



WAGE DATA

Rate Type / Statistical Type	Entry level	Mean	Experienced
Annual wage or salary	\$21,642	\$31,965	\$37,127
Hourly wage	\$10.40	\$15.37	\$17.85

JOB DESCRIPTION

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting, boiler making, insulating, welding, machining, carpentry, repairing electrical or mechanical equipment, installing, aligning, and balancing new equipment, and repairing buildings, floors, or stairs.

DUTIES

- Use tools ranging from common hand and power tools such as hammers, hoists, saws, drills, and wrenches to precision measuring instruments and electrical and electronic testing devices.
- Perform routine preventive maintenance to ensure that machines continue to run smoothly, building systems operate efficiently, or the physical condition of buildings does not deteriorate.
- Inspect, operate, or test machinery or equipment to diagnose machine malfunctions.
- Diagnose mechanical problems and determine how to correct them, checking blueprints, repair manuals, or parts catalogs, as necessary.
- Assemble, install, or repair wiring, electrical or electronic components, pipe systems, plumbing, machinery, or equipment.
- Inspect drives, motors, and belts, check fluid levels, replace filters, or perform other maintenance actions, following checklists.
- Clean or lubricate shafts, bearings, gears, or other parts of machinery.
- Adjust functional parts of devices or control instruments, using hand tools, levels, plumb bobs, or straightedges.
- Repair or replace defective equipment parts, using hand tools and power tools, and reassemble equipment.
- Record type and cost of maintenance or repair work.

TOOLS and TECHNOLOGY

Tools used in this occupation:

Drain or pipe cleaning equipment — Drain augers, Drain cleaning cables, Hand spinners, Power drain cleaners

Pipe or tube cutter — Pipe cutters, Power pipe cutters, Ratcheting polyvinyl chloride PVC cutters, Tubing cutters

Power drills — Cordless power drills, Direct tap machines, Hammer drills, Hand drills

Power saws — Circular saws, Radial arm saws, Reciprocating saws, Tile saws

Pullers — Bearing pullers, Chain pullers, Comealongs, Tub drain removers

Technology used in this occupation:

Electronic mail software — Microsoft Outlook

Facilities management software — Computerized maintenance management system CMMS software

Industrial control software — Digital Direct Control DDC Energy Management software

Spreadsheet software — Microsoft Excel

Word processing software — Microsoft Word

KNOWLEDGE

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

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

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

Repairing — Repairing machines or systems using the needed tools.

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

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

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

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

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

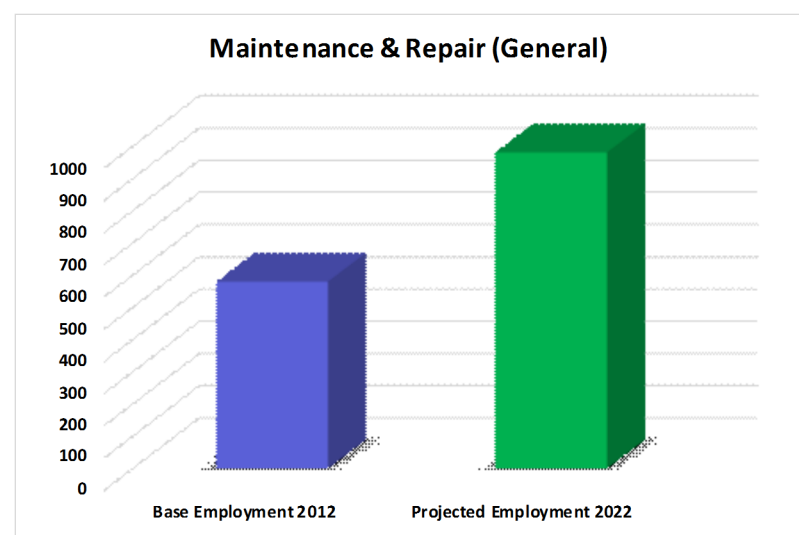
Monitoring — Monitoring/assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

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

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

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

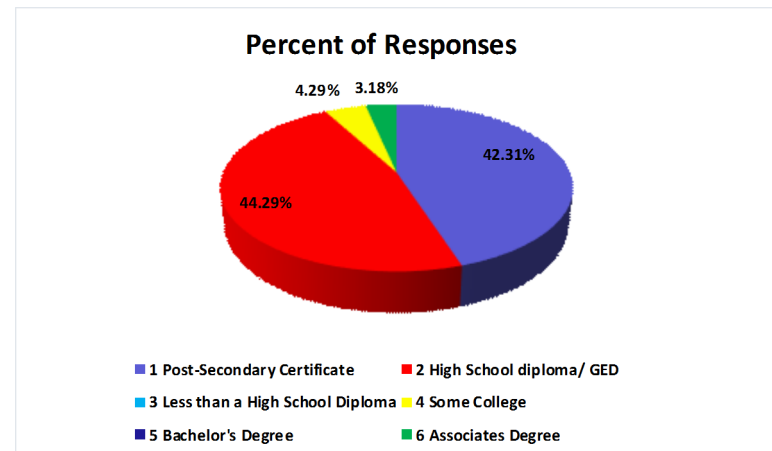
EMPLOYMENT PROJECTION



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

