power Engineering and has about 6 years hands-on experience working in operation at Nubaria CCPP.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 13/09/1988
Gender : Male
Marital Status : Single
Residence : El-Behira

EDUCATION

: B. Sc. in Mechanical Power Engineering, Alexandria University, 2010
: M. Sc. in Mechanical Power Engineering, Alexandria University, 2018

LANGUAGES

Arabic : Native Language
English : Very Good
German : Basics

COMPUTER SKILLS

: Windows, MS Office, Internet
: Ansys Fluent (Computational Fluid Dynamics "CFD")
: Solid Works (3D Drawing)
: Process simulation using Aspen HYSYS
: Programmable Logic Controller (PLC)
: Heat Exchanger Design (HTRI Xchanger Suite)
: Engineering Equation Solver (EES)
: MATLAB
: Qbasic (Programming language)
: AUTOCAD
: GetData Graph Digitizer and SigmaPlot (Data import and export)
: DataFit Oakdale Engineering (Curve fitting)

TRAINING COURSES AND CERTIFICATIONS

: International English Language Testing System (IELTS) (Band score 6, CEFR level B2) - Alexandria British Council.

- : Deutsch learning (A1 level) - Guarantee Educational Institute in Tanta.
- : Vibration monitoring and analysis for turbo machinery - Alexandria Petroleum Training Academy (Petro Train).
- : Process simulation using Aspen HYSYS - Alexandria Faculty of Engineering.
- : Programmable Logic Controller (PLC) advanced course - Alexandria JELECOM.
- : International Computer Driving License (ICDL) certificate – Tanta.
- : Refrigeration and air conditioning - Alexandria Industrial Training Council (ITC).
- : Vehicles transmission systems - Alexandria Industrial Training Council (ITC).
- : GE gas turbine operation in combined cycle power stations - Middle Delta Electricity Production Company (MDEPC).
- : Fire and civil defense training.

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From 2012 till now
- Employer** : Middle Delta Electricity Production Co. (MDEPC)
- Project** : Nubaria CCPP (2250MW)
- Job title** : Processing Engineer
- Job Description** :
- Operating of two GE gas turbines (250MW), ALSTOM steam turbine (250MW) and two STF HRSGs (333 t/hr, 132.5 bar and 568 °C). In addition to other auxiliaries such as pump house, heat exchangers and switch gear and yard.
 - The module consists of:
 - Two GE gas turbines (250MW), MS 9001FA type.
 - Two STF horizontal heat recovery steam generators.
 - One ALSTOM steam turbine (250MW) with high, intermediate and low steam pressures.
 - Medium (6.3KV) and low voltage (400 v) switchgear.
 - 500KV switchyard.

- Dates** : From 2010 till 2012
- Employer** : Johnson Controls - Alexandria
- Job Description** : Construction and Maintenance of Heat, Ventilation and Air Conditioning Systems.

Skills:

- Attending combustion chambers overhaul in GE gas turbines.
- Attending an overhaul for IP, LP blades and combined stop and control valves check in ALSTOM steam turbine.
- Attending the chemical cleaning for the cooling water cycle and boiler lay up.

Research:

Alexandria Engineering Journal (AEJ) (Produced and Hosted by Elsevier, Impact Factor1.5):

- The first paper with the title "Developing Laminar Flow in Curved Semi-

Circular Ducts" was accepted to be published in March 2018.

- Paper abstract: Flow and heat transfer in curved pipes is one of the most attractive research fields of thermofluids mechanics. Curved fluid flow passages are common in most technological systems involving cooling of gas turbine blades, compact heat exchangers, cooling of chemical reactors, nuclear reactors and smart computer processors. Several stages of development have been done to improve this cooling process in toric and helical geometries. Moreover, several correlations for hydrodynamic entrance length and friction factor have been deduced.
- Keywords: Curved, Toroidal, Friction Factor, Semi-Circular Duct, Laminar, Dean.