

Mechanical Engineer

About the Client:

Our client is a 100% employee-owned company. Their people are passionate about solving unique engineering challenges, and with the support of industry experts behind them, they can successfully execute projects of any size while meeting the requirements of scope, schedule, and budget. This client has been providing customers with engineering, system integration and fabrication solutions for more than 40 years. With offices throughout the US and over 500 professionals on our staff, they are one of the largest and most well-established engineering companies in the United States, and they have successfully finished numerous projects for their US clients in many parts of the world.

Job Summary:

Our client has a Mechanical Engineer position open in Orlando, FL. This position is responsible for mechanical engineering on large-scale projects. Project requirements involving mechanical system design from scratch, analysis/calculations (stress/fatigue/etc.), acceleration forces, load calculations, material stress design, failure and effects analysis, risk assessment, component selection, and mechanical system installation/commissioning.

Responsibilities:

- Must be organized, technically competent, have effective oral and written communications, experienced in working in a multi-disciplined environment and interfacing with engineers, designers, and drafters
- Designs, develops, and implements fully integrated mechanical assembly systems to meet process requirements. As well as complying with any local or government agency design/implementation codes
- Knowledge of analyzing system design for Hazard analysis development and mitigation
- Understanding of Class 1 parts to minimize their need and optimize redundancy minimizing single points of failure
- Develops documents of system configuration and design. Documents include Theory/Description of operation, Detailed mechanical system design description, system implementation/acceptance test plans, system routine maintenance/job plans
- Develops drawings of mechanical design, assemblies, and installation procedures on AutoCAD and/or SolidWorks software
- Ability to design and troubleshoot pneumatic and hydraulic control systems
- Ability to perform system analysis/calculations including Stress, fatigue, reliability, life expectancy, tolerance studies
- Knowledge of ride system design requirements for attractions involving guest accelerations, reach envelope, ingress/egress, weight, and emergency evacuation analysis and implementation upon control system failure in worst-case scenarios
- Will assist with the initial start-up and debugging of integrated systems and the development of system documentation

Tech Search Pros does not discriminate based on race, color, religion, marital status, age, national origin, ancestry, physical or mental disability, medical condition, pregnancy, genetic information, gender, sexual orientation, gender identity or expression, veteran status, or any other status protected under federal, state, or local law.

Responsibilities (continued):

- Individual will be working on system integration projects for clients in industries such as entertainment and manufacturing
- Will act as technical lead on projects and guide lower-level engineers, technicians, and contractors
- Will act as Project Manager on smaller projects ranging from \$50k to \$250k. This includes but is not limited to:
 - Develops and executes implementation plans for the project
 - Assigns work to meet overall project deadlines
 - Ensures that all project team members clearly understand the scope of W-M responsibilities
 - Develops schedules for W-M and customer requirements
 - Evaluates progress on project(s) and details changes
 - Responsible for all purchasing and subcontractor requirements
 - Responsible for the development of costs and proposal of change orders to contract scope

Qualifications:

- Bachelor's Degree in Mechanical Engineering.
- 5+ years of experience in mechanical systems, components, stress analysis, acceleration forces.
- Knowledge of amusement ride safety standards (ASTM Standards).
- Knowledge of contract documents and specifications.
- Ability to collect field data and accurately record findings.
- Ability to perform system design functions.
- Planning, Customer Focused, Timely Decision Making, Informing, Organizing, Priority Setting, and Problem-Solving skills required
- Experience with AutoCAD and SolidWorks preferred
- Proficient with MS Windows Office suite

Travel Requirements:

- Ability to travel up to 35%

Physical Demands:

- Seeing, color perception, hearing, listening, clear speech, dexterity in hands, driving, lifting, climbing, ability to mount and dismount equipment, pushing, and pulling.
- Standard office working environment, On-site office, and diverse industrial environments.