Manufacturing Engineer - Project

The Role:
KEC is seeking experienced and qualified Manufacturing Engineers with particular strength in the design and fabrication of mechanical assemblies for tooling and test equipment. Your primary role will be to lead the manufacturing process definition and technical execution on several projects for spacecraft pressure vessel and rocket engine components. Typically the manufacturing process includes metal forming, machining, NDE, weld and test. You will oversee the overall manufacture process from definition through execution. The engineer in this position will help define what production equipment, tools, systems, and materials will be required in order to create an efficient, organized, and lean manufacturing process. After production operations begin, the engineer will work on process improvement and production optimization using lean processes and tools. You must love all things mechanical and be passionate about building high value, flight critical metallic hardware. Depend on the project phase you’ll also be given the opportunity to perform design engineering and project management roles. Our desire is to encourage and develop the best, most competent manufacturing engineers in the industry. We’re an engineering driven company and our effectiveness is directly a function of the quality of our design and manufacturing engineers.

- Bachelor’s degree from an accredited institution, with a concentration in a relevant Engineering discipline plus minimum of three (3) years on the job manufacturing engineer experience.
- High school diploma or GED with 7+ years of role related experience may be substituted for above formal education. Practical machine shop, fabrication and tooling training or apprenticeship and advantage.
- Competent in mechanical component and/or tooling design (3D CAD-based) with leading CAD software. Creo/ProE an advantage but if you’ve got the skills we’ll train you in our software.
- High competence and knowledge of GD&T.
- Great working knowledge in machining of metals, typical for aerospace service. You will provide engineering direction to the machine shop. Prior experience with programming and operating CNC mills and lathes is required to support teaching and mentoring others.
- Working knowledge of welding in at least one of the following techniques - TIG, EB or laser.
- Working knowledge of metal processing including heat treatment, NDE (X-ray, UT and Dye-penetrant) and some other non-conventional machining techniques.
- Knowledge of metal forming, chemical processing (etch) and mechanical testing an advantage
- Knowledge of lean manufacturing philosophies and tools an advantage
Manufacturing Engineer - Project - continued:

Requirements:

• Develop mechanical designs and generates drawings for tooling, fixtures, and testing of products.
• Plan, direct and coordinate manufacturing processes on factory floor and outside processing.
• The manufacturing engineer will be the team technical expert for machined parts.
• Must know how to determine proper tool selection and programming when machining exotic materials at both low and high production rates.
• Experience with the design of jigs and fixtures for use in a lean manufacturing environment.
• Experience setting up new machining facilities or work cells is required. Develop, evaluate and improves manufacturing methods, utilizing knowledge of product design, materials and parts, fabrication processes, tooling and production equipment capabilities, assembly methods, and quality control standards.
• Write work instructions as necessary for the processing of parts, sub-assembles and assemblies.
• Confer with design and production staff concerning process and tooling to ensure efficient production methods.
• Liaise with vendors to determine product specifications and arrange for purchase of equipment, materials, or parts, and evaluates products according to specifications and quality standards.
• Estimate production times and related costs for proposals and project estimates.
• Pursue affordability and manufacturability in everything you do.
• Provide the specification, evaluation and implementation of new equipment for the machine shop.
• Support the supply chain team and Mission Assurance with supplier evaluations and risk assessments.

Additional Requirements:

• Ability to work overtime if required and weekends as needed.

Job Location:

Long Beach, CA, USA

Personal Requirements:

You will have a high level of integrity, respect others and understand the need of complete confidentiality with respect to our company proprietary information and that of our customers.
**Manufacturing Engineer - Project - continued:**

**ITAR Requirements:**

To conform to U.S. Government space technology export regulations, applicant must be a U.S. citizen, lawful permanent resident of the U.S., protected individual as defined by 8 U.S.C. 1324b(a)(3), or eligible to obtain the required authorizations from the U.S. Department of State. KEC is an Equal Opportunity Employer; employment is governed on the basis of merit, competence and qualifications and will not be influenced in any manner by race, color, religion, gender, national origin/ethnicity, veteran status, disability status, age, sexual orientation, gender identity, marital status, mental or physical disability or any other legally protected status.