

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

a. 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.

b. Quality Engineer

- Established fire-resistant certificate to sandwich panel complying BS EN 13501 through Thomas Bell-Wright UAE.
- 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

a. 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.

b. 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.

c. 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

a. 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