



Received,  
Apprenticeship Unit

JUN 18 2018

ROCHESTER

## APPENDIX A

### MAINTENANCE MECHANIC (AUTOMATIC EQUIPMENT)

D.O.T. CODE 638.281-014

O\*NET CODE 49-9041.00

**As Revised for RTMA, The Rochester Technology and Manufacturing Association**

This training outline is the current standard for Work Processes and Related Instruction. Changes in technology, regulations, and safety & health issues may result in the need for additional on-the-job or classroom learning.

### WORK PROCESSES

#### Approximate Hours

- |           |   |             |
|-----------|---|-------------|
| <b>A.</b> | <b><u>Preliminary Machine Familiarization and Workplace Health and Safety</u></b> | <b>600</b>  |
| 1.        | Adjusting and familiarization with machines                                       |             |
| 2.        | Proper use and operation of tools, equipment, and fixtures                        |             |
| 3.        | Familiarity with shop operations, procedures, maintenance schedules               |             |
| 4.        | Safety Compliance   |             |
| 5.        | Lock-Out/Tag-Out  |             |
| 6.        | Handling Hazardous Materials (if applicable)                                      |             |
| 7.        | NEC Safety Regulations  |             |
| <b>B.</b> | <b><u>Basic Maintenance.</u></b>  | <b>1000</b> |
| 1.        | Oiling, greasing and lubricating machinery  |             |
| 2.        | Cleaning machines and other equipment   |             |
| 3.        | Performing basic diagnostic tests and checking performance                        |             |
| 4.        | Testing damaged machine parts   |             |
| 5.        | Detecting minor problems  |             |
| 6.        | Disassembling and assembling machinery/   |             |

EFFECTIVE  
APPRENTICE TRAINING

JUN 11 2018

CENTRAL OFFICE

	equipment	
7.	Temperature monitoring (if applicable)	
C.	<u>Preventive and Predictive Maintenance</u>	1000
1.	Maintaining peak operating condition of industrial machinery/equipment	
2.	Learning problems and repairs to be made to specific machines	
3.	Performing preventive maintenance schedules	
4.	Keeping appropriate records (including computerized records)	
D.	<u>Machine Shop</u>	250
1.	Working safely with machine tools	
2.	Operating machine tools such as: drill, lathe, mill and grinder to make replacement parts for production machines/equipment	
E.	<u>Troubleshooting</u>	3000
1.	Diagnosing major problems in machinery	
2.	Analyzing results	
3.	Repairing or replacing broken parts	
4.	Inspecting, repairing, testing	
5.	Reassembling	
F.	<u>Welding and Fabrication</u>	250
1.	Following all safety procedures and policies	
2.	Accurately reading blueprints, sketches, diagrams, technical manuals	
3.	Welding in connection with the trade	
G.	<u>Rigging and Installing</u>	250
1.	Inspecting, repairing, operating cranes and cables	
2.	Installing machines/equipment	
3.	Aligning machines/equipment	
H.	<u>Electrical (optional*)</u>	1150
1.	Reading schematics	
2.	Installing electrical devices	

Received  
Apprenticeship Unit

JUN 18 2018

ROCHESTER

EFFECTIVE  
APPRENTICE TRAINING

JUN 11 2018

CENTRAL OFFICE

3. Identifying problems in electrical systems and controls
4. Troubleshooting AC and DC systems
5. Using computerized diagnostic systems

I. Miscellaneous (Fluid Systems and Associated Piping) 500

1. Understand basic operations of fluid power systems
2. Understand basic operations of hydraulic systems and pumps
3. Understand basic operations of pneumatic systems and Compressors
4. Understand basic operations of steam-powered systems

---

TOTAL HOURS 8000

**\*If optional Work Processes are not selected, the hours should be devoted to further mastery of the required Work Processes.**

*Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <http://www.labor.state.ny.us/workerprotection/publicwork/PDFs/Article8FAQS.pdf>.*

Received  
Apprenticeship Unit  
JUN 18 2018  
ROCHESTER

EFFECTIVE  
APPRENTICE TRAINING  
JUN 11 2018

APPENDIX B

MAINTENANCE MECHANIC (AUTOMATIC EQUIPEMENT)

RELATED INSTRUCTION

**Safety and Health**

General Workplace Safety  
Proper Use of Personal Protective Equipment (PPE)  
Fall Protection  
Ladder Safety  
Proper Lifting Techniques  
Right-To-Know/ Safety Data Sheets (SDS)  
Annual Hazard Material Communication Training  
Respirator Training, including Fit Test (if applicable)  
Fire Extinguisher Training (if applicable)  
Equipment Safe Operating Practices  
Confined Space Training (if applicable)  
Working around Machines  
Welding Safety  
First Aid – minimum 6.5 hours every 3 years

**Blueprints**

Fundamentals of Blueprint Reading  
Machine Blueprint Reading  
Advanced Blueprint Reading  
Reading Schematics (if applicable)  
Fundamentals of Electronics and Computer Programming (if applicable)

**Mathematics**

Fundamentals  
Elementary Applications to the Trade  
Advanced Applications to the Trade  
Using Technical Manuals and Procedures  
Precision Measurement

**Trade Theory and Science**

Materials of the Trade  
Tools, Machines and Equipment  
Care, Maintenance and Operation  
Terminology  
Technology of Jobs, Operations and Processes  
Layout and Production Methods

EFFECTIVE  
APPRENTICE TRAINING

JUN 11 2018

Received  
Apprenticeship Unit

JUN 18 2018

ROCHESTER

Cutting Tools and Abrasives  
Tool, Die, Jig and Fixture Design  
Metallurgy  
Electrical Controls and Basic Electronics (optional)  
Electric Circuits and Programmable Logic Controllers (PLCs)  
Welding (certification as required)  
Brazing and Soldering

**Other Workplace Skills**

Communication Skills  
Team Work Skills  
Logic and Reasoning Skills (Critical Thinking)  
Active Listening Skills  
Industrial and Labor Relations  
Sexual Harassment Prevention Training – minimum 3 hours

**Other Related Courses as Necessary**

**A minimum of 144 hours of Related Instruction is required for each apprentice for each year.**

EFFECTIVE  
APPRENTICE TRAINING

JUN 11 2018

Received  
CENTRAL OFFICE  
Apprenticeship Unit

JUN 18 2018

ROCHESTER

