

### Discover your career in clean energy!

Well-paying roles like Machine Repairers work in all sectors of the battery industry:

**Upstream,** where minerals are extracted and refined, Machine Repairers are involved in maintaining and repairing plant equipment used to crush, grade, treat, and refine raw minerals for processing into useful forms.

Midstream, where battery cells are manufactured, Machine Operators work to repair and maintain production equipment used to mix and prepare materials, assemble battery cells, and test battery packs.

**Downstream,** where batteries are integrated and recycled, Machine Repairers troubleshoot equipment that separates and refines used battery minerals.

## **CAREER PATH**

#### **Start With:**

· A high school diploma or GED

#### **Get Educated:**

- An apprenticeship through a union or industry
  - United Auto Workers (UAW) Joint Apprenticeship Program
  - International Brotherhood of Electrical Workers Apprenticeship
- A 2-year college program
- Military service (e.g., Computer Numerically Controlled Machinist)

#### **Specialize With:**

- · Certificates or credentials
  - Community College: Manufacturing Machine Repair Certificate
  - Manufacturers Resource Center:
     Maintenance Master Certification
  - New Energy New York: Battery Technician Microcredential
- · On-the-job training

### OCCUPATIONAL SKILLS

- · Critical thinking and problem solving
- Reading comprehension and writing ability
- Social awareness and willingness to follow direction
- Communication and team-oriented attitude
- Attention to safety, industrial risks, and process hazards

## **BENEFITS**

### These energy industry careers offer:

- Varied opportunities
- Upward and continued career growth
- · Work-life balance-your work stays at work
- Opportunities for skill development
- Unionization and leading benefits
- Good pay and interesting work
- · A chance to contribute to U.S. national security





# **b** What Might You Do

# As A Machine Repairer?



#### **ENTRY LEVEL**

#### 1-4 Years

#### What you will do:

- Read gauges and check equipment
- Report operational issues and malfunctions to management
- Ensure safety of immediate work area
- Respond to machine malfunction incidents in a timely manner
- Read instrumentation schematics to diagnose basic problems
- Assist in repair of equipment based on site-specific procedures and manufacturer's specifications

# What knowledge, skills and abilities will you need to succeed?

- Be able to read and write proficiently
- · Ability to work in a team
- Knowledge in mechanical and electrical repairs
- · Listen and follow directions
- Be comfortable working in a noisy industrial environment
- Physical ability to lift and carry heavy loads, climb stairs and ladders, operate power equipment, and operate stiff manual valves
- Ability to retain and apply knowledge from onthe-job training
- Be able to work with various types of industrial equipment and tools
- Come to work on time and prepared

#### **MID-CAREER**

#### 5-8 Years

#### What you will do:

- Troubleshoot and repair equipment using technical guides and manuals
- Inspect equipment to understand the cause of malfunctions
- Use hand and power tools to take apart machines for repair
- Ensure the safety of your workplace
- Perform preventative maintenance on machinery and plant components
- Engage in process hazard analysis, alerting management of potential risks
- Supervise junior employees and provide advice or guidance
- Comply with applicable OSHA standards for hot work, confined spaces, and lockout/tagout

# What knowledge, skills and abilities will you need to succeed?

- Be adept at written and verbal communication and documentation
- Be able to read and interpret technical equipment manuals and process guides
- Ability to understand entire industrial systems and how they interoperate
- Be able to foresee system implications of poor maintenance, user actions, or malfunctions
- Solid understanding of mechanical principles and OSHA guidelines

#### **EXPERIENCED**

#### 8+Years

#### What you will do:

- Ensure safe and injury-free plant operation for all employees
- Supervise team, providing feedback on performance
- Prepare and oversee adherence to budget and production schedules
- Report to senior leadership, communicating critical plant needs
- Ensure continued and timely completion of production schedules
- Lead process hazard analysis and instill culture of safety in subordinates

# What knowledge, skills and abilities will you need to succeed?

- People management skills
- Financial acumen
- Workflow management skills to determine most efficient use of time and resources
- Coordination and communication skills to communicate with staff and management
- Computer skills to prepare evaluations and reports

#### **GET PAID!**

#### **Years 1-4 Entry Level:**

\$50,000-\$70,000 / year\*

#### **Years 5-8 As You Gain Seniority:**

\$70.000-\$90.000 / year\*

#### **Years 8+ Later in Your Career:**

\$90,000-\$140,000 / year\*

\*Compensation figures should be used as a guide; actual compensation may vary depending on education, experience, and many other factors.



For training and career information, visit

GetIntoEnergy.org

Scan to view our Job Board