

Emad Ahmed Fathy

Mechanical Engineer

Email: emadzedan309@gmail.com

Address: Egypt

Phone: 01095417353

Military service: completed

About me

- A dedicated **Mechanical Power Engineer** with a strong foundation in power generation, HVAC systems, and MEP applications. Experienced in mechanical maintenance, sheet metal work, and central air conditioning. Passionate about enhancing Energy. Efficiency and ensuring optimal system performance in industrial and commercial settings.

Education

Bachelor 's Degree in Mechanical power Engineering.

2018-2022

Alexandria University

Grade: Good

Graduation Project: HVAC for clean room in pharmaceutical factory

Grade: Excellent

- Developed a comprehensive **central air conditioning system design** tailored for a pharmaceutical factory.
- Performed detailed **thermal load calculations** to assess the cooling requirements of the factory.
- Selected and specified **HVAC equipment** based on required performance and electrical power ratings.
- Designed the system using **AutoCAD** and **Revit** for accurate and efficient drafting.
- Ensured the system was designed for **optimal energy efficiency** and **environmental comfort**, meeting industry standards for air quality and temperature control.

Work experience and Training

➤ Training in power plants

- Understanding **boiler systems**, their types, and their operation in steam generation.
- Studying the function of **steam turbines** and their role in power generation efficiency.
- Gaining knowledge about **condensers** in the steam cycle and their impact on thermal performance.
- Applying **mechanical maintenance** procedures for plant equipment and systems.
- Adhering to **safety and occupational health** standards while working with thermal equipment.

➤ **Experience in Sheet metal work**

Al Amana Engineering industries and laser metal cutting factory

August 2024 – Present.

- Proficient in **fabrication and installation** of ductwork for air distribution.
- Familiarity with **cutting, bending, and assembling metal components**.
- Skilled in working with **various thicknesses** of metal for different applications up to 20 mm thickness.
- Experienced in designing and manufacturing **complete equipment**, mainly focused on **agricultural machinery**.
- Knowledgeable in working with materials such as **galvanized steel and aluminum**.

➤ **Experience in HVAC Systems**

- Hands-on expertise in **installation, maintenance, and troubleshooting** of central air conditioning systems.
- Knowledge of **chillers, VRF systems, and ducted split units**.
- Understanding of **load calculations and air distribution design**.

➤ **Mechanical Site Engineer**

Al Hashmeyah International Contracting Company – Damietta, Egypt

May 2025 – Present.

1. Working on the "**Tahya Misr 1**" project at the New Damietta Port.
2. Responsible for **infrastructure** works including **fire fighting, fresh water, storm water, electrical, and drainage** pipeline installations.
3. Coordinating with various teams to ensure proper execution of **MEP** systems on site.

Technical Skills

- Proficient in **HVAC systems, power generation, and MEP applications**.
- Strong background in **mechanical maintenance and troubleshooting**.
- Familiar with **AutoCAD, Revit MEP, HAP, and other engineering software**.
- Knowledgeable in **safety regulations and energy efficiency practices**.
- Ability to work in **team-oriented and high-pressure environments**.

Courses

➤ **Technician for Africa Online Training by Mantrac**

- Complete an online course provided by **Mantrac** focused on hydraulic systems relevant to **Mechanical power engineering**
- Gained practical knowledge on **hydraulic components, fluid dynamics**, and their application in power generation and industrial systems

languages

- **Arabic:** Native.
- **English:** proficient.