

Junior Process Engineer ATB Sdn. Bhd. Tanjung Bin, Johor

Position Summary

The Process Engineer will be responsible for supporting process designs, conducting process risk assessments, preparing and implementing procedures, and monitoring the health and testing of plant equipment. They will also ensure quality control of all streams and carry out troubleshooting and investigations to maintain reliability, integrity, regulatory compliance, and profitability.

Responsibilities include:

- Develop understanding of tank terminal operations to facilitate crude tank and product tank ullage planning and optimization.
- Develop good understanding on the entire integrated complex, not just limited to the hydrocarbon processes, including processes to manage environmental emissions (Wastewater treatment plant, flue gas treatment etc.)
- Prepares technical analysis of the Refinery processes including material balances and energy balances (Daily/Monthly/Yearly) using process monitoring tool SeeQ, identifying system bottlenecks, etc. for the purpose of good maintaining & improving refinery operations.
- Prepares technical analysis of individual refinery systems (water treating, flare, heat exchanger, etc.) as required. (May need to use computer simulation with KBC Petrosim etc.)
- Performance monitoring and analysis through interpreting key operating envelopes, energy variables, margin variables, alarms and interlocks. Assists in troubleshooting processing related problems, identifying reasons and recommending remedial action.
- Carefully and precisely documents all processing analysis for future use and prepares analysis of theoretical vs. actual processing performance and makes recommendations to resolve differences. Recommends processing alternatives based on history of refinery and feedstock specification.
- Support corrosion monitoring and controlling in the refinery and tank farm. Close engagement with in-house chemical vendors for chemical optimization.
- Understanding of crude evaluations procedures, involving crude assays analysis and convergence of process simulator.
- Crude tank scheduling and planning for all crude arrivals. This will follow by production prediction and planning, including product yields and qualities.
- Based on economic market factors, runs linear program software optimizing the blending operations (both pre-processing and post-processing blending) to ensure the lowest cost-blending alternative is utilized in the refinery.
- Ensures that blended products meet required specifications. Compares theoretical vs. actual results and resolves differences between the two. Prepares analysis on the differences and documents the analysis for future reference.
- Prepare preliminary specifications, drawings and discusses these with the Refinery technical staff.
- Assists in the preparation and implementation of detailed process related procedures and practices including shutdown, start-up, decoking, vessel entry, etc.
- Abides by all HSE policies as outlined in the Company HSE policy manual.
- Takes care of the process and safety review of all Management-of-Change works as well as acts as coordinator for all Management-of-Change works till released for construction / hold / cancellation.

Qualifications and Experience

- Minimum bachelor's degree in chemical engineering.
- At least 2 years of experience in the Refinery/petrochemical industry.
- Excellent computer skills in word processing and spreadsheets. Added advantage in process monitoring tool, refinery simulation tool and miscellaneous technical and engineering software (pressure analysis, heat transfer, equipment sizing, etc.)

Personal Characteristics

- Good communication and interpersonal skills.
- Ability to work under pressure and manage multiple tasks simultaneously.
- Excellent written and oral technical presentation skills.
- A can-do attitude, and willingness to learn.
- Global outlook. Able to work across organizational and cultural boundaries.
- Team player, with an open non-political style and a high level of personal integrity
- Energetic, resilient, and resourceful, with an ability to work accurately under pressure.

Languages

- Fluent in English
- Added advantage in Malay and Mandarin.