



**CUSTOM MANUFACTURING
& ENGINEERING™**

Mechanical Engineer

CMEHR@Custom-mfg-eng.com
3690 70th Avenue North
Pinellas Park, FL 33781
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Job ID: 2021-27C
Regular/Temp: Reg
Full-Time/Part-Time: Full time
Submit Reply and Resume to: CMEHR@custom-mfg-eng.com

MUST complete Predictive Index test before applying:

<https://assessment.predictiveindex.com/54R/76d0c093-804e-4fa1-8bca-8d2ed95dfc82?type=candidateba>

Job Summary:

Are you someone who has a passion for finding exciting design solutions to complex problems? As Mechanical Engineer at CME, you will use principles and techniques of mechanical engineering to meet the customer's specifications/requirements by meeting delivery, schedule, and budget by designing mechanical parts, assemblies and systems to meet documented requirements. You will also research components for best design, update documentation necessary for designs, as well as production thereof. You will take proactive lead on project issues related to mechanical design alternatives. If this is something you have a passion for, we want to speak to you!

Duties and Responsibilities:

- Work daily with multi-discipline teams on new product design and continuous improvement of CME product electrical and electro-mechanical systems. Provides design/development oversight of engineering development projects for electro-mechanical systems utilizing technical engineering leadership
- Development of detailed documentation packages including the execution of test plans and protocols
- Provides support for Manufacturing Process Development Engineering methodologies, standards, and relevant tests and/or certifications of electro-mechanical products.
- Awareness of Industry 4.0 automation and interested in implementation of these modernizations
- Create, read, and interpret blueprints, technical drawings, schematics, & computer-generated reports.
- Confer with engineers and other personnel to implement operating procedures, resolve system malfunctions, and provide technical information for designs, design modifications, and assistance with bid proposal activities. Oversee the installation, operation, maintenance, and repair to ensure that machines and equipment are installed and functioning according to specifications
- Research and analyze customer design proposals, specifications, manuals, and other data to evaluate the feasibility, cost, and maintenance requirements of designs or applications to meet customer requirements as well as CME's schedule and budget. Additionally, research, design, evaluate, install, operate, and maintain mechanical products, equipment, systems and processes to meet requirements, applying knowledge of engineering principles
- Specify system components or direct modification of products to ensure conformance with engineering design and performance specifications
- Investigate equipment failures and difficulties to diagnose faulty operation, and to make recommendations to maintenance crew
- Assist drafters in developing the structural design of products using drafting tools or computer-assisted design (CAD) or drafting equipment and software
- Conduct research that tests and analyzes the feasibility, design, operation and performance of equipment, components and systems
- Other duties as assigned

Job Qualifications:

- Knowledge of the practical application of engineering science and technology.
- Knowledge of:
 - Machines and tools, including their designs, uses, repair, and maintenance.
 - Design techniques, tools, and principals involved in production of precision technical plans, blueprints, drawings, and models
 - Raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods
- Knowledge and design of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming
- Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes
- The Mathworks MATLAB, Autodesk AutoCAD software; SolidWorks CAD software; Thermal and structural computer analysis software
- Experience with Rockwell Software, environmental testing to MIL-STD-810 and MIL-STD-901
- Basic knowledge of machine tool operation and processes including drill presses, milling machines, surface grinders, CNC machines, welding, and fasteners and accelerated life testing principals
- Basic principals of DFA & DFM
- Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems, using scientific rules and methods to solve problems, and considering the relative costs and benefits of potential actions to choose the most appropriate one
- Managing one's own time and the time of others
- Design experience utilizing the ability to:
 - Communicate both written and oral to levels of the organizations. Oral
 - Listen to and understand information and ideas presented through spoken words and sentences
 - Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem
- Familiarity with Deltek CostPoint ERP software
- Configuration management and revision control
- Supply Chain support
- Military Grade specification of electronics and wiring

Minimum Requirements Needed:

- Bachelor's degree in mechanical engineering, industrial engineering or another related field; MS degree preferred
- At least 1 year of related experience in mechanical design of electronic & electrical products, components, subassemblies, and finished goods
- Positions with CME require access to controlled goods and technologies subject to the International Traffic in Arms Regulations or the Export Administration Regulations. Applicants for these positions need to be "U.S. Persons," as defined in these regulations. Generally, a "U.S. Person" is a U.S. citizen, lawful permanent resident, or an individual who has been admitted as a refugee or granted asylum.
- Successful Passage of Required Screenings & Tests: Background Check, Reference, Credit, and Drug Testing
- **You have been completely vaccinated for COVID-19**

Travel Percentage Required: Minimal & Usually Local to Vendors. 0% -5%

An award-winning Tampa Bay small business for two decades, Custom Manufacturing & Engineering, Inc. (CME®) delivers Engineering, manufacturing, test, and calibration/repair services to Government and Industry. Join us at CME, where one can "Use Our Expertise to Design & Build Your Solutions" CME's culture is embodied by Core Values that are focused on: Serving the customer while protecting CME, delivering quality products and services as required, solving problems, working with energy and passion, and encouraging and developing employees that challenge themselves.

As a strong supporter of Science, Technology, Engineering and Math (STEM) and other select charitable initiatives, CME promotes and encourages employee community support to nonprofit organizations or educational institutions, especially for mentoring and school/student support. Most of CME's products and services are focused on the development and manufacturing of energy efficient and sustainable products such as more efficient power supplies, intelligent power distribution units, energy saving solar panels, and other electronic systems, end products, or components. (www.custom-mfg-eng.com).

CME is an Equal Opportunity/Affirmative Action Employer. *All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, pregnancy, sexual orientation, gender identity, national origin, age, protected veteran status, or disability status.*

*As a U.S. defense contractor CME is also subject to additional rules and regulations regarding the hiring of foreign persons. **In compliance with U.S. federal law, all persons hired will be required to verify identity and eligibility to work in the United States; CME cannot accept any person for employment who does not meet employment eligibility requirements, E-Verify verification, and/or is in the U.S. under a student (F1 and/or OPT, J1, orM1) and/or temporary work visa.** For the purposes of clarification, the I-9 defines eligibility of an employee as a: U.S. citizen, permanent resident card or alien registration card (Form I-551), a person with a temporary I-551 stamp on their passport or U.S. immigrant visa, and/or passport from the Federated States of Micronesia (FSM) or Republic of the Marshall Islands (RMI) with Forms I-94 or I-94A indicating nonimmigrant admissions under Compact of Free Association between the U.S. and FSM or RMI.*

Removal Date: Jan 12th, 2022