

Industrial Machinery Mechanics, Machinery Maintenance Workers, and Millwrights

SOC: 49-9041 • Career Profile Report

■ Key Facts

\$63,510

Median Salary

538,300

Employment

+13.0%

Growth Rate

■ Requirements & Salary Range

Education: High school diploma

■ Automation Risk Assessment

Low Risk - 25.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

6.4/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.8/10	Investigative	7.4/10
Artistic	4.4/10	Social	5.6/10
Enterprising	4.6/10	Conventional	6.4/10

■ Top Skills Required

Manual dexterity, Mechanical skills, Troubleshooting skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Industrial Machinery Mechanics, Machinery Maintenance Workers, and Millwrights install, maintain, and repair **industrial machinery and mechanical equipment**. They troubleshoot mechanical issues, perform preventive maintenance, and ensure equipment operates efficiently and safely. Their work is critical in manufacturing, production, and industrial operations.

This career is well suited for individuals who enjoy mechanical problem-solving, hands-on technical work, and maintaining complex systems.

What Do Industrial Machinery Mechanics, Machinery Maintenance Workers, and Millwrights Do?

These professionals inspect, repair, and maintain machinery to prevent downtime and ensure safe operation.

Common responsibilities include:

- Diagnosing mechanical problems in machinery and equipment
- Dismantling, repairing, and reassembling machines
- Performing routine maintenance and lubrication
- Installing new machinery and aligning mechanical components
- Testing machinery for performance and safety compliance
- Reading and interpreting blueprints, manuals, and specifications
- Collaborating with engineers, technicians, and operators

Key Areas of Machinery Maintenance

Workers may focus on specific machinery, systems, or operational areas:

- Mechanical Repair: Fixing and adjusting gears, motors, and mechanical systems
- Preventive Maintenance: Regular inspection, lubrication, and upkeep of equipment
- Installation and Alignment: Setting up new machinery and ensuring correct operation
- Troubleshooting and Diagnostics: Identifying and resolving equipment malfunctions
- Safety and Compliance: Following industry safety standards and operational protocols

Skills and Abilities Needed

These professionals combine mechanical, technical, and analytical skills.

Core Professional Skills

Personal Qualities That Matter

Education and Career Pathway

This role typically requires technical training and practical experience:

- High School Diploma or GED (minimum): Basic math, reading, and mechanical skills
- Vocational or Technical Training: Courses in machinery maintenance, mechanics, or industrial technology
- Apprenticeship or On-the-Job Training: Hands-on experience repairing and maintaining machinery
- Certifications (optional): Specialized credentials in maintenance, welding, or mechanical systems
- Continuous Learning: Staying current on machinery technology, safety standards, and repair techniques

Where Do Industrial Machinery Mechanics, Machinery Maintenance Workers, and Millwrights Work?

They are employed in organizations that manufacture, maintain, or operate industrial machinery:

- Manufacturing Plants
- Industrial and Production Facilities
- Power Plants and Utilities
- Construction and Heavy Equipment Companies
- Maintenance and Repair Services

Work environments include factories, industrial sites, construction areas, and repair shops.

Is This Career Difficult?

This career requires mechanical knowledge, problem-solving, and physical ability. Workers must troubleshoot complex machinery, ensure safety, and maintain high-quality standards.

Who Should Consider This Career?

This career may be a strong fit if you:

- Enjoy hands-on mechanical work and problem-solving
- Are detail-oriented and technically skilled
- Can work independently or in teams
- Have physical stamina and dexterity
- Want a career maintaining and repairing industrial machinery

How to Prepare Early

- Take courses in mechanics, industrial technology, or machine operation
- Gain experience through internships, vocational programs, or part-time work
- Develop skills in troubleshooting, repair, and maintenance
- Learn to read technical drawings, manuals, and specifications
- Explore certifications or training programs in machinery maintenance, welding, or industrial systems

Industrial machinery mechanics, maintenance workers, and millwrights ensure that industrial equipment operates efficiently, safely, and reliably, supporting production and operational success.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/installation-maintenance-and-repair/industrial-machinery-mechanics-and-maintenance-workers-and-millwrights.htm>