



# Manufacturing Engineer

## Job Description

### JOB INFORMATION

Job Family	Manufacturing
Sub-Family	Manufacturing/Process/Design Engineering
Job Title:	Manufacturing Engineer
Job Code:	79666
Alternate Title	Manufacturing Engineer
Version Date:	7/27/2020 3:37:21 PM
Salary Grade:	
Category	Manufacturing
Department:	Engineering
FLSA Classification:	Exempt
EEO Code:	Professionals
Job Level:	Manager

### JOB SUMMARY

Develops Manufacturing Processes by applying knowledge of product design, fabrication, assembly, tooling, and materials; researching, designing, modifying and testing methods and equipment; analyzing and planning workflow, space requirements, and equipment layout; designing testing methods; testing finished-product and process capabilities; establishing standards; confirming production processes, cutting routers for production, assisting machinists with production-related issues and nonconformances.

#### Essential Functions

Essential Function	% TIME
Evaluates manufacturing processes by designing and conducting research programs; applying knowledge of product design, fabrication, assembly, tooling, and materials; conferring with equipment vendors; soliciting observations from operators.	35%
Prepares manufacturing information and reports by writing computer programs; entering data; collecting, analyzing, and summarizing data and trends.	30%
Improves manufacturing efficiency by analyzing and planning workflow, space requirements, and equipment layout.	10%
Provides production decision-making information by calculating production, labor and material costs; reviewing production schedules; estimating future requirements.	10%
Develops manufacturing processes by studying product requirements; researching, designing, modifying and testing methods and equipment; conferring with equipment vendors.	5%
Prepares production staff by training and guiding technicians.	5%
Maintains safe, secure, and healthy manufacturing environment by adhering to organization standards and policies, and to legal regulations; alerting others regarding potential concerns.	5%

#### Additional Responsibilities

##### Additional Responsibilities

Protects organization value by keeping information confidential; cautioning others regarding potential breaches.  
Maintains product and company reputation by complying with government regulations.

### QUALIFICATIONS

*To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

#### Education

High School Diploma	High School graduate or GED or satisfactory completion of an on-the-job training period.	Required	Or
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Education			
Associate's Degree	Associates Degree or equivalent certificate in Manufacturing Engineering.	Preferred	Or
Bachelor's Degree	Bachelor's Degree or higher in Manufacturing Engineering.	Preferred	
Bachelor's Degree	Advanced education in manufacturing principles or industrial technology.	Preferred	

Work Experience			
3 years or more	Minimum of three years industry experience.	Required	

Skills			
Proficient in Mastercam and SolidWorks.			High
Proficient in drawing interpretation and development.			High
Familiar with the ISO 9001, AS9100 and industry standards.			High
Good communication skills to interact with shop floor employees.			High
Able to reprocess/reprogram outdated processes.			High
Able to maintain a quality management system in compliance with ISO 9001 and AS9100.			High
Master-problem solver/ efficiently solves quality and production issues.			High
Must be proficient in English language skills, both oral and written and have basic computer literacy skills working with PTD documents.			Medium
Be confident in reporting issues to customers or regulatory agencies.			High
Be confident in accessing and completion of customer required web-based sites and documents.			High
Knowledge in Microsoft Excel and Word			High

## PHYSICAL DEMANDS/WORKING CONDITIONS

### Physical Demands

<i>Physical Demand</i>	<i>NA</i>	<i>Rarely</i>	<i>Occasionally</i>	<i>Frequently</i>	<i>Constantly</i>	<i>Weight</i>
Standing				X		
Walking				X		
Sitting				X		
Lifting			X			25 lbs
Carrying			X			25 lbs
Pushing			X			25 lbs
Pulling			X			25 lbs
Climbing			X			
Balancing			X			
Stooping			X			
Kneeling			X			
Crouching			X			
Crawling			X			
Reaching			X			
Handling			X			
Grasping			X			
Feeling			X			
Talking					X	
Hearing					X	
Repetitive Motions			X			
Eye/Hand/Foot Coordination			X			
Close and Distance Vision			X			

*The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions*

### Working Environment

<i>Working Condition</i>	<i>NA</i>	<i>Rarely</i>	<i>Occasionally</i>	<i>Frequently</i>	<i>Constantly</i>
Extreme cold	X				

Working Environment					
Working Condition	NA	Rarely	Occasionally	Frequently	Constantly
Extreme heat	X				
Humidity		X			
Wet		X			
Noise					X
Hazards					X
Temperature Change	X				
Atmospheric Conditions	X				
Vibration			X		
Other	X				

### TRAVEL REQUIREMENTS

Travel Type	Percentage
Domestic	5%

### Valid Driver's License Required

Yes/No	Reason for Drivers License
Yes	Reliable transportation to and from work.

*The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

### Functional Competencies

Competency	Level	Competency Description
Business Impact	6. Expert	Sets strategy for the organization.
Collaboration	6. Expert	Develops, maintains, and reinforces alliances internally and externally to create a mutual benefit.
Communication Skills	5. Senior	Communicates at a high level and is able to negotiate on a broad spectrum of matters.
Functional Knowledge	6. Expert	Recognized expert in his/her field.
Job Impact	6. Expert	Entire organization.
Leadership Skills	5. Senior	Manages a division.
Strategic Responsibility	5. Senior	Sets or influences strategy for his/her division.
Problem Solving	5. Senior	Arrives at decision using analytical thought.
Managing Change	5. Senior	Sponsors transformation for the division.
Influence	5. Senior	Takes advantage of wide-spread support within the division to elevate proposals and projects important to him/her.
Company Knowledge	5. Senior	Understands how the functions integrate into the division and the strategic concept behind the corporate goals.
Analytical Thinking	5. Senior	Tackles critical large-scale issues using rational thinking and reasoning.

## SCOPE

### Freedom To Act

Works with minimal direction toward predetermined long-range goals. Acts independently to determine methods and procedures on new or special assignments. Determines and pursues courses of action essential in obtaining desired results. Takes calculated risks.

### Problem Complexity and Problem Solving Timeframes

Works on significant and unique issues where analysis of situations or data requires and evaluation of intangibles. Aware and responds to changing and interconnected variables. Exercises independent judgment in methods, techniques and evaluation

## Problem Complexity and Problem Solving Timeframes

criteria for obtaining results. Problem/Task resolution timeframe: Inclusive of shorter timeframes, but typically twelve months or more to resolve.

### People Management

*# Direct Resources Managed*

*# Indirect Resources Managed*

1-5

11-49

### Impact

Erroneous decisions or recommendations would normally result in the inability to reach crucial organizational objectives and may have prolonged effect, as well as the expenditure of substantial resources.

### Contact with Others

Frequently inter-organizational and outside customer / vendor contacts. Part of a team who represents the organization. Monitors activities and communicates information across the organization

### Financial Responsibility

Total Financial Responsibility

\$500 - \$999 Thousand USD