

## PROFEUND JOB DESCRIPTION – MECHANICAL DEVELOPER/ INDUSTRIAL **DESIGNER**

Description	
Job Title	Mechanical Developer/ Industrial Designer
Reports to Title	Director Hardware Engineering & QA
General Accountability	Our mission is to Profoundly change the standard of care by creating a tomorrow where clinicians can confidently ablate tissue with precision; a tomorrow where patients have access to safe and effective treatment options, so they can quickly return to their daily lives. Changing the standard of care is part of our fabric. We are a group of energetic, problem-solvers focused on innovation, and looking to change the world. If you want to make a Profound impact with your career, while making a difference in other people's lives, here is your chance.
	The Mechanical Developer/Industrial Designer is involved in all mechanical aspects of the TULSA-PRO system from generation through manufacturing, as well as future products of the company.
Duties and	Duties and responsibilities will include (but are not limited to):
Responsibilities	<ol> <li>Analyze user needs and generate requirements for the company's products</li> <li>Create aesthetic, functional, and reliable product designs</li> <li>Build models and three-dimensional prototypes of new products</li> <li>Evaluate design ideas for practicality, cost, and market characteristics.</li> <li>Create design specifications for the mechanical aspects of the company's products</li> <li>Review existing product design, identify weaknesses and propose improvements</li> <li>Analyze mechanical designs</li> <li>Create strategy for the verification of the design, and participate in verification activities as required</li> <li>Produce DHF and DMR documentation for transfer to test/manufacturing</li> <li>Interact with customers, marketing, and sales as required to capture user needs and look for opportunities to improve products</li> <li>Investigate product complaints at clinical/customer sites, perform root cause analysis of failures, and propose remediation in a timely fashion</li> <li>Develop clinical workflow, author content for the user manual, incorporate human factors into designs and train other employees on product use</li> <li>Contribute to risk management content such as hazard analysis</li> <li>Perform project engineering roles as needed.</li> <li>Perform all duties in compliance with the quality management system; actively contribute to the continuous improvement of the QMS</li> </ol>



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Competencies	
Education	Industrial Design / Mechanical Engineering or similar degree
Certifications	None
Key Attributes	Required:
(experience, skills and technical knowledge)	<ul> <li>3 or more years industrial experience is required preferably in medical device industry.</li> <li>Industrial design experience, model making experience and applicants submitting a design portfolio will be considered</li> </ul>
	<ul> <li>Extensive knowledge of SolidWorks Surface and Solid Modelling</li> <li>Excellent verbal and written skills. Ability to quickly, clearly, and concisely communicate.</li> <li>Mechanical aptitude including ability to use common shop tools and measurement equipment</li> <li>Tenacious problem solver, organized, detail oriented</li> <li>Knowledge of medical device standards such as IEC-60601-1, ISO 10993</li> <li>In depth knowledge of manufacturing processes such as machining, injection molding, urethane casting, 3D printing and sheet metal</li> <li>Demonstrated ability to translate user needs into design specifications</li> <li>Demonstrated ability to troubleshoot problems and perform root cause analysis</li> <li>Demonstrated ability to communicate with customers.</li> <li>Knowledge of ASTM standards and testing methods</li> <li>Competency in mechanical analysis skills such as kinematics, solid</li> </ul>
	and fluid dynamics, heat transfer, material strength  Desired:
	<ul> <li>Experience working with MR compatible devices and therapeutic ultrasound devices.</li> <li>Knowledge of electromechanical design</li> <li>Familiar with mechatronics components sizing and sourcing</li> <li>Experience working with adhesives</li> <li>Experience working with sterilization and disinfection methods</li> <li>Experience with statistical analysis</li> <li>Experience using and designing with off-the-shelf medical components</li> </ul>