



JOB INFORMATION

Job Code	AD86
Job Description Title	Master Machinist
Pay Grade	ST15
Range Minimum	\$53,530
33rd %	\$66,020
Range Midpoint	\$72,260
67th %	\$78,510
Range Maximum	\$91,000
Exemption Status	Non-Exempt
Approved Date:	1/1/1900 12:00:00 AM

JOB FAMILY AND FUNCTION

Job Family:	Production & Skilled Trades
Job Function:	Construction

JOB SUMMARY

Under minimal supervision, sets up and operates a variety of machines, and equipment. This combines elements of mechanical design, technical drawings, mathematics, and computer aided machining (CAM). Tracks a product through each phase of its creation, from an initial concept to a tangible, finished item and utilizes 3D printers, CNC machines, Coordinate Measuring Equipment, and state of the art 3D scanners to physically make anything humans may conceive.

RESPONSIBILITIES

- Enforces and supervises principles and legal requirements for OSHA Machining Safety, Material Safety Data Sheets, Lock Out Tag Out (LOTO), and Electrical Safety.
- Demonstrates and programs coordinate measuring machines of all types. Uses optical microscopes and surface measuring instruments to characterize surface finish of produced parts.
- Troubleshoots and take corrective actions necessary to maintain the functionality of machining equipment.
- Interprets engineering drawings provided by customers, including Geometric Dimensioning and Tolerance
- Demonstrates and teaches advanced reverse engineering skills using manual and automatic metrology tools.
- Produces assembly drawings as necessary. Instructs industrial and academic student in the use of multiple Computer Assisted Drawing Software.
- Programs 5 axis machines, Swiss machines, Grinding machines and EDM machines as necessary to produce prototypes and production work. Teaches industrial workshops in these areas.
- Leads workshops and instruct all Level 1, 2 and 3 skills with other industrial operators and students.
- Acts as one of the Safety Officers in the facility.
- Supervises safety of undergraduate and graduate students on the production/shop floor.

The responsibilities listed above show the typical duties for jobs in this classification. Actual tasks may differ depending on the department's needs. Other similar duties may be assigned with discretion of the supervisor. Not every duty will apply to every position, and the amount of time spent on each task can change based on department needs.

SUPERVISORY RESPONSIBILITIES

Supervisory Responsibility	Full supervisory responsibility for other employees is a major responsibility and includes training, evaluating, and making or recommending pay, promotion or other employment decisions.
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MINIMUM QUALIFICATIONS

To be eligible, an individual must meet all minimum requirements which are representative of the knowledge, skills, and abilities typically expected to be successful in the role. For education and experience, minimum requirements are listed on the top row below. If substitutions are available, they will be listed on subsequent rows and may only be utilized when the candidate does not meet the minimum requirements.

MINIMUM EDUCATION & EXPERIENCE

Education Level	Focus of Education	Years of Experience	Focus of Experience
Associate's Degree	A.S in Advanced Manufacturing, Machining or Computer Numerical Control (CNC) Machining	4 years of	Advanced Manufacturing, Machining or Computer Numerical Control (CNC) Machining

MINIMUM KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of basic machining concepts.

MINIMUM LICENSES & CERTIFICATIONS

Licenses/Certifications	Licenses/Certification Details	Time Frame	Required/Desired
	NIMS Certification in Milling 1 and 2		Required
	NIMS Certification in Turning 1 and 2		Required
	Qualified as CNC 5 axis Operator		Required
	Qualified as an Electrostatic Discharge Machine Operator		Required
	NIMS Certification in Diemaking Level II		Desired
	NIMS Certification in Moldmaking Level II		Desired
	I 4.0 Smart Systems Integration Specialist		Desired
	I 4.0 Smart Process Specialist		Desired
	Basic Swiss Machine Operator		Desired
	Entry into Level III requires an employee to pass the Auburn University CNC 5 Axis Specialist and the Conversational Grinding Machine Operator examination.		Required
	Must be eligible to obtain a security clearance.		

PHYSICAL DEMANDS & WORKING CONDITIONS

Physical Demands Category: Labor & Trades

PHYSICAL DEMANDS

Physical Demand	Never	Rarely	Occasionally	Frequently	Constantly	Weight
Standing					X	
Walking					X	
Sitting		X				
Lifting				X		
Climbing			X			
Stooping/ Kneeling/ Crouching				X		
Reaching				X		
Talking					X	
Hearing					X	
Repetitive Motions					X	
Eye/Hand/Foot Coordination					X	

WORKING ENVIRONMENT

Working Condition	Never	Rarely	Occasionally	Frequently	Constantly
Extreme temperatures				X	
Hazards					X
Wet and/or humid			X		
Noise					X
Chemical			X		
Dusts			X		
Poor ventilation			X		

Vision Requirements:

Ability to see information in print and/or electronically and distinguish colors.

Additional Special Requirements:

Routine deadlines; usually sufficient lead time; variance in work volume seasonal and predictable; priorities can be anticipated; some interruptions are present; involves occasional exposure to demands and pressures from persons other than immediate supervisor