

With 5 years' experience in plastic, foam, and chemical related manufacturing industry as a Chemical Engineer, covering from Process, Research and Development, and Quality. Recognized as accredited Chemical Engineer in the Philippines and Kingdom of Saudi Arabia.

## WORK EXPERIENCE

### 1. Chemical Engineer

Gulf Factory for Insulation Panels Production Industry  
November 2022 – Present Thadiq, Saudi Arabia

- Process Engineer
  - Optimized process parameter (line speed and temperature) for foam unit line, machine Robor Italy.
  - Optimized chemical formulation (polyol, MDI, additive, and catalyst ratio) for foam unit line.
  - Modified chemical tank reactor from single to double feed, eliminating 30-minute downtime due to chemical charging.
  - Troubleshoot pump of MDI due to cavitation by intensive purging process.
- Quality Engineer
  - Established fire-resistant certificate to sandwich panel complying BS EN 13501.
  - Pioneered of mechanical testing (tensile and compressive strength) analysis using Mecmesin UTM.
  - Pioneered of ISO 9001:2015 (Quality Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) through DAS Certification United Kingdom.

### 2. Chemical Engineer

Polyfoam RGC International Corporation  
October 2019 – October 2022 Valenzuela, Philippines

- Research and Development Engineer
  - Implemented process change on mixing and extrusion from Fure shuen Machinery Taiwan using optimized design experiment.
  - Improved cooling tower rehabilitation project for 2 years, increasing the cycle time using process optimization.
  - Pioneered a sustainable product development, conversion of food container into biodegradable plastics with service life of 2 years using life cycle analysis method.
  - Developed and re-designed packaging for Monoblock table using value analysis and value engineering process with 26 percent cost savings.
  - Established warranty to Monoblock chair products using accelerated and natural weatherability design laboratory experiment, ASTM D4364.
  - Tested reformulation on Monoblock chairs using cost benefit analysis, design of experiment, and product testing using Instron and Haida Testing Machine.
- Product Development Engineer
  - Launched 11 products of plastic furniture to local market with product standard seal and patent.
  - Re-launched better priced storage solution (drawers) with 30 percent down compare to leading price.
- Process and Technology Engineer
  - Handled commissioning of 2 servo injection machine with hydraulic two-platen type technology for 570k USD project with payback of 4 years from Jonwai Machinery Taiwan.
  - Engineered on line capacity expansion of Monoblock business plant for 6M USD project.
  - Built the commissioning of automatic material conveying system from A-Max Taiwan, a gravimetric type for 800k USD project.
  - Pioneered the manufacturing execution system of injection machine line for 50k USD project from Techmation Company Taiwan.
  - Designed a recycling facility plant design for plastics with a capacity and area of 500 kg/hr and 300 square meters respectively for 10k USD project.
  - Managed double screw extruder commissioning project of 500k USD capex from Century Extrusion Company USA.

### 3. Chemical Engineer

Genstar Manufacturing Corporation  
April 2018 – August 2019 Valenzuela, Philippines

- Production Coordinator/ Supervisor
  - Tested and designed system program that will support transactions inside manufacturing business units from Rebar Solutions Company Philippines.
  - Resolved manufacturing issues concerning process systems and operations.
  - Resolved issue on product rejects by initiating process improvement on in-mould labelling using starch compound deposits on OPP (oriented polypropylene).
  - Developed product design on in-mould labelling by introducing pearl film (biaxially oriented polypropylene film) with 25% added durability on fatigue compare to leading film material.
  - Successfully reduced 20% of overhead cost by supporting optimization of operators working capability and time measurement analysis.

## EDUCATION

### BS in Chemical Engineering

University of Santo Tomas, Philippines  
June 2012 – May 2017

## ACCREDITATION AND LICENSES

- Licensed Chemical Engineer
  - November 2017 – August 2024
  - Professional Regulation Commission, Philippines
- Accredited Chemical Engineer
  - December 2022 – December 2024
  - Saudi Council of Engineers, Saudi Arabia
- Driver's License
  - September 2022 – August 2027
  - Department of Transportation, Philippines

## CERTIFICATION, SKILLS, AND TRAINING

- Quality Management System Program (2021)
- Mastering Management Fundamentals 101 (2022)

## AWARDS

- Recognition for Promoting Academic Excellence (2017)

## LANGUAGE

- English (Fluent)

## INTERESTS

- Process Engineer
- Research and Development
- Project Management
- Plastics
- Foam
- Sustainability