



STATE OF NEW YORK  
DEPARTMENT OF LABOR

APPENDIX A

WELDER (MAINTENANCE)  
D.O.T. CODE 819.384.010

WORK PROCESSES

Approximate Hours

A.	<u>Welding Theory</u>	500
1.	Arc Welding	
a.	Mig	
b.	Tig	
c.	Stick Electrode	
2.	Gas Welding	
3.	Resistance Welding	
B.	<u>Welding Equipment</u>	1,000
1.	Shop Operation of Welding Equipment	
a.	Mig	
b.	Tig	
c.	Stick Electrode	
C.	<u>Welding and Cutting Equipment</u>	1,000
1.	Shop	
a.	Resistance Welding	
b.	Gas Welding	
c.	Cutting, Torch	
2.	Welding Metallurgy – Materials	
3.	Mechanics – Stress, Strain	
D.	<u>Associated Joining Processes</u>	1,000
1.	Shop	
a.	Brazing	
2.	Basic Metallurgy	
3.	Mechanics – Surface Tension, Fluxes	

Welder (Maintenance) – continued

Approximate Hours

E.	<u>Welding Repair Work</u>	1,000
1.	Shop	
a.	Holes and Cracks	
b.	Stress Relief	
c.	Distortion	
d.	Work Parts	
2.	General Metallurgy Related to Repair Work	
3.	Mechanics – Strength of Materials	
F.	<u>Structural Welding</u>	1,000
1.	Shop	
a.	Fabrication of Frames	
b.	Cabinet Structures	
2.	Blueprint Reading, Tolerances	
3.	Shrinkage and Residual Stresses	
G.	<u>Flat Stock Layout and Welding</u>	1,000
1.	Shop	
a.	Fabrication of Smooth Butt Joints	
b.	Joining of Plates	
c.	Flatness of Welded Stock	
H.	<u>General Shop Welding</u>	1,500
1.	Shop Application of Knowledge in General Welding	
a.	All Position Welding	
b.	Gun Welding	

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Total hours 8,000

*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>.*

APPENDIX B

WELDER (MAINTENANCE)

RELATED INSTRUCTION

Blueprint Reading, Sketching and Drawing

Elementary Blueprint Reading  
Advanced Blueprint Reading  
Sketching, Drawing and Layout

Related Mathematics

Fundamentals of Mathematics  
Mathematics for the Shop  
Use of Handbooks and Reference Tables  
Estimating

Theory and Trade Science Related To:

Materials of the Trade  
Metals  
Strength of Materials  
Testing and Inspection of Welds  
Hand Tools and Equipment

Safety

General Trade Safety Rules  
Fire Protection

Other Related Courses as Necessary

First Aid – minimum 10 hours per year

Sexual Harassment Prevention Training – minimum 3 hours

144 Hours of Related Instruction is Required for Each Apprentice for Each Year