



## Manufacturing Engineering I

### SUMMARY:

Develop, improve, and support manufacturing tools, machinery, and processes to achieve greater quality, productivity, and cost savings. Serve as manufacturing engineering representative to other departments and be an active participant in project teams. Develop and maintain knowledge of various topics and applications to recommend and implement new programs and concepts. Design, build and document fixtures and tools and resolve equipment issues. Assist in research, planning, and implementation of Industry 4.0 upgrades. Responsible for facilities project management of manufacturing related projects. Directs, supervises and coordinates activities of personnel engaged in plant and equipment maintenance.

### TYPICAL FUNCTIONS AND RESPONSIBILITIES:

- Coordinates facility maintenance activities, including working with existing contract vendors and/or onboarding new vendors as needed.
- Ensures all safety regulations are met when implementing new manufacturing procedures, by working closely with divisional safety manager.
- Oversees and maintains Equipment Alert Preventative Maintenance Database Program for all manufacturing machinery and general maintenance
- Plans, develops and implements new methods and procedures designed to improve operations, minimize operating costs and effect greater utilization of labor and materials.
- Provide general technical support to Manufacturing and other departments: Provide technical assistance to other Departments such as Assembly, Shipping, Engineering, Quality Assurance, and Safety
- Assist other departments in their improvement efforts by providing Manufacturing Engineering insight and perspectives.
- Use data driven frameworks (such as Six Sigma) and LEAN or flow manufacturing methods to improve production processes: Use root cause analysis methods to solve problems and recommend corrective and preventative action of internal and external processes.
- Apply statistical process control (SPC) or other statistical methods to monitor process trends.
- Promote and support LEAN Manufacturing and Continuous Improvement activities in Manufacturing.
- Research and collect data to support Manufacturing Engineering projects using statistical software (e.g. JMP, QI Macros, and Excel), provide visual analysis and draw conclusions and recommendation for next actions. Detail the work performed and create reports.
- Prepare charts, graphs, and diagrams to illustrate workflow, routing, floor layouts, material handling, and machine utilization.
- Modify and maintain manufacturing documents, spreadsheets and databases.
- Responsible for creating and refining processes in order to improve manufacturing safety
- Complete time studies to quantify processing times, recommend standards, and identify areas for process improvements.
- Train production personnel as needed on flow manufacturing concepts, new equipment and processes, and data collection and usage.
- Perform analysis of manufacturing operations to continuously reduce cost and improve productivity. Conducts periodic safety inspections and initiates action to eliminate hazards; assists in safety investigations to determine root cause.

- Be responsible for production machinery upkeep and improvement, and assist department with equipment projects: Design, develop and build testers, fixtures and production tools used in manufacturing cells. Develop, assemble, procure or modify existing and new tooling and equipment to ensure efficient production processes.
- Identify and troubleshoot process, material, or equipment problems to minimize down time and recommend solutions.
- Revise improvements to manufacturing methods and procedures, including writing change orders, field complaints, and deviations.
- Develop and build of new manufacturing equipment. This may include mechanical assembly, connection of pneumatic devices, installation and wiring of electrical and electronic devices, and functional testing.
- Set up, program, and train operators on equipment using CAD/CAM software. Troubleshoot CAD/CAM related programming issues.
- Create, maintain, and update "Visual Manufacturing Procedures" as needed.
- Design jigs, fixtures, and basic in-house automation projects using AutoCAD and/or SolidWorks.
- Reads schematics, assembly drawings, data sheets to perform testing, build and trouble-shoot equipment.
- Maintain manufacturing equipment, including scheduling preventative maintenance activities with outside vendors and/or performing in-house maintenance of equipment to ensure continued smooth operation
- Support and develop automation and integration projects: Help develop machine vision and robotic applications to automate manual processes.
- Own machine vision and robotic automation equipment including programming, set up, maintenance, troubleshooting and training of production operators if necessary.

#### **QUALIFICATIONS & DESIRED SKILLS AND CHARACTERISTICS:**

- Bachelor's Degree in engineering or related technical field, and five years of related experience. Familiarity with machinery and production equipment
- Strong project management skills, be able to complete tasks and projects with limited supervision. Be capable of managing several projects and tasks at one time.
- Knowledge of and experience with industrial lasers, press brake, welding and CNC equipment.
- Strong problem solving skills and efficient management of time and resources.
- Knowledge of AutoCAD and SolidWorks. Basic CAD/CAM experience. Basic mechanical design knowledge a plus.
- Using and understanding of general test and measurement equipment, torque wrenches, force gages, caliper etc.
- Strong mathematical skills and knowledge of statistics and Statistical Process Control (SPC).
- Woodworking knowledge and/or Machine Shop knowledge, knowledge and experience in the fabrication of sheet metal products, and molded plastic parts. Knowledge of sheet metal stamping, dies, tooling and plastic molding a plus.
- Basic knowledge of Electrical/Electronics.
- Understanding and experience with Industrial Robotics, Vision Systems, and/or automation.
- Proficient with Microsoft Office products including Excel/Word/PowerPoint/Outlook.
- Strong verbal and written communication skills. Logical report writing skills and public presentation skills.

Job Type: Full-time

Pay: \$86,000 - \$102,000 per year

Benefits:

- 401(k)
- Dental insurance
- Disability insurance
- Health insurance
- Life insurance
- Paid time off
- Referral program
- Vision insurance

Schedule:

- Monday to Friday

Education:

- Bachelor's (Required)

Experience:

- Manufacturing: 3 years (Preferred)

Work Location:

- One location

Company's website:

- [www.bobrick.com](http://www.bobrick.com)

Work Remotely:

- No

COVID-19 Precaution(s):

- Remote interview process
- Personal protective equipment provided or required
- Temperature screenings
- Social distancing guidelines in place
- Virtual meetings
- Sanitizing, disinfecting, or cleaning procedures in place