

Manual Machinist Assistant:

Working as a Manual Machinist Assistant involves supporting the manual machinist in various tasks, such as setup, tooling, and material handling. Here are the stages of performance for a Manual Machinist Assistant, along with their corresponding requirements:

1. Beginner/Apprentice: Pay Range: \$18.00-\$20.00

Education/Training: High school diploma or equivalent. Completion of a vocational training program or apprenticeship in machining or a related field is beneficial.

Skills/Requirements:

- Basic understanding of manual machining principles, tools, and equipment.
- Familiarity with common machine shop safety protocols and personal protective equipment (PPE).
- Ability to follow instructions and work under supervision.
- Basic knowledge of machine tool setup and operation.
- Basic understanding of cutting tools, speeds, feeds, and machining processes.
- Basic mathematical skills for measurements and calculations.
- Physical stamina and the ability to handle materials and assist with machine setup.

2. Intermediate/Journeyman: Pay Range: \$20.00-\$23.00

Education/Training: High school diploma or equivalent. Completion of a formal training program or apprenticeship, along with on-the-job experience.

Skills/Requirements:

- Proficiency in supporting manual machining operations, including machine setup, tooling, and material handling.
- Knowledge of common machining techniques and processes.
- Ability to read and interpret machining blueprints and technical drawings.
- Experience in machine tool setup, including workpiece clamping and tool changes.
- Familiarity with measuring tools, such as micrometers, calipers, and gauges.
- Basic understanding of cutting tool selection and optimization.
- Basic knowledge of materials and their characteristics.
- Strong attention to detail and the ability to assist with quality control inspections.
- Good communication skills to coordinate with the manual machinist and other team members.



3. Advanced/Senior: Pay Range: \$23.00-\$25.00

Education/Training: High school diploma or equivalent. Additional training or certification programs in machining or related areas may be advantageous.

Skills/Requirements:

- Expertise in providing comprehensive support to manual machining operations.
- Mastery of advanced machining support tasks, such as complex machine setup, tooling optimization, and material selection.
- In-depth knowledge of machining techniques, processes, and best practices.
- Ability to interpret complex machining blueprints, geometric dimensioning and tolerancing (GD&T), and technical documentation.
- Experience with advanced measuring tools and techniques.
- Understanding of advanced materials and their machining considerations.
- Ability to troubleshoot and assist with resolving machining issues.
- Strong teamwork and communication skills to collaborate effectively with the manual machinist and other team members.

4. Expert/Master: Pay Range: \$25.00-\$30.00+

Education/Training: High school diploma or equivalent. Extensive years of experience and continuous professional development as a Manual Machinist Assistant.

Skills/Requirements:

- Mastery of all aspects of supporting manual machining operations.
- Deep understanding of machining principles, tolerances, and surface finishes.
- Expert knowledge of machine tool setup, tooling selection, and optimization.
- Ability to interpret and apply complex machining blueprints and specifications.
- Experience in training and mentoring other Manual Machinist Assistants.
- Strong problem-solving skills to assist with complex machining challenges.
- Leadership qualities and the ability to contribute to process improvement initiatives.
- Reputation for consistently delivering high-quality support to manual machining operations.