CONSTRUCTION – INFRASTRUCTURE AUDITOR (MECHANNICAL)

Position Overview: The Mechanical Engineer for Refinery Construction and Infrastructure Audit is responsible for providing technical expertise and oversight related to mechanical systems during the construction phase of a refinery project. Additionally, this role involves conducting comprehensive audits of existing mechanical infrastructure within the refinery to ensure safety, reliability, and compliance with industry standards and regulations. The engineer will work closely with the construction team, project managers, and other engineering disciplines to ensure that mechanical systems are designed, installed, and maintained in a manner that meets all operational requirements.

Key Responsibilities:

1. Refinery Construction Phase: a.) Review mechanical design plans and specifications to ensure compliance with engineering standards and applicable codes. b.) Provide technical support during the installation and commissioning of mechanical systems, including equipment, pipelines, pressure vessels, and other related components. c.) Collaborate with the construction team to resolve any mechanical design issues that arise during the construction process. d.) Conduct regular inspections to verify that mechanical installations adhere to safety standards and quality requirements.
2. Infrastructure Audit: a.) Perform thorough audits of existing mechanical infrastructure within the refinery to identify potential hazards, inefficiencies, and opportunities for improvement. b.) Evaluate the condition and functionality of mechanical equipment, pipelines, storage tanks, and other mechanical components. c.) Identify areas where upgrades or modifications are necessary to ensure compliance with safety standards and to enhance system performance. d.) Develop comprehensive audit reports detailing findings, recommendations, and proposed action plans.
3. Compliance and Safety: a.) Ensure that all mechanical systems and equipment comply with relevant industry codes, standards, and regulations. b.) Collaborate with the safety department to implement safety protocols for mechanical installations and maintenance activities. c.) Recommend and implement measures to mitigate mechanical hazards and enhance safety within the refinery.
4. Documentation and Reporting: a.) Maintain accurate records of mechanical installations, modifications, and audit findings. b.) Generate progress reports, audit reports, and other documentation as required by management and regulatory authorities.
5. Project Management: a.) Participate in project planning and scheduling related to mechanical aspects of refinery construction and infrastructure audits. b.) Coordinate with project managers, contractors, and other stakeholders to ensure timely completion of mechanical engineering tasks.

Requirements:

1. Education: Bachelor's degree in Mechanical Engineering or a related field. Advanced degrees or certifications are a plus.

2. Experience: a.) Previous experience minimum of 15 years' experience in mechanical engineering within the refinery, petrochemical, or heavy industrial sectors. b.) Experience in construction project management, mechanical system design, and infrastructure audits is highly valued.

3. Knowledge: a.) Proficiency in relevant mechanical engineering codes, standards, and regulations (e.g., ASME, API). b.) Familiarity with refinery processes and equipment is beneficial.

4. Skills: a.) Strong analytical and problem-solving skills. b.) Excellent communication and interpersonal abilities to work effectively with multidisciplinary teams. c.) Attention to detail and a strong commitment to safety and compliance.

5. Certifications: QMS, PMP, NSE, COREN are mandatory.