

## **Description - Chemical Process Engineer (positions at multiple levels available)**

- Become an expert on the process chemistry, the operating philosophy, and the process design basis for the equipment in chemical plant operating areas supported by the role.
- Provide technical support to chemical plant operating areas to help meet plant goals through troubleshooting and continuous improvement.
- Lead the development of Process Design Packages for capital improvements to address safety, quality, delivery, inventory and cost opportunities. This will consist of:
  - Process description and key technology and risk summary
  - Integration of design principles for operability, maintainability and reliability
  - Process simulations
  - Heat and Material Balance and Process Flow Diagrams
  - Piping and Instrumentation Diagrams
  - Process Equipment Specifications
  - Evaluation of Process Economics
  - Support capital engineering with Project Punch-listing, Commissioning and Startup
- Work within cross functional teams to track performance as well as develop and implement productivity projects with the overall goal of achieving improved safety, more efficient use of energy, higher yields, better production rates, and higher attainment
- Development and ownership of daily tracking systems to monitor performance of various process and plant KPIs (Key Process Indicators).
- Effective use of OSHA-PSM elements including Process Hazards Analysis, Management of Change, Pre-Startup Safety Review, and Standard Operating Procedures
- Identify and implement improvements on basic control schemes and advanced process control strategies

## **Requirements - Basic Qualifications:**

- S. Degree in Chemical or Mechanical Engineering
- Process, production and/or manufacturing engineering experience as a degreed engineer in industries such as: chemical, petroleum, polymer, pulp & paper or pharmaceutical
- Strong commitment to process safety, occupational safety, and environmental compliance

## **Additional Qualifications:**

- Six Sigma certification preferred
- Strong written and verbal communication skills
- Demonstrated ability to work effectively at all levels of an organization and in cross-functional teams including salaried and hourly co-workers
- Capable of managing multiple priorities and projects
- Strong computer skills, specifically Excel, ASPEN, PipeFlo, Minitab, Powerpoint
- Working knowledge of SAP a plus
- Familiarity with chemical plant Distributed Control Systems (DCS), Honeywell Experion and/or advanced process control a plus
- Demonstrated ability to generate significant process improvements in areas of process safety, environmental systems, yield, energy and capacity.
- Experience in the fundamentals of production optimization and process design for a broad range of unit operations including reaction, distillation, refrigeration, fired heaters, and heat integration
- Understanding of various utility systems, including steam boilers, water distribution systems, instrument air systems, pressure relief devices and process safety systems, etc. a plus
- Solid process troubleshooting skills
- Demonstrated experience in quality and statistical tools to drive operational improvements including control charts, process capability analysis, measurement system analysis, and root cause investigations preferred