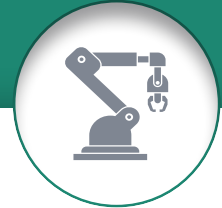


Computer-Controlled Machine Tool Machinist

Advanced Manufacturing Series



Company Overview:

<Please insert a short paragraph talking about your company and what makes it unique. Include details that capture the core values, culture, and mission of your company, so job seekers clearly understand the environment in which they will be working.>

Job Summary and Responsibilities:

Computer-Controlled Machine Tool Machinists operate machines or robots to perform machine functions on metal or plastic workpieces. These CNC machinists must set up, maintain, modify and operate a variety of computer-controlled machine tools to produce precision parts and instruments. Applicants must demonstrate knowledge of mechanics, metal properties, layout and machining procedures.

<Add any additional responsibilities or changes relevant to this role at your company.>

Required Competencies:

OCCUPATIONAL COMPETENCIES

- **Computer-Aided Manufacturing:** Proficiency with computer-assisted design programs (e.g., CAM) and processes/machines (e.g., 5-axis machining, CNC machines, mills & lathes)
- **Machine Tools:** Proficiency with machine tools such as power grinders, milling cutters, drill presses, lathes, calipers, tool dies, dial indicators, micrometers, depth mike or step mike, CNC mills and CNC lathes
- **Machinery:** Able to safely and appropriately operate, clean and lubricate machines
- **Technical Drawing:** Able to read, interpret and apply blueprints/models/pdfs for production, inspection and quality purposes



FOUNDATIONAL COMPETENCIES

- **Quality Control Analysis:** Conduct tests and inspections to validate pieces meet specifications (e.g., use micrometer); assess machines to verify they work (e.g., verify blades are sharp); provide feedback to programmers and managers on QA problems and, ideally, identify root cause of problems and offer potential solutions
- **Operation & Control:** Monitor the end-to-end production process and check for alignment of all relevant tools; position and insert pieces appropriately; upkeep the health of a machine (e.g., coolant, speed and feed rate, debris) and ensure safety; preferably, read and edit GCode (i.e., command language)
- **Operation Monitoring:** Watch gauges, dials, coolant levels, chip evacuation, hydraulic oil levels and other indicators to make sure a machine is working properly; follow safety protocols and check environment (e.g., hydraulic oil leaking, coolant leaking) for warning signals

Preferred Competencies:

OCCUPATIONAL COMPETENCIES

Mathematics: Able to think about and apply geometric dimensions and tolerances. Able to apply basic geometry (e.g., triangles, cylinders, circles) for production purposes. Able to conduct basic measurements (e.g., angles, diameters inside and outside)

FOUNDATIONAL COMPETENCIES

Critical Thinking: Identify and discover problems (e.g., dull blades, blades “cutting air”) and inform programmer of problems. Ideally, propose solutions (e.g., use different machines or cutters) to reduce production time, save money, improve quality or enable customization

Find additional competencies for this role using Skillful’s occupation deep dive at

www.skillful.com/employers.



Example Activities:

- Set up, operate, and maintain computer-controlled machines or robots to perform various functions on metal or plastic workpieces; mount, install, align and secure tools, attachments, fixtures, and workpieces on machines
 - Measure and check workpieces, using hand tools and precision measuring instruments
 - Transfer commands from servers to computer numerical control (CNC) modules, using computer network links
 - Review program specifications and blueprints to choose and set machine operations, numerical control sequences and finish workpiece dimensions
 - Listen to machine during operation to detect sounds such as those made by dull cutting tools or excessive vibration and adjust machines to compensate for problems; remove and replace dull cutting tools
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Required Certifications

<Note: Insert Required Certifications *but only if truly required.*>

Job Details:

- Location
- Department
- Job ID
- Classification
- Insert additional details of this position if applicable