

ALI LAKKIS

Mechanical Engineer

Lakkisali76@gmail.com

+961 76803435

Dedicated mechanical engineer with over 4 years of experience in continuous improvement, maintenance, and water treatment.

WORK EXPERIENCE

MAY 2022 – PRESENT

CONTINUOUS IMPROVEMENT ENGINEER, LIBANLAIT – CANDIA

- Determination of overall equipment efficiency for Libanlait different production lines, in addition to applying lean manufacturing tools to maximize productivity of operations
- Supervising the design and implementation of a new 1,844 KWp PV solar project with massive impact on fuel savings and energy cost reduction (33% diesel consumption reduction)
- New PET injection and blowing line: supervising the commissioning and installation of PET injection and blowing machines with correspondent chillers and high pressure (40 bar) air compressor with all the MEP work required; power, water and compressed air networks
- Conduct detailed analysis of performance data and integrate into Manufacturing processes
- Executing weekly, monthly, and yearly performance plant reports to set Key Performance Indicators 'KPIs', monitor and control plant performance
- Drive a culture of continuous improvement throughout the organization

OCTOBER 2021 – MAY 2022

MAINTENANCE ENGINEER, LIBANLAIT – CANDIA

As a maintenance engineer, I was in charge of internal and external (3rd party) maintenance work in different sectors of Libanlait plant including utilities, Tetra Pak processing, filling and packaging lines.

- Setting preventive maintenance schedules for Tetra Pak machines according to their operation and maintenance manuals
- Ammonia Refrigeration System: Commissioning and installing new Baltimore SVC- 700 condenser evaporator:
 - Leading team of welders and fitters to connect new 6 ins pipeline to start-up the new Baltimore condenser evaporator
 - Rehabilitation of the existing Sabroe ammonia compressors SMC-108E with Johnson Controls – Sabroe representatives in Lebanon
- Water Treatment station rehabilitation: Installation of new sand, carbon, and cartridge filters for reverse osmosis station. Replacement of old R.O membranes with new ones for more permeate flowrates.
- Water Network Rework: Design and implementation of a new water network to satisfy water quality for every sector of dairy plant

- Boilers: Rehabilitation of 8-ton and 5-ton capacity steam boilers using chemical flushing to remove all scale build-ups to enhance heat transfer and boilers performance
- Steam and Condensate Network: Rehabilitation of steam collectors, steam traps, fittings, and valves for better steam distribution. In addition to steam network, new condensate return lines were installed to decrease water and treatment demand for steam (water demand for steam drastically decreased)

JANUARY 2020 – OCTOBER 2021

WASTEWATER TREATMENT, LIBANLAIT - CANDIA

Commissioning and installation of Livestock Water Recycling 'LWR' treatment plant to recycle plant and farm wastewater. As a mechanical engineer I was in charge of:

- Installation of LWR equipment in place
- Leading all MEP works with drawings and layouts with remote coordination with Canadian engineers
- Supervising the welders' team and fitters for all stainless pipe works
- Commissioning of LWR 2nd wave, including clarifier, filter, and reverse osmosis system
- Supervision of all LWR operations ensuring standard operation following manuals and handbooks
- Installing new biofilter to treat offensive air coming out of wastewater collection tanks

EDUCATION

JUNE 2019

BACHELOR'S DEGREE IN MECHANICAL ENGINEERING, AMERICAN UNIVERSITY OF BEIRUT

DECEMBER 2019

Holder of **Solid Waste Management certificate** awarded from **European Union** and **International Solid Waste Management Association, ISWA**

NOVEMBER 2019

Holder of **Operation and Maintenance of Water Pumping Stations** offered by **US Agency for International Development – Lebanon Water Project (LWP)**

SKILLS

- Energy Specialist
- Water treatment specialist
- Wastewater treatment specialist
- Lean Management tools
- Reporting and technical communication skills
- Management skills

EXTRA ACTIVITIES

Lebanese Judo national champion