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### **Job Posting**

### MECHANICAL DESIGN ENGINEER

2024-02-07

### **About SubC Imaging**

We're a passionate team dedicated to SubC Imaging's innovative products, aiming for top customer satisfaction. SubC values sharing ideas and perspectives and providing opportunities to learn and enhance professional skills.

Take advantage of our flexible schedule program in the scenic Clarenville area of eastern Newfoundland, where you can balance work and life. This is a full-time position, based in our Clarenville, NL office. A Relocation Package may be provided to the successful candidate.

Join our dynamic research and development team, where you'll play a vital role in developing cutting-edge subsea imaging systems! Reporting to the Engineering Manager, you'll be instrumental in designing, refining, and optimizing mechanical systems for the most advanced underwater technologies. Your knack for proposing and implementing innovative solutions will enhance the efficiency, functionality, and quality of our subsea cameras, lights, and laser systems.

### What you do as our MECHANICAL DESIGN ENGINEER:

### Mechanical Design and Analysis:

- Use CAD software (Solidworks) to create mechanical designs and drawings (Deep sea underwater housings, frames, electronics mounts, opto-mechanical assemblies, and more)
- Ensure design compatibility and compliance with various regulatory bodies and design standards
- Conduct Finite Element Analysis (FEA) on designed parts and assemblies to ensure correct operation at high pressures
- Confirm system and product capabilities by designing feasibility and testing methods
- Display a strong understanding of manufacturing practices (machinability, tolerancing, cost optimization, etc.)

#### **Documentation and Process Management:**

- Create, review, update, and maintain user manuals, technical drawings, and product datasheets
- Implement manufacturing processes and quality assurance initiatives by generating assembly and testing documents and guidelines
- Create and maintain Bill of Materials while collaborating with Purchasing & Inventory Coordinator

### **QA and Efficiency Enhancement:**

- Assure product and process quality by designing testing methods, testing prototypes and finished products, establishing standards, and confirming manufacturing quality
- Source or develop production jigs/holders, testing and manufacturing equipment, and optimize workstations for quality assurance
- Identify areas for improvement in production processes and finished products through collaboration with the entire operations team



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#### **Product Maintenance and Change Management:**

- Provide production support by addressing production process or quality control concerns and issues
- Keep testing and manufacturing equipment operational by coordinating maintenance and repair services, following manufacturer's instructions.
- Lead and implement new product production launches, new change management solutions, and all new manufacturing training programs for new equipment or processes.

## **Key Proficiencies and Qualifying Characteristics:**

- Mechanical or Manufacturing Engineering Degree
- Minimum 3+ years experience in manufacturing or product development
- Proficiency in 3D CAD software (Solidworks or equivalent) and Technical drawings
- Knowledgeable in Finite Element Analysis
- Strong analytical skills and attention to detail in testing and quality assurance processes
- Effective diagnostic, problem-solving, and change management abilities
- Excellent communication skills for collaborative work in a multidisciplinary team
- Familiarity with high-complexity, low-volume assembly manufacturing processes (mechanical and electrical)
- Capability to autonomously oversee and manage individual responsibilities within the context of larger project initiatives
- Experience with utilizing 3D printers in design process \*\*
- Experience with FMEA and FMECA analysis \*\*

The above job description is meant to describe the general nature and level of work being performed; it is not intended to be construed as an exhaustive list of all responsibilities, duties, and skills required for the position.

### What we offer:

- Hourly pay: At SubC everyone is paid an hourly wage because we believe in mutual transparency and trust. Your time is valuable and we believe that, too often, corporations take advantage of salary workers with unrealistic working hours.
- Flex time: Life is complex. Work around your own schedule with the freedom and flexibility to manage your work and define what work-life balance means to you.
- Vacation: Two weeks vacation (to start), one extra vacation day each year of employment, additional paid time off during Christmas week, provincial statutory holidays plus three additional SubC stat holidays.
- **PTO days:** Five days per year.
- Health/dental coverage: Sun Life industry standard with Health Spending Account.
- Matched RRSP plan: We match your contribution for retirement planning.
- **Wellness program:** Spending account for fitness equipment/memberships and various initiatives throughout the year focusing on physical, mental, and financial wellness.
- **Employee Giving Program:** Charitable Giving Program Fund amount of \$250 to donate to your charity/non-profit of choice.
- Continuous Learning & Development: Continue honing your skills with professional development plans and online learning.

<sup>\*\*</sup> Value Added Skills



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## To Apply:

Email your resume and portfolio to careers@subcimaging.com. Please confirm your readiness to relocate to Clarenville, Eastern Newfoundland, if selected. We look forward to receiving your application. Thank you for considering a role with SubC Imaging.