



Job Title: Manufacturing Engineer		Location: Blacksburg, VA	
Reports to: Operations Manager		FLSA: Salary/Exempt	
Rev #: 2	Rev date:	Nature of Changes: add new skills and education requirements	Approved by: ACoble

### SUMMARY OF FUNCTIONS:

Responsible for supporting production by developing, implementing, improving and optimizing manufacturing processes to achieve maximum Safety, Quality (defect reduction), Productivity (production improvement in cycle time), On Time Delivery, waste reduction, and related.

### MAJOR DUTIES AND RESPONSIBILITIES:

- Utilize a systematic approach for analyzing operations to optimize overall manufacturing safety, quality, delivery, productivity and costs.
- Must demonstrate skills in collecting and evaluating data to arrive at technically accurate conclusions and ensure timely resolution to issues.
- Develop proposals for process improvement, cycle time reduction, cost reduction and other activities by reducing/eliminating non-value-added activities in processes.
- Apply extensive technical expertise to top level objectives related to lean manufacturing and variation reduction.
- Demonstrate capability to effectively conduct feasibility studies of various solutions to resolve problems.
- Lead problem solving activities in a progressive, team-oriented environment. Conduct process capability studies and implement SPC control systems. Drive process improvement efforts to increase safety, quality, productivity, and machine utilization.
- Work with design engineers to support introduction of new products and ensure accountability to meeting Design for Manufacturability targets.
- Design and implement tooling/fixtures/workstations.
- Provide cost estimates for new projects.
- Provide guidance and training to workers engaged in production on the factory floor. Compile and write training material and conduct training sessions on production processes.

### KNOWLEDGE, SKILLS, AND ABILITIES NECESSARY:

- Process improvement and analytical skills required
- Demonstrate a high degree of creativity and initiative
- Ability to manage multiple concurrent projects within defined time and budget constraints
- Project management skills and experience
- Work well with others and have the ability to lead cross-functional teams to solutions
- Manufacturing process improvement experience preferred
- Excellent PC skills
- Demonstrate a commitment to quality and continuous improvement
- Ability to apply LEAN manufacturing tools in a production environment such as PFMEA and DFMEA



**EDUCATION and/or EXPERIENCE**

- Bachelor’s degree in ME, EE, IE or related is required
- 3-5 years of manufacturing engineering experience preferred
- Experience with formalized continuous improvement methodologies is required – Six Sigma Black Belt preferred
- 3D CAD modeling and 2D CAD/CAM experience required, preferred Siemens NX and Inventor
- NASTRAN/ ANSYS FEA Experience a plus
- Strong preference towards experience writing and debugging code written in LabVIEW
- PLC system design and ladder logic coding experience preferred, Click PLC a plus
- Experience working with MYSQL databases desired
- Experience in designing and solving problems on pneumatic, mechanical, electrical, and hydraulic controlled machine tools
- Knowledge of electric motor winding and assembly equipment a plus

**PHYSICAL DEMANDS:**

The physical demands are necessary to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

	None	Occasionally	Regularly	Frequently
<b>Stand</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Walk</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Sit</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Use hands to finger, handle, or feel</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Reach with hands and arms</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Climb or balance</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Stoop, kneel, crouch, or crawl</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Talk or hear</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Taste or smell</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Lifting: up to 10 pounds</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Lifting: 10 – 25 pounds</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Lifting: 25 – 50 pounds</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Lifting: more than 50 pounds</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Vision Requirements:** (Check all that apply.)

- Close vision (clear vision at 20 inches or less)
- Distance vision (clear vision at 20 feet or more)
- Color vision (ability to identify and distinguish colors)



- Peripheral vision (ability to observe an area that can be seen up and down or to the left and right while eyes are fixed on a given point)
- Depth perception (three-dimensional vision, ability to judge distances and spatial relationships)
- Ability to adjust focus (ability to adjust the eye to bring an object into sharp focus)
- No special vision requirements

*InMotion US reserves the right to modify, interpret, or apply this job description in any way the company desires. This job description in no way implies these are the only duties, including essential duties, to be performed by the employee occupying this position. This job description is not an employment contract, implied or otherwise. The employment relationship remains "at-will." The aforementioned job requirements are subject to change to reasonably accommodate qualified disabled individuals.*

*InMotion US is an Equal Opportunity Employer that does not discriminate on the basis of actual or perceived race, creed, color, religion, alienage or national origin, ancestry, citizenship status, age, disability or handicap, sex, marital status, veteran status, sexual orientation, arrest record, or any other characteristic protected by applicable federal, state or local laws. Our management team is dedicated to this policy with respect to recruitment, hiring, placement, promotion, transfer, training, compensation, benefits, associate activities and general treatment during employment.*

Associate's Printed Name: \_\_\_\_\_

Date: \_\_\_\_\_

Associate's Signature: \_\_\_\_\_