



**Job Title:** Mechanical Engineer  
**Job Type:** Regular, Full-Time  
**Job Class:** Professional  
**Department:** Engineering  
**Reports to:** Engineering Manager  
**Direct Reports:** None  
**Indirect Reports:** None

**FLSA Status:** Exempt

**Location:** Beaumont, TX

#### JOB SUMMARY / OVERVIEW

Perform engineering duties related to planning and designing small to medium level in-plant projects, supporting management-of-change (MOC) work, troubleshooting occasional equipment issues, providing turnaround assistance, and supporting maintenance activities.

#### ESSENTIAL JOB FUNCTIONS

- Serve as a member of cross-functional team to resolve equipment problems, investigate incidents and improve reliability
- Read and interpret blueprints, technical drawings, schematics, or computer-generated reports.
- Assist drafters in developing the structural design of products using drafting tools or computer-assisted design (CAD) or drafting equipment and software.
- Research, design, evaluate, install, operate, and maintain mechanical products, equipment, systems and processes to meet requirements, applying knowledge of engineering principles.
- Confer with engineers or other personnel to implement operating procedures, resolve system malfunctions, or provide technical information.
- Perform functions and duties in a manner that protects personal safety as well as the safety of all personnel on site
- Promptly report all safety, health or environmental incidents or issues
- Monitor operating performance of rotating equipment to ensure availability is maximized, performance is up to expected levels and cost of operations, repair and ownership is minimized.
- Provide technical and field support to Operations and Maintenance departments for mechanical equipment.
- Recommend design modifications to eliminate machine or system malfunctions.
- Conduct research that tests or analyzes the feasibility, design, operation, or performance of equipment, components, or systems.
- Investigate equipment failures and difficulties to diagnose faulty operation, and to make recommendations to maintenance crew.

- Develop and maintain reliability improvement/tracking programs for critical assets for mechanical equipment.
- Develop and test models of alternate designs and processing methods to assess feasibility, operating condition effects, possible new applications and necessity of modification.
- Develop, coordinate, or monitor all aspects of production, including selection of manufacturing methods, fabrication, or operation of product designs.
- Specify system components or direct modification of products to ensure conformance with engineering design and performance specifications.
- Assist in root cause failure analysis on critical equipment failures.
- Perform component failure analysis as required.
- Witness repairs to equipment and serve as a coordinator on critical equipment repairs as needed.
- Initiate capital projects to maintain/enhance business goals.
- Participate on capital project teams and provide assistance in development of specifications and supporting detail design efforts.
- Review project design packages for proper design regarding reliability, application and maintenance.
- Assist in the development and monitoring of the preventative maintenance program.
- Develop, review and maintain equipment specifications as related to purchasing, installation, operation, and maintenance/repairs.
- Develop and implement alterations and revisions to equipment to improve business performance of the operating units.
- Provide various reports as needed.
- Present a professional image at all times to clients and vendors and maintain a positive reputation of the company.
- Follow all relevant company policies and procedures.
- Assists other Departments and other administrative personnel as necessary.
- Perform other tasks as assigned.

## QUALIFICATIONS

### LICENSES, CERTIFICATIONS, AND/OR REGISTRATIONS

- None required.

### EDUCATION, EXPERIENCE, AND/OR TRAINING

- Bachelor's or higher degree in mechanical engineering required.
- 5+ years of experience preferred. Experience preferred as plant owners' employee in a continuous process industry, preferably chemicals or oil refining.

### PREFERRED

- Ability to communicate information and ideas in speaking or in writing so others will understand
- Must be self-motivated and possess skills to identify and solve unusual problems
- Must be capable to make decisions and recommendations with minimal supervision
- Must be willing to spend time in the field as required
- Ability to use computers and computer systems utilizing standard software (ie; Microsoft Suite, AutoCad)

### KNOWLEDGE, SKILLS, AND ABILITIES

- Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Production and Processing — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
- English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Design — Knowledge of design techniques, tools, and principals involved in production of precision technical plans, blueprints, drawings, and models.
- Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- Science — Using scientific rules and methods to solve problems.
- Complex Problem Solving — identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

- Critical Thinking — using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Systems Analysis — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.
- Reading Comprehension — Understanding written sentences and paragraphs in work related documents.
- Systems Evaluation — Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
- Operations Analysis — Analyzing needs and product requirements to create a design.
- Mathematical Reasoning — The ability to choose the right mathematical methods or formulas to solve a problem.
- Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Category Flexibility — The ability to generate or use different sets of rules for combining or grouping things in different ways.
- Deductive Reasoning — The ability to apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Written Comprehension — The ability to read and understand information and ideas presented in writing.

## SPECIAL REQUIREMENTS

### TOOLS / EQUIPMENT

- Computer
- Copy Machine
- Scanner
- Telephone system

### SOFTWARE

- Proficiency in Microsoft Office, including Excel, Word, and Outlook required

### PHYSICAL

- Ability to lift 20 lbs. occasionally.
- Ability to sit for prolonged amounts of time required.
- Ability to effectively communicate through various means required.

### ENVIRONMENTAL

- Work is performed within an office environment, including office equipment – such as computers, telephones and copiers.
- Work is performed in the “field”, requiring proper safety equipment.
- Requires passing by industrial equipment on way to office.
- Noise levels are typically moderate.

### WORK SCHEDULE

- Rolling 80 Hour work week – Week 1: M-Th (9HR), F (8HR) Week 2: M-Thu (9HR), F (off)
- May work longer hours to meet deadlines as necessary.

### TRAVEL

- Less than 10% of the time.

**Employment is contingent upon the successful completion of a background check, pre-employment physical and drug screen.**



**OCI Beaumont is an equal opportunity employer that recruits, hires, trains, and promotes regardless of race, color, veteran status, age, disability, sex, national origin or religion. We value diversity in our workforce and in the communities we serve.**

**DISCLAIMER**

This is not necessarily an exhaustive list of all responsibilities, skill, tasks, requirements, efforts, or working conditions associate with the job. While this is intended to be an accurate reflection of the current job, OCI Beaumont, LLC reserves the right to revise or change job duties and responsibilities as business needs arise. In compliance of EEOC regulations, if the employee cannot perform the essential functions of this position in a satisfactory manner, further accommodations shall be made if it does not constitute undue hardships upon this organization.

**Prepared by:       Brandan Rossi**  
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**Approved by:       Christie Simon**  
**Approved Date:    August 13, 2019**  
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