



WAGE DATA

Rate Type / Statistical Type	Entry level	Mean	Experienced
Annual wage or salary	\$44,790	\$48,081	\$53,829
Hourly wage	\$21.46	\$23.67	\$27.90

JOB DESCRIPTION

Adjust, repair, install, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.

DUTIES

- Analyze test results, machine error messages, or information obtained from operators to diagnose equipment problems.
- Observe and test the operation of machinery or equipment to diagnose malfunctions, using voltmeters or other testing devices.
- Repair or maintain the operating condition of industrial production or processing machinery or equipment.
- Repair or replace broken or malfunctioning components of machinery or equipment.
- Disassemble machinery or equipment to remove parts and make repairs.
- Reassemble equipment after completion of inspections, testing, or repairs.
- Clean, lubricate, or adjust parts, equipment, or machinery.
- Examine parts for defects, such as breakage or excessive wear.
- Operate newly repaired machinery or equipment to verify the adequacy of repairs.
- Record parts or materials used and order or requisition new parts or materials as necessary.

TOOLS and TECHNOLOGY

Tools used in this occupation:

Drill press or radial drill — Punch presses, Radial drills

Hex keys — Allen wrenches, Hex wrenches

Micrometers — Inside micrometers, Outside micrometers

Power grinders — Cylindrical grinders, Grinding wheels, Precision grinders

Thickness measuring devices — Space gauges, Telescoping gauges, Thickness gauges

Technology used in this occupation:

Computer aided design CAD software

Computer aided manufacturing CAM software — Extranet Machine Tools Suite

Facilities management software — Maintenance management software

Industrial control software — BIT Corp ProMACS PLC; KEYENCE PLC Ladder Logic

Spreadsheet software — Microsoft Excel

KNOWLEDGE

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

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.

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

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

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

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

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

Building and Construction — Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.

Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

SKILLS

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

Repairing — Repairing machines or systems using the needed tools.

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

Troubleshooting — Determining causes of operating errors and deciding what to do about it.

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.

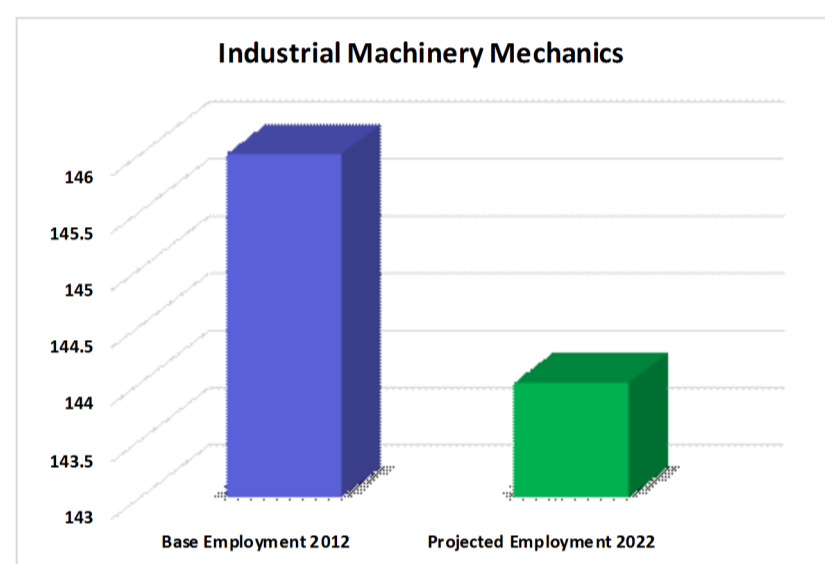
Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Equipment Selection — Determining the kind of tools and equipment needed to do a job.

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.

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

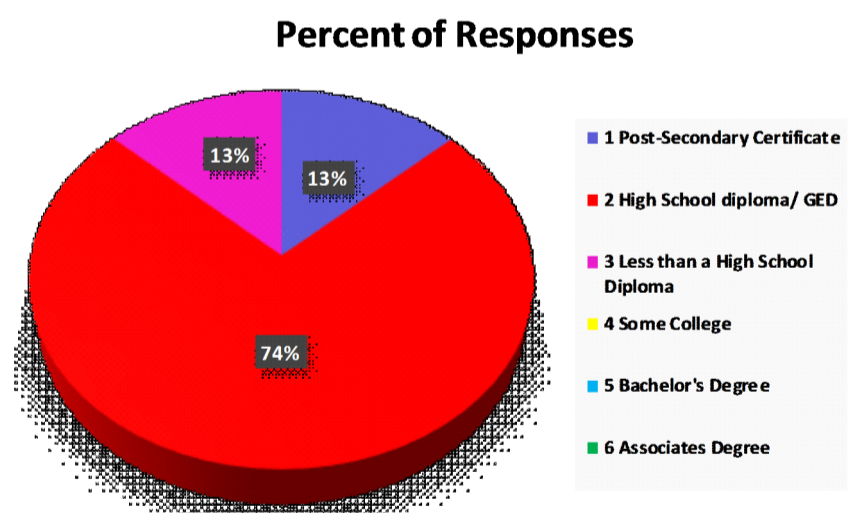
EMPLOYMENT PROJECTION



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 Industrial Machinery Mechanics.



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://higher.ed.colorado.gov/academics/colleges/public4year.asp>
- Locations to Get Manufacturing Certificates
<http://www.coloradomanufacturingcareers.com/>

