Job Title:	**Manufacturing Engineer - Mechanical**	**Job Code:**	MNFENGM
Department:	Manufacturing Engineering (MFG O/H)	**Division:**	Ithaca, NY
Reports to:	Manufacturing Engineering Manager	**FLSA Status:**	Exempt
Hours:	Full-time – 40 Hrs/week	**Rev Date:**	08-21-2018

Primary Function

Exercises technical leadership and analytical skills in the resolution of production issues. Demonstrates creativity in implementing process improvements and new manufacturing methods including the conception, design and implementation of new tools, fixtures, methods; building and testing new product prototypes, and qualifying machinery and test equipment. Prepares technical reports, drafts and executes validations and change control under the direction of Manufacturing Engineering management staff. This position would be responsible for working closely with manufacturing and design engineering to provide necessary support through applying theory and principles of mechanical engineering.

I. Duties and Responsibilities

- Actively participate on new product release teams from the earliest phases to assure that design for manufacturing concepts are employed and to facilitate a smooth transition from Engineering to Manufacturing.
- Owns the development of assembly processes for new products as well as the introduction of new methods into the assembly processes of current products and associated PFMEA's.
- Interpret engineering prototypes, test instructions, drawings, and schematics to identify, modify and plan requirements for fabrication, assembly, testing and test nature of technical problems.
- Devise, document, fabricate and assemble new or modified test fixtures for construction by the machine shop or external supplier.
- Apply DOE and statistical tools to identify root cause(s) of yield loss and propose and implement corrective actions, make recommendations for changes in test fixtures or test methods by applying theory & principles of mechanical engineering.
- Maintain Work Instructions, BOM's, preventative maintenance schedules, and routers and perform training as required.
- Record test procedures and results; write test reports using numerical and graphical data using Excel and Word.
- Confer with engineering staff and submit reports of test results to engineering department and recommend design or material changes.
- Actively participate in discussions related to changes in design, method of manufacture and assembly, and drafting techniques and procedures with staff and coordinate corrections.
- Develop and release processes and equipment in a controlled manner, ensure documentation procedures have been followed and drawings are accurate.
- Draft and execute validation & verification for tooling, equipment, and processes, including IQ/OQ/PQ organized activities.
- Identify and resolve manufacturing errors expeditiously with attention to impact on safety/ergonomics, quality, cost and production schedules from software.
- Perform other work-related duties as requested, directed or assigned by management.

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II. Working Relationships

- Interact with Manufacturing Leaders.
- Interact with Manufacturing technicians
- Interact with all Company departments.
- Interact with external technical experts and consultants.
- Interact with external vendors & suppliers.

III. Education and Experience

- BS in Mechanical, Manufacturing, or Biomedical Engineering required.
- MS in Mechanical or Biomedical Engineering preferred.
- Minimum of two years' experience. Preferred is prior experience in medical device industry and familiarity with FDA CGMP regulations and validation practices.
- Proficiency in 3D Modeling required, CREO or SolidWorks preferred
- Experience in electronics and systems design a plus.

IV. Knowledge, Skills and Abilities

- Excellent analytical and problem-solving skills with the capability of explaining the underlying concepts and principles.
- Proficient in CAD Modeling and knowledgeable in drawing standards/GD&T.
- Excellent written and verbal communication skills including effective presentation of technical data to all levels within the organization.
- Use of logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems related to prototype and testing.
- Requires understanding of validation concepts and document control.
- Ability to manage multiple projects in a fast paced & dynamic environment
- Familiarity with a variety of the mechanical engineering concepts, practices, and procedures.
- Knowledge of additive manufacturing techniques a plus.

V. Supervisory Responsibilities

- No Direct Reports.

VI. Physical Demands

- Must be able to work under a microscope for assembly and/or soldering under a microscope.
- Finger dexterity with the ability to make precisely coordinated movements to grasp, manipulate or assemble very small objects.
- Normal/corrected color vision required.
- Must be able to lift up to 25 lbs. and to adhere to safety requirements.

VII. Work Environment

- Normal work environment includes office, testing/research lab, machine shop and manufacturing floor.
- Occasional exposure to elements such as odor, noise, dust, heat, cold, epoxy, or chemicals.
- Personal Protective Equipment (PPE) is required occasionally.

Disclaimer: This Job Description is not intended to be all-inclusive, and may be subject to change to include new responsibilities and tasks or change existing ones as management deems necessary to meet the ongoing needs of the company.