

Position Description

Role: Tooling Engineer
Reports to: Engineering Manager/Director
Team Size: 1 associate

Key accountabilities/responsibilities for this role include:

The Tooling Engineer is responsible to design and develop composite molds and assembly fixtures to support prototyping activities within the design engineering department. Responsibilities include designing and sourcing master plugs or molds, designing and managing the fabrication of mold framework, as well as designing and managing the fabrication of component and assembly fixtures required to complete prototype fabrication. Key emphasis will be on ability to understand complex assemblies and components, and to translate these into tools that enable prototyping to be completed on time and on budget. The incumbent will also need to work with outside vendors to ensure we are using the state of the art in tooling and fixturing designs.

Specific accountabilities of the role are noted below.

Responsibilities & Accountabilities

- Experience in composite tooling design and fabrication
- Experience with composite lamination and assembly processes
- Ability to model 3D master prototype/mold surfaces for tooling
- Manage outside vendors with on time and on budget delivery of tooling components when required
- Ability to perform tolerance stackup analysis and full understanding of GD&T
- Develop innovative solutions for component fabrication and assembly using proven composite bonding and fastening techniques
- Work as part of a fast-paced design engineering team taking part in DFMEAs, PFMEAs, and other risk management events
- Review and critique 2D drawings and develop and manage tooling specifications
- Support all first article inspection requirements for tooling, prototyping, and PPAP events as part of the design lifecycle

Who we are looking for:

Minimum Education and Experience

Bachelor's Degree in Engineering and 2-5 years relevant work experience

Transportation composite or other composite experience preferred

Required Skills and Education

- Composite tooling design experience with RTM, VARTM, pultrusion, and L-RTM processes
- Bonding fixture design and qualification experience
- Assembly fixture design and qualification experience
- Experience designing and fabricating steel weldments for tooling bracing
- Fundamental understanding of composite component fabrication and materials
- Background in prototyping of composite components
- Proficient in CATIA V5 R2016 and Solidworks 2015 or later
- All Microsoft Office software including Project 2010 or later
- Great problem solving and communication skills
- Ability to work on projects demanding fast prototype/production startups
- Ability to work with vendors, customers and employees
- Experience leading high performance teams in a fast-paced environment
- Ability to maintain safe work environment

Preferred Skills and Education

- Experience in global organization
- Project management and multi-tasking ability
- Mold flow analysis experience
- Control system design and implementation
- Machining understanding and experience
- Welding understanding and experience
- APQP experience and support