

Job Posting: Product Industrial Designer- Manufacturing

Tulmar designs, manufactures, and distributes engineered protective textiles, survivability and safety solutions for the Aerospace, Defense and Public Security industries.

Headquartered in Hawkesbury, Ontario, Tulmar operates a modern 60,000 square foot facility with equipment ranging from computerized cutting tables, stitching machines R.F. (radio frequency) welding and heat-sealing equipment to highly sophisticated testing and certification equipment including cold temperature test chambers, inertia reel testing equipment and computerized measurement and test equipment for quality inspection.

We are currently looking for a **Product Industrial Designer - Manufacturing** to join a dynamic & close-knit team!

This is a unique opportunity for someone who thrives at the intersection of creative product design and practical manufacturing execution. You will take ideas from concept to production, blending aesthetics, usability, and performance with manufacturability, cost-effectiveness, and compliance to rigorous industry standards.

Under the guidance of the VP of Engineering & Design or delegate, you will develop, maintain, and improve assigned products and processes – ensuring they meet customer expectations, align with brand identity, and deliver operational efficiency.

Duties & Responsibilities:

- Conceptualize and develop innovative product designs for aerospace, defense, and safety applications—taking projects from sketches and CAD models through to prototyping and manufacturing.
- Collaborate closely with engineering, production, and marketing to ensure designs are functional, feasible, cost-efficient, and aligned with brand objectives.
- Create and maintain engineering drawings, 3D models, and technical documentation (specifications, BOMs, routings, patterns, cutting schedules, work instructions, etc.).
- Plan, execute, and document validation tests for products, processes, and materials.
- Select materials and manufacturing processes (including textile fabrication, RF welding, injection molding, etc.) suited to product requirements.
- Managing assigned projects (scope, budget, timeline, resources, sub-contractors, etc.).
- Writing technical documentation (proposals, reports, manuals, etc.).
- Maintaining part number library (ERP) and master engineering files.
- Supporting compliance with the Ontario Occupational Health and Safety Act.
- Troubleshooting & Improving manufacturing processes to drive efficiency and high quality while updating applicable documentations.
- Support production on assigned products, to adjust, analysis and improve/update manufacturing Tech Data package

What you need to succeed:

- Completion of a college or university program in Industrial Design, Mechanical Engineering, Product Design, or related field, with 4–8 years of relevant experience (or equivalent combination of education/experience).
- Strong 2D/3D design skills and proficiency in CAD (Solid Edge preferred; experience with SolidWorks, Rhino, or similar is an asset).
- Knowledge of related manufacturing technology such as mechanical, electrical, pneumatic, and hydraulic systems, RF/ultrasonic/heat welding of plastics, metal welding, sewing, adhesive bonding.
- Knowledge of effective manufacturing principles and techniques (Lean, Kaizen, Kanban, Poke-yoke, JIT, 5S etc.).
- Experience working in regulated industry and familiar with industry standards such as:
- ISO9001, AS9100, ASTM, ASME, CARs, OHSA, Military specs used in engineered textile and military industry would be an asset.
- Project management experience.
- Excellent communication skills in English (French is a strong asset)
- Strong decision-making skills.
- Ability to apply engineering base concept of forces, stress, strain, material properties and assembly methods to create well thought, safe, clever design.
- Strong computer skills in a MSOffice environment.
- Ability to deal with various requests and/or projects while maintaining work efficiency through good prioritisation.
- Ability to travel as required by the position. Valid driver's license and passport.
- Due to Controlled Goods Program and ITAR compliance requirements, candidates must be Canadian citizens or permanent residents eligible under ITAR regulations.