



JOB DESCRIPTION

JOB TITLE: Senior Mechanical Systems Design Engineer

JOB CODE:

EXEMPT/NON-EXEMPT: Exempt

REPORTS TO: Engineering Manager

DEPT.: Engineering

DEPT. APPROVAL: VP-GM

DATE: 01/18/2023

MANAGER LEVEL:

EEO CODE:

BRIEF POSITION SUMMARY:

The Senior Mechanical Systems Design Engineer will take technical lead on specific projects as identified by the Engineering Manager. Will provide assistance to the Engineering Manager in coaching other Mechanical Engineers to develop design skills and work to the departmental processes. Researches and develops ideas for new products and systems.

DUTIES and RESPONSIBILITIES:

- Plays an integral role in all aircraft systems (fuel, hydraulic, electrical, landing gear, etc.) designs for the Advanced Design team
- Perform aircraft conceptual and preliminary systems design and analysis
- Perform trade studies (weight, performance, systems sizing)
- Create engineering designs, layouts and drawings for aircraft functional systems
- Lead a team of designers/draftsman to complete engineering drawing packages
- Complete designs using Catia/Solidworks design software
- Knowledge of manufacturing - hands-on experience with tube assemblies, ducts, harnesses, part fabrication and assembly processes a plus
- Composite knowledge a plus
- Working knowledge of GD&T
- Problem solving skill sets
- In-depth understanding of maintaining complex Bills of Material
- Pursues all cost saving opportunities to maximize project profitability
- Performs critical path analysis and prepares and implements work-around plans to ensure the successful completion of projects

*The company reserves the right to add or change duties at any time

EDUCATION, EXPERIENCE, and QUALIFICATIONS:

- Degree in mechanical engineering or related
- 10+ years of experience in related field
- Extensive experience in a similar role ideally within military/aerospace or similar industry

- Supervisory experience
- Collates cost data relating to the mechanical design
- Ensures the mechanical design functionally meets the user's requirements
- Produces designs to specified deadlines and achieves the required timescales
- Sets an example to the other members of the mechanical design team on how to manage designs
- Confident, proactive character, ability to take the lead in challenging situations
- Excellent verbal and written communication skills
- Good IT skills
- Critical thinking along with active listening
- Committed to undertaking professional development
- CATIA V5 / Solidworks (10,000+ hours minimum)
- GD&T experience.
- Self-starting team player with the ability to work tight deadlines
- Must be a U.S. citizen
- Ability to obtain and maintain a U.S. Security Clearance at the appropriate level (requires U.S. Citizenship)
- Secret Clearance Active/Eligible Desired
- Holds and able to maintain a valid U.S. Driver's license
- Must pass pre-placement drug screen and background investigation

PHYSICAL REQUIREMENTS:

- Must be able to sit/stand for extended periods – 9 hours minimum
- Physically able to handle items weighing up to 40lbs unassisted
- May be exposed to high level noise, dust, and vibration and chemical fumes (within OSHA limits)
- Continuous use of both hands including grasping, pulling, and pushing
- Walking and balancing on even and uneven surfaces
- Must be able to stoop, kneel, climb, bend, crawl, and be able to reach overhead and below the shoulder
- Able to work in a non-climate controlled environment