



WAGE DATA

Rate Type / Statistical Type	Entry level	Mean	Experienced
Annual wage or salary	\$42,382	\$48,928	\$52,201
Hourly wage	\$20.38	\$23.52	\$25.10

JOB DESCRIPTION

Set up, test, and adjust manufacturing machinery or equipment, using any combination of electrical, electronic, mechanical, hydraulic, pneumatic, or computer technologies.

DUTIES

- Adhere to all applicable regulations, policies, and procedures for health, safety, and environmental compliance.
- Inspect products for quality and adherence to customer specifications.
- Set up and operate production equipment in accordance with current manufacturing practices and standard operating procedures.
- Calibrate equipment to ensure quality production using tools such as calipers, micrometers, height gauges, protractors, or ring gauges.
- Set up and verify the functionality of safety equipment.
- Monitor and adjust production processes or equipment for quality and productivity.
- Troubleshoot problems with equipment, devices, or products.
- Test products or subassemblies for functionality or quality.
- Plan and lay out work to meet production and schedule requirements.
- Start up and shut down processing equipment.

TOOLS and TECHNOLOGY

Tools used in this occupation:

Calipers — Dial calipers, Digital calipers, Vernier calipers

Gage block set — Gauge blocks, V blocks

Integrated circuit testers — Digital logic analyzers, Digital logic probes

Screwdrivers — Phillips head screwdrivers, Straight screwdrivers

Stripping tools — Wire strippers

Technology used in this occupation:

Analytical or scientific software — Cadence PSpice, Minitab software

Computer aided design CAD software — Autodesk AutoCAD software, National Instruments Multisim

Enterprise resource planning ERP software — Plant maintenance software, SAP software

Label making software — Labeling software

Spreadsheet software — Microsoft Excel

KNOWLEDGE

Mechanical — Knowledge of machines and tools including their designs, uses, repair, and maintenance.

Production and Processing — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Design — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Computers and Electronics — Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software including applications and programming.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

SKILLS

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is working properly.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Equipment Maintenance — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

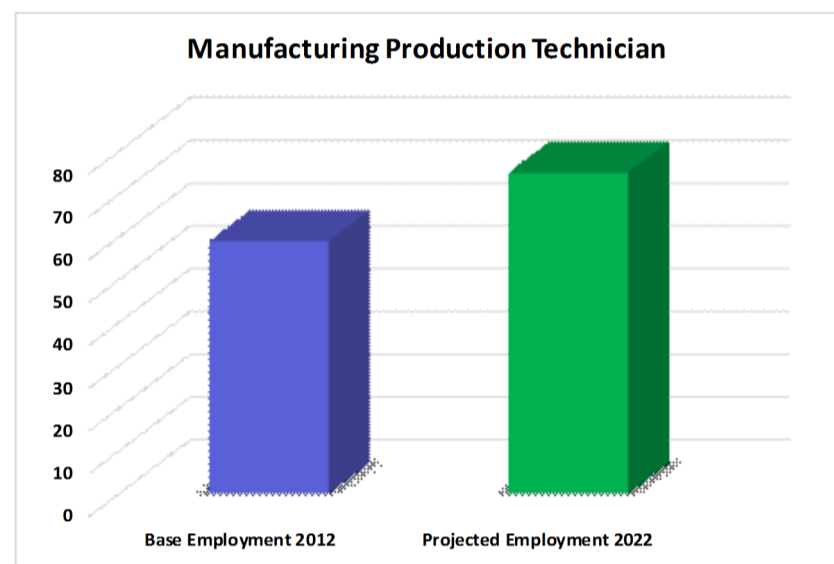
Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Operation and Control — Controlling operations of equipment or systems.

Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

Repairing — Repairing machines or systems using the needed tools.

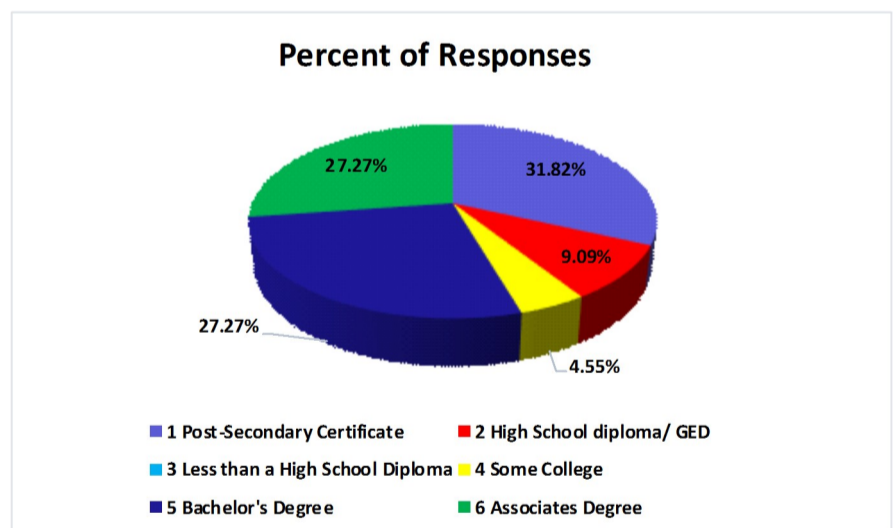
EMPLOYMENT PROJECTION



This information is based on LMI Gateway Data

EDUCATION

The graph below shows the results of a national survey listing the most common required level of education for Manufacturing Production Workers.



EDUCATION FOR THIS JOB

- 2014 Catalogue of Colorado Advanced Manufacturing Program and Skill Resources
<http://www.coloradomanufacturingcareers.com/>
- Approved Colorado Community College Manufacturing Cluster education programs
<http://www.coloradocommunitycolleges.com/go/programs/skilled-trades-technical-sciences/>
<http://www.coloradocommunitycolleges.com/go/>
- Colorado Four Year Colleges and Universities
<http://highered.colorado.gov/academics/colleges/public4year.asp>
- Locations to Get Manufacturing Certificates
<http://www.coloradomanufacturingcareers.com/>

