

Contents

Complete Training Courses	4
Student Workbooks	12
Programmed Learning Courses	14
Technical Guides	15
General Welding Books	16
Pipe Welding & Pipe Layout Books	16
AWS® Books	17
Welding Codes & Specifications	17
Welding Inspection Tools	17
Wall Posters	18
Order Form	19
Online Education	22



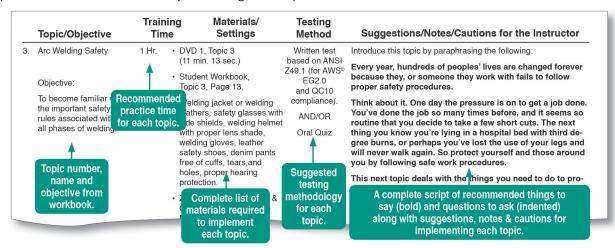
COMPLETE TRAINING COURSE OVERVIEW

Each Complete Course Includes:

an instructor's guide; DVD(s), one student workbook, one technical guide, tests & answer keys.

• Instructor's Guide

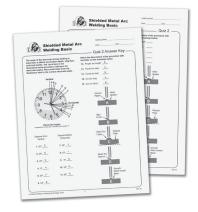
With comprehensive instructions for implementing each topic.





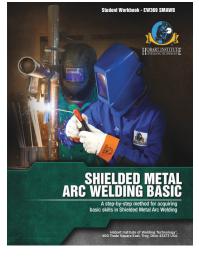
Answer Keys for Written Test

Answer keys for each written test make it easy for instructors to measure student mastery of key concepts. (50 copies of each written test are shipped with each complete course.)



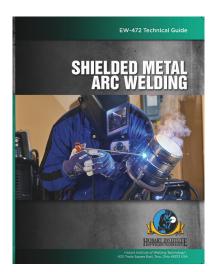
One Student Workbook

Featuring easy to follow practice sessions based on video demonstrations and summaries of essential theory.



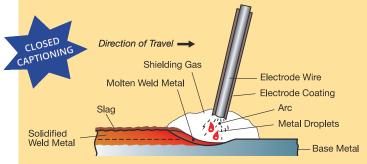
One Technical Guide

An individual resource for instructors and students, each technical guide contains process specific information on equipment, process variables, weldability, preand post-weld procedures, shielding gases, electrodes, safety and more.



Shielded Metal Arc Welding

The Shielded Metal Arc Welding program is a complete training program. The fundamentals of shielded metal arc welding are covered in the basic program. It provides training in all positions, on mild steel with single and multipass welds. SMAWA-1 (Structural) teaches welding on single V-groove welds on carbon steel with multipass welds in all positions with backing strips. SMAWA-2 (Pre-pipe) teaches welding on single V-groove welds with open root on carbon steel with multipass welds in all positions. SMAWA-2 is in preparation for the transition to pipe welding. There are three pipe welding courses; 2" Pipe Uphill, 6" Pipe Uphill and 6" Pipe Downhill.



SMAW is an electric arc welding process where the heat for welding is generated by an electric arc between a covered metal electrode and the work.

- Square-Groove Weld, Butt Joint, Vertical Position, Uphill, Guided Bend Test
- 28. Square-Groove Weld, Butt Joint, Overhead Position
- 29. Distortion Control
- Multi-Pass Fillet Welds, T-Joints, Flat, Horizontal, Vertical & Overhead Positions, E7018
- 31. Multi-Pass Fillet Welds, Lap Joint, Horizontal Position, E7018 & F7024
- **32.** Square-Groove Weld, Butt Joint, Flat Position, Fillet Welds, Lap & T-Joints, Horiz. Pos., E7024
- **33.** Fillet Weld, Lap & T-Joints, Horizontal & Vertical Position, Down, 11 Gauge, E6013
- **34.** Fillet Weld, Lap & T-Joints, Horizontal & Vertical Position, Down, 16 Gauge, E6013
- **35.** Fillet Weld, Lap Joint, Vertical Position, Down, 11 & 16 Gauge, E6013
- 36. AWS® QC10 2G Qualification Test
- 37. AWS® QC10 3G Qualification Test
- 38. AWS® Standard Guided Bend Test

Product	Item No.	List Price
Complete SMAWB course	DV01	\$1,125.00
Site License	V01.50	\$500.00

Shielded Metal Arc Welding Basic

Complete Course: 4 DVDs (3 hrs. 47 min); 1 Instructor Guide; 5 written tests, 50 copies each ITEM NO. **DV01**

Topics

- 1. Shielded Metal Arc Welding Basic, Course Overview
- 2. Introduction to Shielded Metal Arc Welding
- 3. Arc Welding Safety
- 4. The Five Essentials
- 5. Striking & Controlling the Arc
- 6. Pad of Beads, Flat Position, E6013
- **7.** Pads of Beads, Flat Position, E6010
- 8. Pads of Beads, Horizontal Position, E6010
- 9. The Welders Role In Quality Control
- 10. Fillet Weld, Lap Joint, Horizontal Position, E6013
- 11. Fillet Weld, Lap Joint, Horizontal Position, Uphill, E6010
- **12.** Fillet Weld, Lap Joint, Overhead Position, E6010
- 13. Electrode Selection
- **14.** Three-Bead Fillet Weld, T-Joint, Horizontal Position, E6010
- **15.** Fillet Weld, T-Joint, Horizontal Position, Break Test, E6010
- Fillet Weld, T-Joint, Vertical Position, Uphill, with Z-weave Cover, E6010
- Three-Bead Fillet Weld (Root & 2 Weaves), T-Joint Vertical Position, Uphill, E6010
- 18. Three-Bead Fillet Weld, T-Joint, Overhead Position, E6010
- 19. Fillet Weld, T-Joint, Overhead Position, Break Test, E6010
- 20. The Low Hydrogen Electrodes and Their Uses
- 21. Three-Bead Fillet Weld, T-Joint, Vertical Position, Uphill, with Z-weave Cover, E7018
- 22. Three-Bead Fillet Weld, T-Joint, Overhead Position, E7018
- 23. Power Source Technology
- 24. Square-Groove Weld, Butt Joint, Horizontal Position
- **25.** Square-Groove Weld, Butt Joint, Horizontal Position, Guided Bend Test
- 26. Square-Groove Weld, Butt Joint, Vertical Position, Uphill

Shielded Metal Arc Welding - Structural

Complete Course: 3 DVDs (1 hr. 58 min); 1 Instructor Guide; 4 written tests, 50 copies each ITEM NO.

Recommended as an advanced plate curriculum for Structural welding and displaying the use of backing strips.

- 1. Shielded Metal Arc Welding Structural Course Overview
- 2. Introduction to Shielded Metal Arc Welding
- 3. Safety & Health Of Welders
- 4. Single V-Groove Weld, Butt Joint, Horizontal (2G) Position
- 5. Weld Size & Profile
- 6. Procedure & Welder Qualification
- Single V-Groove Weld, Butt Joint, Horizontal (2G) Position, Destructive Test
- **8.** Single V-Groove Weld, Butt Joint, Vertical (3G) Position
- **9.** Destructive Testing
- 10. Single V-Groove Weld, Butt Joint, Overhead (4G) Position
- **11.** Nondestructive Testing
- 12. Single V-Groove Weld, Butt Joint, Horizontal (2G) Position
- 13. Air Carbon Arc Cutting & Gouging
- **14.** Single V-Groove Weld, Butt Joint, Horizontal (2G) Position, Destructive Test
- **15.** Single V-Groove Weld, Butt Joint, Vertical (3G) Position
- 16. Metals Identification for Welding
- 17. Single V-Groove Weld, Butt Joint, Overhead (4G) Position
- 18. Welding Cast Iron & Hard Surfacing Welds
- 19. Single V-Groove Weld, Butt Joint, Flat (1G) Position

Product	Item No.	List Price
Complete SMAWA-1 course	DV02	\$1,125.00
Site License	V02.50	\$500.00

Shielded Metal Arc Welding - Pre-Pipe

Complete Course: 3 DVDs (1 hr. 58 min); ITEM NO. 1 Instructor Guide; 4 written tests, 50 copies each DV05

Recommended as an advanced curriculum to prepare students for SMAW – open root – pipe welding.

Topics

- 1. Shielded Metal Arc Welding Pre-Pipe Course Overview
- 2. Introduction to Shielded Metal Arc Welding
- 3. Safety & Health of Welders
- 4. Single V-Groove Weld, Butt Joint, Horizontal (2G) Position
- 5. Weld Size & Profile
- 6. Procedure & Welder Qualification
- Single V-Groove Weld, Butt Joint, Horizontal (2G) Position, Destructive Test
- 8. Single V-Groove Weld, Butt Joint, Vertical (3G) Position
- 9. Destructive Testing
- 10. Single V-Groove Weld, Butt Joint, Overhead (4G) Position
- 11. Nondestructive Testing
- 12. Single V-Groove Weld, Butt Joint, Vertical Down (3G) Position
- 13. Air Carbon Arc Cutting & Gouging
- **14.** Single V-Groove Weld, Butt Joint, Vertical (3G) Position
- Single V-Groove Weld, Butt Joint, Vertical (3G) Position, Destructive Test
- 16. Metals Identification of Welding
- 17. Single V-Groove Weld, Butt Joint, Overhead (4G) Position
- 18. Welding Cast Iron & Hard Surfacing Welds
- 19. Single V-Groove, Butt Joint, Flat (1G) Position

Product	Item No.	List Price
Complete SMAWA-2 course	DV05	\$1,125.00
Site License	V05.50	\$500.00

Shielded Metal Arc Welding 2-Inch Pipe Uphill

Complete Course: 2 DVDs (1 hr. 54 min); ITEM NO. 1 Instructor Guide; 2 written tests, 50 copies each DV03

Topics

- 1. Shielded Metal Arc Welding 2" Pipe Uphill Course Overview
- 2. Introduction to Shielded Metal Arc Welding Pipe
- 3. Safety & Health of Welders
- 4. Weld Quality: Reading the Puddle
- Preparation & Assembly of an Open Root Pipe Joint Double Extra Strong (XX Strong)
- Single V-Groove Weld, Butt Joint, (2G) Pipe Double Extra Strong (XX Strong)
- 7. Standard Destructive Test Double Extra Strong Pipe (XX Strong)
- Single V-Groove Weld, Butt Joint, (5G) Pipe Double Extra Strong (XX Strong)
- Single V-Groove Weld, Butt Joint, (6G) Pipe Double Extra Strong (XX Strong)
- **10.** Preparation & Assembly of an Open Root Pipe Schedule 80
- 11. Single V-Groove Weld, Butt Joint, (2G) Pipe Schedule 80
- 12. Standard Destructive Test Schedule 80 Pipe
- **13.** Single V-Groove Weld, Butt Joint, (5G) Pipe Schedule 80
- 14. Single V-Groove Weld, Butt Joint, Vertical (6G) Pipe Schedule 80

15. Pipe Scheduling & Tubing Dimensions

Product	Item No.	List Price
Complete SMAW 2" Pipe Uphill	. DV03	\$1,125.00
Site License	. V03.50	\$500.00

Shielded Metal Arc Welding 6-Inch Pipe Uphill

Complete Course: 2 DVDs (1 hr. 57 min); ITEM NO. 1 Instructor Guide; 5 written tests, 50 copies each DV06

Topics

- 1. Shielded Metal Arc Welding 6" Pipe Uphill Course Overview
- 2. Introduction to Shielded Metal Arc Welding Pipe
- 3. Safety & Health of Welders
- 4. Weld Quality: Reading the Puddle
- 5. Preparation & Assembly of an Open Root Pipe Joint
- 6. Single V-Groove Weld, Butt Joint, (2G) Pipe Schedule 80
- 7. Standard Destructive Test Schedule 80 Pipe
- 8. Methods of Applying the Root Pass
- 9. Single V-Groove Weld, Butt Joint, (5G) Pipe Schedule 80
- 10. How to Read & Apply Welding Procedures
- 11. Single V-Groove Weld, Butt Joint, (6G) Pipe Schedule 80
- 12. Preheat & Interpass Temperatures
- 13. Single V-Groove Weld, Butt Joint, (6G) Pipe E7018 Root Schedule 80

Product	Item No.	List Price
Complete SMAW 6" Pipe Uphill	. DV06	\$1,125.00
Site License	. V06.50	\$500.00

Shielded Metal Arc Welding Pipe - Downhill

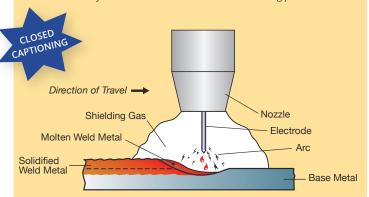
Complete Course: 2 DVDs (1 hr. 49 min); ITEM NO. 1 Instructor Guide; 2 written tests, 50 copies each DV04

- 1. Shielded Metal Arc Welding Pipe Downhill Course Overview
- 2. Introduction to Shielded Metal Arc Welding Pipe Downhill
- 3. Safety & Health of Welders
- 4. Weld Quality: Reading the Puddle Downhill Travel
- 5. Preparation & Assembly of a 6" Open Root Pipe Joint Downhill
- 6. Single V-Groove Weld, Butt Joint, (5G) Position, 6" Pipe- Downhill
- 7. Standard Visual Inspection Schedule 80 Pipe Downhill
- 2. Building visual hispection. Schedule of the Downing
- 8. Pipeline Construction & Welding Downhill
- 9. How to Read & Apply Welding Procedures Downhill
- 10. Single V-Groove Weld, Butt Joint, (6G) Position, 6" Pipe- Downhill
- 11. Standard Destructive Test, Guided Bend & Nick Break Test
- 12. Preparation & Assembly of a 2" Open Root Pipe Joint Downhill
- 13. Single V-Groove Weld, Butt Joint, (5G) Position, 2" Pipe Downhill
- 14. Single V-Groove Weld, Butt Joint, (6G) Position, 2" Pipe Downhill

Product	Item No.	List Price
Complete SMAWPD	. DV04	\$1,125.00
Site License	V04.50	\$500.00

Gas Metal Arc Welding

There are three courses in the Gas Metal Arc series — Basic, Advanced and Pipe. The programs feature male and female narration, animated graphics and shots of the arc so clear you can see the silicon island in the welding puddle.



Gas Metal Arc Welding Basic

Complete Course: 3 DVDs (2 hrs. 10 min); 1 Instructor Guide; 2 written tests, 50 copies each ITEM NO.

Topics

- 1. Gas Metal Arc Welding Basic Course Overview
- 2. Introduction to Gas Metal Arc Welding
- 3. Safety & Health of Welders
- 4. Installation, Setup & Maintenance of Equipment
- 5. Surfacing Welds, Flat Position
- **6.** Square Groove & Fillet Welds, Butt, Lap & T-Joints, Flat Position
- Square Groove & Fillet Welds, Butt, Lap & T-Joints, Horizontal Position
- 8. The Quality of Welds
- Square Groove & Fillet Welds, Butt, Lap & T-Joints, Vertical Position, Down
- Square Groove & Fillet Welds, Butt, Lap & T-Joints, Vertical Position, Up
- 11. Metal Transfer & Shielding Gases
- **12**. Square Groove & Fillet Welds, Butt, Lap & T-Joints, Overhead Position
- 13. Square V-Groove, Butt Joint, Horizontal Position
- **14.** Square V-Groove, Butt Joint, Horizontal Position, Guided Bend Test
- 15. Square V-Groove, Butt Joint, Vertical Position, Down
- **16.** Square V-Groove, Butt Joint, Vertical Position, Down, Guided Bend Test
- 17. Square V-Groove, Butt Joint, Vertical Position, Up
- 18. Square V-Groove, Butt Joint, Flat Position
- 19. Square V-Groove, Butt Joint, Overhead Position
- 20. Fillet Welds, Lap & T-Joints, Horizontal Position
- 21. Fillet Welds, Lap & T-Joints, Vertical Position, Down
- 22. Fillet Welds, Lap & T-Joints, Flat Position with Spray Transfer
- 23. Fillet Welds, Lap & T-Joints, Horizontal Position with Spray Transfer
- 24. Single V-Groove Weld, Flat Position with Spray Transfer

Product	Item No.	List Price
Complete GMAWB course	. DV10	\$1,125.00
Site License	. V010.50	\$500.00

Gas Metal Arc Welding Advanced

Complete Course: 2 DVDs (1 hr. 52 min); 1 Instructor Guide; 2 written tests, 50 copies each

Topics

- 1. Gas Metal Arc Welding Advanced Course Overview
- 2. Introduction to Gas Metal Arc Welding Spray & Pulse Spray Transfer
- 3. Safety & Health of Welders
- 4. Equipment Set-Up, Operation & Shut-Down
- 5. Single V-Groove Weld, Butt Joint, (1G) Position Spray
- 6. Introduction to Pulse Spray Transfer
- 7. Single V-Groove Weld, Butt Joint, (2G) Position Pulse
- 8. Standard Destructive Test
- 9. Weldability of Aluminum Alloys
- 10. Fillet Weld, Lap & T-Joint (2F) Position
- 11. Fillet Weld, Lap & T-Joint (3F) Position
- 12. Single V-Groove Weld, Butt Joint, (3G) Position
- **13.** Single V-Groove Weld, Butt Joint, (3G) Position with Visual Inspection & Microetch Test
- 14. Single V-Groove Weld, Butt Joint, (4G) Position
- 15. Fillet Weld, Lap & T-Joint (2F) Position

Product	Item No.	List Price
Complete GMAWA course	. DV11	\$1,125.00
Site License	. V11.50	\$500.00

Gas Metal Arc Welding Pipe

Complete Course: 2 DVDs (1 hr. 10 min); 1 Instructor Guide; 2 written tests, 50 copies each TEM NO. **DV15**

ITEM NO.

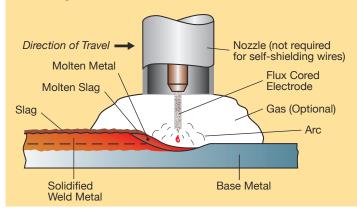
DV11

- 1. Gas Metal Arc Welding Pipe Course Overview
- 2. Introduction to Gas Metal Arc Welding
- 3. Safety & Health of Welders
- 4. Equipment Setup, Operation & Shutdown
- 5. Preparation & Assembly of an Open Root Pipe Joint
- 6. Single V-Groove Weld, Butt Joint, (2G) Position
- 7. Weld Quality: Visual Inspection
- 8. Standard Destructive Test Schedule 80 Pipe
- 9. Single V-Groove Weld, Butt Joint, (5G) Position Downhill
- Single V-Groove Weld, Butt Joint, (5G) Position Downhill Root, Uphill Fill & Cover
- 11. Single V-Groove Weld, Butt Joint, (6G) Position, Downhill 6" Pipe
- 12. Single V-Groove Weld, Butt Joint, (6G) Position, Downhill 2" Pipe

Product	Item No.	List Price
Complete GMAWP course	. DV15	\$1,125.00
Site License	. V015.50	\$500.00

Flux-Cored Arc Welding

The Flux Cored Arc Welding training program provides the student with a thorough understanding of the Flux Cored Arc Welding process. It provides training in all positions, on carbon steels, with and without shielding gas, using small and large diameter flux cored electrodes.



Flux-Cored Arc Welding

Complete Course: 3 DVDs (2 hrs. 20 min); 1 Instructor Guide; 2 written tests, 50 copies each ITEM NO.

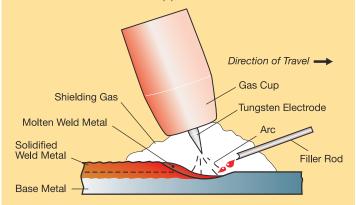
Topics

- 1. Flux-Cored Arc Welding Course Overview
- 2. Introduction to Flux-Cored Arc Welding
- 3. Safety & Health of Welders
- 4. Equipment Setup, Adjustment & Maintenance
- Fillet Welds, T-Joints, Horizontal, Vertical & Overhead Positions (Gas & Self-Shielded)
- 6. Electrode Classification & Selection
- Single V-Groove Weld, Butt Joint, Horizontal (2G) Position (Gas & Self-Shielded)
- 8. Single V-Groove Weld, 2G Destructive Test
- Single V-Groove Weld, Butt Joint, Vertical (3G) Position (Gas & Self-Shielded)
- Single V-Groove Weld, Butt Joint, Overhead (4G) Position (Gas & Self-Shielded)
- **11.** Single V-Groove Weld, Butt Joint, Horizontal (2G) Position (Gas & Self-Shielded)
- **12**. Single V-Groove Weld, Butt Joint, Vertical (3G) Position (Gas & Self-Shielded)
- 13. Single V-Groove Weld, 3G Destructive Test
- **14.** Single V-Groove Weld, Butt Joint, Horizontal (1G) Position (Self-Shielded)
- **15.** Fillet Weld, Lap Joint, Flat (1F) Position (Metal-Cored)
- **16.** Single V-Groove Weld, Butt Joint, Flat (1G) Position (Metal-Cored)
- 17. Single V-Groove Weld, Butt Joint, Horizontal (2G) Position (Gas & Self-Shielded)
- 18. Single V-Groove Weld, Butt Joint, Horizontal Fixed Position (5G), Pipe

Product	Item No.	List Price
Complete FCAW course (DVD)	. DV12	\$1,125.00
Site License	V12.50	\$500.00

Gas Tungsten Arc Welding

The Gas Tungsten Arc Welding program is a complete training program. The fundamentals of Gas Tungsten Arc Welding are covered in the basic program. It provides training on mild steel, stainless steel and aluminum, using both direct and alternating current. Gas Tungsten Arc Welding Pipe is divided into two programs. Gas Tungsten Arc Welding 2-inch Pipe prepares the student for pipe welding, and teaches the student to weld on 2-inch Sch. 80 pipe, in all positions. Gas Tungsten Arc Welding 6-inch Pipe provides training on 6-inch pipe using GTAW to deposit the root and second pass; and SMAW to complete the weld. Students also weld on stainless steel pipe and with a consumable insert.



Gas Tungsten Arc Welding

Complete Course: 4 DVDs (3 hrs. 40 min); 1 Instructor Guide; 4 written tests, 50 copies each DV20

- 1. Gas Tungsten Arc Welding Course Overview
- 2. Introduction to Gas Tungsten Arc Welding
- 3. Safety & Health of Welders
- **4.** Equipment Setup, Adjustment & Shutdown
- **5.** Stringer Bead, Flat Position (Carbon Steel)
- 6. The Essentials of GTAW
- 7. Fillet Weld, Lap Joint, Horizontal & Flat Positions (Carbon Steel)
- 8. The Metallurgy & Weldability of Carbon Steel
- 9. Fillet Weld, Outside Corner Joint, Flat Position (Carbon Steel)
- Fillet Weld, T-Joint, Horizontal, Vertical Up & Flat Positions (Carbon Steel)
- 11. Fillet Weld, T-Joint, Overhead Position (Carbon Steel)
- 12. Square-Groove Weld, Butt Joint, Flat Position (Carbon Steel)
- 13. Square-Groove Weld, 1G Destructive Test (Carbon Steel)
- **14**. Square-Groove Weld, Butt Joint, Horizontal & Vertical Up Positions (Carbon Steel)
- 15. Square-Groove Weld, Butt Joint, Overhead Position (Carbon Steel)
- 16. Introduction to GTAW Using Pulsed Current
- 17. Square-Groove Weld, Butt Joint, Flat Position (Stainless Steel)
- **18.** The Welding Characteristics of Stainless Steel
- 19. Square-Groove Weld, Butt Joint, Horizontal Position (Carbon Steel)
- 20. Fillet Weld, Lap Joint, Horizontal & Flat Positions (Stainless Steel)
- **21.** Fillet Weld, Outside Corner Joint, Flat Position (Stainless Steel)
- Fillet Weld, T-Joint, Horizontal, Vertical Up & Flat Positions (Stainless Steel)
- 23. Visual Inspection Test, Stainless Steel
- 24. The Welding Characteristics of Aluminum
- 25. Stringer Bead, Flat Position (Aluminum)
- 26. The Effects of Process Variables on the Welding Arc
- 27. Fillet Weld, Outside Corner Joint, Flat Position (Aluminum)
- 28. Fillet Weld, Outside Corner Joint, Vertical Position, Up (Aluminum)

- 29. Fillet Weld, Lap Joint, Horizontal & Flat Positions (Aluminum)
- **30.** Square-Groove Weld, Butt Joint, Flat Position (Aluminum)
- 31. Fillet Weld, T-Joint, Horizontal & Flat Positions (Aluminum)
- 32. Fillet Weld, T-Joint, Vertical Position, Up (Aluminum)
- 33. Visual Inspection Test, Aluminum

Product	Item No.	List Price
Complete GTAWB course (DVD)	. DV20	\$1,125.00
Site License	. V20.50	\$500.00

Gas Tungsten Arc Welding 2-Inch Pipe

Complete Course: 2 DVDs (1 hr. 30 min); 1 Instructor Guide; 1 written test, 50 copies each ITEM NO.

Topics

- 1. Gas Tungsten Arc Welding 2" Pipe Course Overview
- 2. Introduction to Gas Tungsten Arc Welding
- 3. Safety & Health of Welders
- 4. Equipment Setup, Adjustment & Shutdown
- 5. Preparation & Assembly of an Open Root Pipe Joint
- 6. Single V-Groove Weld, Butt Joint, (2G) Pipe
- 7. Pipe Weld Quality
- 8. Single V-Groove Weld, Butt Joint, (2G) Pipe Destructive Test
- 9. Single V-Groove Weld, Butt Joint, (5G) Pipe
- 10. Single V-Groove Weld, Butt Joint, (6G) Pipe

Product	Item No.	List Price
Complete GTAW 2" Pipe	. DV22	\$1,125.00
Site License	V22 50	\$500.00

Gas Tungsten Arc Welding - Shielded Metal Arc Welding 6-Inch Pipe

Complete Course: 2 DVDs (1 hr. 57 min);
1 Instructor Guide; 2 written tests, 50 copies each [

ITEM NO.

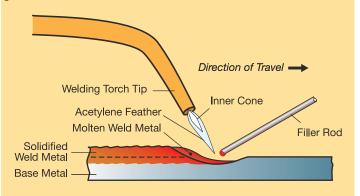
Topics

- Gas Tungsten Arc Welding- Shielded Metal Arc Welding 6" Pipe -Course Overview
- 2. Introduction to Gas Tungsten Arc Welding
- 3. Safety & Health of Welders
- 4. Preparation & Assembly of an Open Root Pipe Joint
- **5.** Single V-Groove Weld, Butt Joint, (5G) Pipe
- 6. Single V-Groove Weld, Butt Joint, (5G) Pipe, Destructive Test
- 7. Single V-Groove Weld, Butt Joint, (2G) Pipe
- 8. Single V-Groove Weld, Butt Joint, (6G) Pipe
- 9. Stainless Steel Pipe Welding
- 10. Preparation & Assembly of a Stainless Steel Pipe Joint
- **11.** Single V-Groove Weld, Butt Joint, (6G) Stainless Steel Pipe
- **12.** Joint Design for Gas Tungsten Arc Welding Pipe & Tubing
- **13.** Preparation & Assembly of a Pipe Joint with Consumable Insert
- **14.** Single V-Groove Weld, Butt Joint, (6G) Pipe with Consumable Insert
- 15. Pipe Weld Quality

Product	Item No.	List Price
Complete GTAW-SMAW Pipe	. DV26	\$1,125.00
Site License	. V26.50	\$500.00

Oxyacetylene Welding, Cutting & Brazing

The Oxyacetylene Welding, Cutting and Brazing program is a complete training program. It teaches the student to flame cut plate, braze mild steel, cast iron and copper. There is related information on weld quality and applications of fuel gases, not used in this course.



Oxyacetylene Welding, Cutting & Brazing

Complete Course: 4 DVDs (3 hrs. 6 min); 1 Instructor Guide; 4 written tests, 50 copies each ITEM NO.

Recommended as an entry-level curriculum to teach cutting techniques & hand-eye coordination associated with good puddle control & filler addition.

- 1. Oxyacetylene Welding, Brazing & Cutting Course Overview
- 2. Introduction to Oxyacetylene Welding, Brazing & Cutting
- 3. Oxyacetylene Welding Safety
- 4. Safety & Health of Welders
- 5. Equipment Setup, Operation & Shutdown
- 6. Weld Quality: Controlling the Welding Variables
- Stringer Bead, Bead on Plate With & Without Filler Metal, Flat Position
- 8. Fillet Weld, Lap Joint, Horizontal (2F) Position
- 9. Fillet Weld, Inside Corner Joint, Horizontal (2F) Position
- 10. Fillet Weld, Lap Joint, Vertical (3F) Position
- 11. Fillet Weld, Inside Corner Joint, Vertical (3F) Position
- 12. Square Groove Weld, Butt Joint, Vertical (3G) Position
- 13. Introduction to Oxyacetylene Flame Cutting14. Standard Destructive Test, Visual Inspection & Guided Bend Test
- 15. Square Groove Weld, Butt Joint, Flat (1G) Position
- 16. Square Groove Weld, Butt Joint, Overhead (4G) Position
- 17. Square Groove Weld, Butt Joint, Horizontal (2G) Position
- 18. Application of Fuel Gases
- 19. Square-Groove, Bevel & Hole Cuts Manual
- 20. Square-Groove, Bevel & Hole Cuts Visual Inspection
- 21. Single V-Groove Weld, Butt Joint, Vertical (3G) Position
- 22. Single V-Groove Weld, Butt Joint, Flat (1G) Position
- 23. Single V-Groove Weld, Butt Joint, Overhead (4G) Position
- 24. Single V-Groove Weld, Butt Joint, Horizontal (2G) Position
- 25. Single V-Groove Weld, Butt Joint, (5G) Position, 2" Pipe
- 26. Single V-Groove Weld, Butt Joint, (6G) Position, 2" Pipe
- 27. Introduction to Soldering, Brazing & Braze Welding
- **28.** Fillet Weld, Lap Joint, Square-Groove, Butt Joint, Braze Weld, Horizontal (2F) & Flat (1G) Position
- 29. Socket Joint, Brazed Copper (2F) Position
- 30. Socket Joint, Brazed Copper (5F) Position

 Product
 Item No.
 List Price

 Complete OAW
 DV30
 \$1,125.00

 Site License
 V30.50
 \$500.00

Welding Procedures & Qualification

Complete Course: 1 DVD (26 min); 1 Instructor Guide; 1 written test, 50 copies ITEM NO. **DV86.3**

Topics

- 1. Purpose of Welding Procedures & Qualification
- 2. Welding Procedure Specifications
- 3. Procedure Qualification Records
- 4. Performance Qualification
- 5. Maintaining Qualification Records

Product	Item No.	List Price
Complete Course	. DV86.3	\$500.00
Site License	. V86.35	\$500.00

Destructive Testing Methods

Complete Course: 1 DVD (43 min); 1 Instructor Guide; 1 written test, 50 copies

Topics

- 1. Introduction to Destructive Testing
- 2. Tensile Tests
- 3. Impact Tests
- 4. Guided Bend Tests
- 5. Nick Break Tests
- 6. Fillet Weld Break Tests
- **7.** Etch Tests

Product	Item No.	List Price
Complete Course	. DV86.5	\$500.00
Site License	. V86.55	\$500.00

Welding Discontinuities & Defects

Complete Course: 1 DVD (1 hr. 12 min); 1 Instructor Guide; 1 written test, 50 copies

ITEM NO. **DV86.4**

Topics

- 1. Weld Inspector Responsibilities Related to Discontinuities & Defects
- **2.** Identification & Definition of Weld Discontinuities & Defects
- 3. Common Causes of Discontinuities related to Shape, Size & Contour
- **4.** Common Causes of Discontinuities related to Internal Inconsistencies & Weld Metal Irregularities
- Common Causes of Discontinuities related to Weld & Base Metal Properties

Product	Item No.	List Price
Complete Course	. DV86.40	\$500.00
Site License	V86.45	\$500.00

Visit our website at
www.welding.org
for additional Instructor
Guides and Tests

Nondestructive Testing Methods

Complete Course: 1 DVD (45 min); 1 Instructor Guide; 1 written test, 50 copies ITEM NO. **DV86.6**

ITEM NO.

DV86.5

Topics

- 1. Introduction to Nondestructive Testing
- **2.** Principles of Visual Inspection
- **3**. Principles of Liquid Penetrant Testing
- 4. Principles of Magnetic Particle Testing
- 5. Principles of Ultrasonic Testing
- 6. Principles of Radiographic Testing

Product	Item No.	List Price	
Complete Course	. DV86.6	\$500.00	
Site License	V86.65	\$500.00	

Student Workbooks are listed on Pages 12-13

Common Arc Welding Processes

ITEM NO. Complete Course: 2 DVDs (2 hrs. 10 min); 1 Instructor Guide; 2 written tests, 50 copies each **DV85**

Topics

- 1. Introduction to Common Arc Welding Processes
- 2. Safety and Health of Welders
- 3. Introduction to Shielded Metal Arc Welding
- 4. SMAW Electrode Selection
- 5. Introduction to Gas Metal Arc Welding
- **6.** GMAW Metal Transfer and Shielding Gases
- 7. Introduction to Flux Cored Arc Welding
- 8. FCAW Electrode Classification and Selection
- 9. Introduction to Gas Tungsten Arc Welding
- 10. The Essentials of GTAW

Product	Item No.	List Price
Complete Course	. DV85	\$500.00
Site License	. V85.50	\$500.00

Arc Welding Safety

ITEM NO. 1 DVD (11 min) **DV91**

Covers the following areas of arc welding safety:

- Arc Radiation
- Fire and Explosion
- Air Contamination
- Other Welding Hazards
- Compressed Gases
- Safety Data Sheets • Safety Standards
- Cleaning • Electric Shock

Product	Item No.	List Price
Safety and Health of Welders		
DVD (11 min.)	DV91.0	\$85.00
Site License	V85.50	\$500.00

Basic Metallurgy

	ITEM NO.
1 DVD (40 min)	DV40.0

Included in complete GTAW course (DV20.0)

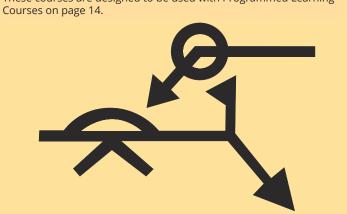
Topics

- The metallurgy & weldability of carbon steel
- The welding characteristics of stainless steel
- · The welding characteristics of aluminum

Product	Item No.	List Price
Basic Metallurgy (DVD)	DV40.0	\$500.00

Symbols For Welding, Blueprint Reading, **Advanced Blueprint & Pipe Layout**

These courses are designed to be used with Programmed Learning



Symbols for Welding UPDATED 2024

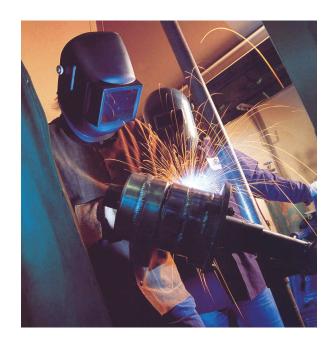
Complete Course: 1 DVD (58 min) 1 Instructor Guide

ITEM NO. **DV80**

Topics

- 1. Communicating Welding Information
- 2. Fillet Welds
- 3. Weld Symbols For Length and Arrangement
- 4. Supplementary Symbols and Reference
- 5. Plug and Slot Welds
- 6. Spot, Stud and Seam Welds
- 7. Groove Weld Symbols
- 8. Backing, Back, Melt-Through and Surfacing Welds
- 9. Edge Welds and Combination Welds

NOTE: DVD program is intended to be used with the **Updated Symbols Programmed Instruction Packet**



Blueprint Reading for Welders & Fitters

Complete Course: 2 DVDs (1 hr. 22 min) 1 Instructor Guide ITEM NO.

Topics

- 1. Introduction to Blueprint Reading for Welders and Fitters
- 2. Review of Mathematics
- 3. Metrics and Metric Conversions
- 4. Review of Welding Symbols
- 5. Orthographic Views
- 6. Standard Drawing Lines and Symbols
- 7. Inerpreting Blueprint Information
- 8. Surface and Centerline Relationships
- 9. Auxiliary Views
- 10. Scale Drawings
- 11. Dimensional Tolerance and Stock Allowance
- 12. Set-up Tools
- 13. Set-up Applications

Product	Item No.	List Price
Complete Blueprint Reading Course	. DV81	\$500.00
Site License	. V81.50	\$500.00

Pipe Layout for Pipefitters & Welders

Complete Course: 2 DVDs (1 hr. 50 min) 1 Instructor Guide ITEM NO.

Topics

- 1. Introduction to Pipe Layout for Pipefitters and Welders
- 2. Review of Basic Shapes & Pipefitter Terminology
- 3. Review of Basic Mathematic Calculations
- 4. Review of Decimals
- 5. Review of Geometric Calculations
- 6. Angles & Angular Lavout
- 7. Calculated Welded Offsets
- 8. Offsets Other than 45° & 90°
- 9. Welded Offsets
- 10. Multiple Turn Layouts
- 11. Two Piece Parallel Offsets
- 12. Offsets Around Obstructions
- 13. Rolling Offsets
- 14. Fabricated Tees
- 15. Lateral Tees
- 16. Circumferential Sleeves
- 17. Pipe Blanking
- 18. Elliptical Holes & Blind Flanges
- 19. Fabricating Brackets

Product	Item No.	List Price	
Complete Course	DV82	\$1,	195.00
Site License – Pipe Layout for			
Pipefitters & Welders	V82.	50 \$5	500.00

Advanced Blueprint Reading

Complete Course: 1 DVD (46 min) 1 Instructor Guide TEM NO.

Topics

- 1. Development of Blueprints and Drawings
- 2. Standards, Codes and Specifications
- **3.** Standard Plates and Shapes
- 4. Blueprint Reading
- 5. Calculating Measurements and Common Layout Tools
- 6. Pipe Essentials
- 7. Role of the Welder in Quality and Safety
- 8. Fabrication Tools

Product	Item No.	List Price
Complete Advanced Blueprint	DV83	\$500.00
Site License	V83.50	\$500.00

Test are included with each student packet on page 14, not complete training courses.

SITE LICENSE (SL)

In response to requests to place DVD's on company and school intranets (private networks) a site license (SL) at an additional cost of \$500.00 per program is now available for each complete training course purchased from Hobart Institute of Welding Technology (HIWT). Complete training courses may contain multiple DVD's. A separate site license is required for each program you intend to distribute.

The site license, granted for a three year period, includes a signed document authorizing the electronic distribution of HIWT training materials to others within your organization's secure network. The intranet distribution of HIWT DVD's without a site license is prohibited.

Student Workbooks

Workbooks follow the DVDs topic-by-topic and take a step-by-step approach to practice sessions, featuring objectives; set-up instructions; materials and machine settings; and summaries of essential theory with many illustrations. All destructive tests are based on AWS®, ASME or API codes.



Oxyacetylene Welding

Consists of 30 topics which include 19 skill topics, 2 testing topics and 7 topics that cover essential theory. There is also course overview and introduction. 172 pages Item No. EW369OAWList Price \$25.00

Shielded Metal Arc Welding Basic

Consists of 38 topics which include 29 skill topics with 8 of these topics covering essential theory and course overview, 4 testing topics and introduction. 188 pages Item No. EW369SMAWBList Price \$25.00

Shielded Metal Arc Welding Structural

Consists of 19 topics which include 9 skill topics, 9 essential theory topics and course overview. 104 pages Item No. EW369SMAWA1.....List Price \$25.00

Shielded Metal Arc Welding Pre-Pipe

Consists of 19 topics which include 9 skill topics, 9 essential theory topics and course overview. 100 pages Item No. EW369SMAWA2List Price \$25.00

Shielded Metal Arc Welding 2 Inch Pipe Uphill

Consists of 15 topics which include 10 skill topics, 4 essential theory topics and course overview. 100 pages Item No. EW369SMAWPU2.....List Price \$25.00

Shielded Metal Arc Welding 6 Inch Pipe Uphill

Consists of 13 topics which include 6 skill topics, 5 essential theory topics and an introduction and course overview. 96 pages Item No. EW369SMAWPU6......List Price \$25.00

Shielded Metal Arc Welding Pipe Downhill

Consists of 14 topics which include 6 skill topics, 2 testing topics, 4 essential theory topics and an introduction and course overview. 92 pages
Item No. EW369SMAWPD.....List Price \$25.00

Gas Metal Arc Welding Basic

Consists of 24 topics which include 19 skill topics and 5 essential theory topics. 96 pages Item No. EW369GMAWBList Price \$25.00

Gas Metal Arc Welding Advanced

Consists of 15 topics which include 9 skill topics, 4 essential theory topics, an introduction and overview 77 pages Item No. EW369GMAWA.....List Price \$25.00

Gas Tungsten Advanced

Consists of 17 topics which include 8 skill topics, 4 testing topics, an introduction and overview 77 pages Item No. EW369GTAWAList Price \$25.00

Gas Metal Arc Welding Pipe

Consists of 13 topics which include 6 skill topics, 5 essential theory topics, an introduction and overview. 76 pages Item No. EW369GMAWP.....List Price \$25.00

Welding Procedures & Qualification

An explanation of the steps necessary to develop procedure and performance qualifications. 38 pages Item No. EW512-3List Price \$25.00

Flux Cored Arc Welding

Consists of 18 topics which include 13 skill topics, 4 essential theory topics, an introduction and overview. 94 pages Item No. EW369FCAW.....List Price \$25.00

Welding Discontinuities & Defects

An explanation of the welding discontinuities and defects in relation to welding procedure variables. 38 pages Item No. EW512-4.....List Price \$25.00

Gas Tungsten Arc Welding

Consists of 33 topics which include 23 skill topics, 9 essential theory topics, and a course overview. 94 pages Item No. EW369GTAWList Price \$25.00

Destructive Testing

An explanation of destructive testing and results obtained. 44 pages

Item No. EW512-5List Price \$25.00

Gas Tungsten Arc Welding 2 Inch Pipe

Consists of 10 topics which include 5 skill topics, 4 essential theory topics, and course overview. 52 pages Item No. EW369GTAWP2List Price \$25.00

Nondestructive Testing

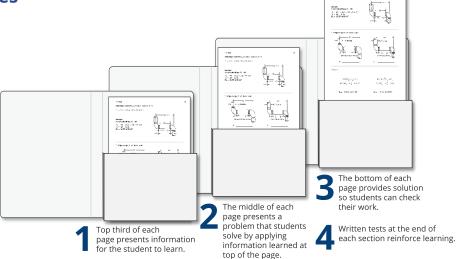
An explation of nondestructive testing and reults obtained. 34 pages
Item No. EW512-6.....List Price \$25.00

Gas Tungsten Arc Welding 6 Inch Pipe

Consists of 15 topics which include 9 skill topics, 5 essential theory topics, and course overview. 96 pages Item No. EW369GTAWP6List Price \$25.00

Programmed Learning Courses

These courses provide a simple, and yet complete method, for students to learn and understand the principles of welding symbols, symbols for nondestructive examination, blueprint reading and pipe layout. Each page is designed to teach a small amount of information which is reinforced through an action/problem and self-check (see illustration at right). Each page builds for the next as the student learns in an efficient and rewarding manner.



Symbols for Welding UPDATED 2024

The symbols for welding course is based on AWS® A2.4 Symbols for Welding and Nondestructive Examination Standard. This system of communication provides a vital link between the designer and the individuals responsible for producing and planning welding. 3 Tests are included with each student packet. 122 pages. (Symbols packet is designed to be utilized with the updated DVD program.)

Product	Item No.	List Price
Symbols for Welding	EW-342	\$27.00
Key to test	EW-343	\$10.95

Symbols for Nondestructive Examination

This course is designed to teach students how to interpret nondestructive examination symbols based on AWS® 2.4. The first part of the course serves as an introduction, which is deemed beneficial for those not familiar with welding symbols. 1 Test is included with each student packet. 38 pages.

Product	ltem No.	List Price
Symbols for Nondestructive Examination	EW-457	\$20.00
Key to test	EW-458	\$9.95

Blueprint Reading for Welders & Fitters

The Blueprint Reading for Welders and Fitters course contains valuable information on mathematics and metrics, blueprint reading for the welder, blueprint reading for the fitter, setup tools, and set-up applications. 5 Tests are included with each student packet. 176 pages.

Product	Item No.	List Price
Blueprint Reading for Welders and Fitters	EW-459	\$29.00
Key to test	EW-460	\$11.95

Advanced Blueprint Reading

This two packet course covers the design procedure; an interpretation of blueprints and shop drawings as well as applying this information; the use of measuring tools in layout and assembly; the basics of codes, specifications and standards and to be aware of the responsibility of a welder in quality control. 11 tests included with the packets. 185 pages.

Product	Item No.	List Price
Advanced Blueprint Reading (2 Packets)	EW-462	\$53.00
Key to test	EW-463	\$11.95

Pipe Layout for Pipefitters & Welders

This 10 section, self-study programmed learning course includes: pipefitter terminology, mathematics & plane figures, angles and angular layout, calculated welded offsets, tees, laterals & circumferential sleeves, pipe blanking, elliptical holes, brackets and pipe flanges. Based in part on Thomas W. Frankland's "The Pipe Fitters and Pipe Welder's Handbook," and "Pipe Trades Pocket Manual." 10 Tests are included with each student packet. 237 pages.

Product	item No.	List Price
Pipe Layout for Welders & Fitters	EW-517	\$45.00
Key to test	EW-519	\$12.95

Technical Guides

These guides contain extensive welding information on individual welding processes and welding subjects. They supplement the student workbooks for welding training and have an application for manufacturing engineering and quality control. Books are in full color.

Welding Guide — Provides general welding information including common arc welding process descriptions, weldability of metals, non-destructive testing process descriptions, welding data charts and tables, and metric conversion. 117 pages.

Item No. EW-385List Price \$29.00

Gas Tungsten Arc Welding — Covers the process in detail, equipment, applications, procedures, welding training and safety. 98 pages. Item No. EW-470 List Price \$29.00

Shielded Metal Arc Welding — Describes the SMAW process,

procedures and applications, electrode selection charts, welding safety and explains the equipment used. 78 pages.

Item No. EW-472 List Price \$29.00

Gas Metal Arc Welding — Provides an explanation of the GMAW process, equipment, applications, procedures, safety and welding symbols. 110 pages.

Item No. EW-473List Price \$29.00

Flux-Cored Arc Welding — This guide describes the self-shielded and gas shielded processes, equipment, methods of application, safety and procedures. 98 pages.

Item No. EW-492List Price \$29.00

Safety and Health of Welders — A valuable guide to protection against the hazards associated with welding. 23 pages.

Item No. EW-607List Price \$20.00

Oxyfuel Welding, Cutting & Brazing — This guide covers the process, equipment, and safety. 82 pages.

Item No. EW-480List Price \$29.00



General Welding Books

Pocket Welding Guide, 32nd Edition — Known as the "Welder's Bible", and widely used by students, teachers, hobbyists and professionals as a handy reference, this updated edition features: overview of all welding processes, examples of good and bad weld beads, causes & cures of common welding problems, welding symbols, guidelines for the indentification of metals & calculating filler metal consumption, oven storage & reconditioning of filler metals, shielding gases & their uses, AWS® filler metal classifications & comparative indices, GMAW welding parameters, complete listing of filler metals with operating ranges, filler metals selector guide for welding ASTM steels, troubleshooting guides for semiautomatic wire & equipment, welding terms & definitions, metric conversions tables, and more. 164 pages. 4" x 7" format.

Item No. EW-609List Price \$9.00

WELDING: A Journey to Explore its Past by Andre A. Odermatt -

What is this simple but complex process called welding? When did it begin? This book is a humble attempt to answer just a few questions about the origins of welding. It is not a textbook or an academic paper. It aims to give the reader some basic knowledge of a few aspects of the history of welding and its problems and its contribution to society, from antiquity to modern times, from brazing and forging, to gas welding and electric welding.

Item No. EW-806 1st Edition 181 PagesList Price \$10.00 Item No. EW-807 2nd Edition 213 PagesListPrice \$20.00

All proceeds go to the Andre A. Odermatt Scholarship

Properties and Uses of Ferrous and Non-ferrous Metals *by Weiss & Leuchtman.* 112 pages.

Item No. EW-220 List Price \$24.95

The Metal Trades & Welding Handbook — A book covering all aspects of the metal trades from roping to welding. 581 pages.

Item No. EW-676List Price \$29.25



Pipe Welding & Pipe Layout Books

Pipefitters Handbook — A comprehensive reference including tables for pipe bends, offsets, mitered joints and other useful information for shop and field use. Leatherette bound. 444 pages.

Item No. EW-389 List Price \$42.00

Pipe Trades Pocket Manual *by Frankland* — Tables for bending, offsets, miter turn fittings, elbow offsets, solving angles with steel square and more. Leatherette bound. 262 pages.

Item No. EW-390 List Price \$32.00

The Pipe Fitters and Pipe Welders Handbook *by Frankland* — Pocket size booklet containing layout information for making all types of pipe joints. Leatherette bound. 194 pages.

Item No. EW-234 List Price \$32.00

Pipe Trades Handbook — Covers basic data on tube and pipe, national standards, fittings, valves, joints, offsets, pipe layout, mathematics and pipe welding, 534 pages.

Item No. EW-696 List Price \$29.25

PipeFitters Bluebook — Contains charts, tables, drawings, instructions on pipe joints and layout. 176 pages.

Item No. EW-697 List Price \$25.00

Pipe Layout for Pipefitters and Welders — This 10 section, self-study, programmed learning course from the Hobart Institute of Welding Technology includes pipefitting terminology, mathematics & plane figures, angles and angular layout, calculated welded offsets, tees, laterals & circumferential sleeves, pipe blanking, elliptical holes, brackets and pipe flanges. 10 tests are included with each copy.

Item No. EW-517List Price \$45.00

Answer Key

Item No. EW-519 List Price \$12.95

AWS® Books



Certification Manual for Welding Inspectors — A great study aid for the AWS® CWI®/CWE® exam. Reduce those day-of-test jitters by putting yourself in command of the material that everyone must know to succeed on the CWI® exam. Over 360 questions and answers. 300 pages Item No. EW-475 List Price \$228.00

Welding Inspection — Essential information for the CWI® on manual arc welding inspection techniques including destructive testing and nondestructive examination methods. 275 pages.

Item No. EW-223List Price \$108.00

Welding Terms and Definitions — The comprehensive and official listing of welding and cutting terms and definitions. (A3.0M/ A3.0:2020) 148 pages.

Item No. EW-291 List Price \$228.00



Welding Codes & Specifications

API Standard 1104, Standard for Welding Pipelines and Related Facilities 22nd Edition — This code book published by the American Petroleum Institute provides the complete and detailed information needed by welders, inspectors and engineers. 162 pages.

Item No. EW-264List Price \$454.00

AWS® Structural Welding Code, D1.1 — Complete structural welding code for buildings, bridges, and other welded structures. Welding engineers, inspectors and others involved with design and quality control of welded structures should have this book for guidance and reference. 634 pages.

Item No. EW-531List Price \$732.00

Welding Inspection Tools

V-WAC Gauge

Used to check undercut, crown heights, porosity and pits.

Item No.EW454List Price \$44.00



Fillet Weld Gauge

A valuable tool for measuring both convex and concave fillet weld dimensions.

Item No. EW-453 List Price \$42.00



Wall Posters



35" x 23" size for good shop or classroom visibility Has plastic surface for durability, ease cleaning

Spiff up your shop or classroom, and send the "quality" message with a complete set of these attractive and instructive, full-color, welding-related posters.

Shielded Metal Arc Welding (SMAW) EW-901	\$18.00
Types of Welds EW-902	\$18.00
Gas Tungsten Arc Welding (TIG) (GTAW) EW-903	\$18.00
Gas Metal Arc Welding (GMAW) (MIG) EW-904	\$18.00
Flux Cored Arc Welding (FCAW) EW-905	\$18.00
Welding Positions EW-906	\$18.00
Common Weld Joints and Symbols EW-907	\$18.00
Electrode Selection and Identificat EW-908	\$18.00
Plasma Arc Welding (PAW) EW-909	\$18.00
Oxyacetylene Welding (OAW) EW-910	\$18.00
Examples of Good and Bad Beads EW-911	\$18.00
Welding Discontinuities and Defects EW-912	\$18.00
Good and Bad Welds (FCAW) EW-913	\$18.00
Complete Set of Posters WP-13	\$230.00





WP11

Set of 11 Posters: \$45.00

Size: 11" X 17"

Set includes:

- Common Terms Applied to a Weld
- Arc Length
- Diagram of Shielded Metal Arc Welding
- Learn to Read the Puddle
- Electrode Angle
- Tungsten Electrode Preparation
- 5 Essential
- 5 Methods of Control
- Travel Speed
- The Fire Tetrahedron
- Fire Extinguisher Ratings

To See pictures of our wall posters, visit our website at www.welding.org

Industrial Sectors Using Welding





Individual Posters

Size: 11" x 17" \$7.00 each

Sciences in a Weld

Item No. EW914

Welding & Joining Processes

Item No. EW915

Industrial Sectors Using Welding

Item No. EW916

Spark Testing of Metals

Item No. EW917

Iron-Carbon Equilibrium Diagram Poster

Item No. EW918

Changes in Carbon Steel Poster

Item No. EW919

Pearlite/Martensite Poster

Item No. EW920

TRAINING MATERIALS ORDER FORM



SOLD Name

MAIL TO: Attn: Publication Dept.

Hobart Institute of Welding Technology

400 Trade Square East Troy, OH 45373 U.S.A.

PHONE: (800) 332-9448 Ext. 9509

(937) 332-9509 (937) 332-9551

FAX: (937) 332-9551
INTERNET: www.welding.org
EMAIL: orders@welding.org

Title/Dept.

TO:								
	Company Address							
	City				State	Zip	Phone	
Quantity		Product Descri	ption		Color	Size	Price Each	Total Price
Credit o	card informa	tion:					Subtotal:	
☐ Ameri	☐ American Express ☐ Discover ☐ Visa ☐ Mastercard		tercard		Shipping:			
Card No.	•						-	
Expiration date Security Code				Total Amount:				

TERMS AND CONDITIONS OF SALES

Shipping & Handling:

All U.S. orders will be shipped by UPS Ground Service, unless otherwise specified at the time of the order. All shipping charges will be added to the order total. International orders will be shipped as requested by the customer at their expense.

Shipping charges for continental U.S. only: Shipping is based on weight of product and number of boxes.

NOTE: The above shipping and handling charges apply only to the continental United States. Shipping charges for Alaska, Hawaii, and for international orders will be quoted upon request.

Copyrights:

All HIWT products and services relating to training programs, including streaming content, and books are protected by copyright. This material may not be duplicated in whole or in part.

Site License (SL):

In response to requests to place DVD's on company and school intranets (private networks) a site license (SL) at an additional cost of \$500.00 per program is now available for each DVD program purchased from Hobart Institute of Welding Technology (HIWT). DVD programs may contain multiple DVD's. A separate site license is required for each program intended for distribution.

The site license, granted for a three year period, includes a signed document authorizing the electronic distribution of HIWT training materials to others within an organization's secure network. The intranet distribution of Hobart Institute DVD's without a site license is prohibited.

Return Policy:

There will be a restocking charge of 20% of the original net invoice

amount. Credit return will be determined by HIWT according to the condition of the returned items. (All return items must be in new, unlabeled, and unused condition.)

Books: Any request for return must be received within thirty (30) days of the original invoice date. The original invoice number must be indicated on the request for return.

Digital Video Discs (DVDs): Any request for return must be received within thirty (30) days of the original invoice date. The original invoice number must be indicated on the request for return.

Cancellation Policy:

Cancellation of an order or any part of an order by the purchaser must be made prior to shipment without a cancellation fee being assessed. **On-line courses and streaming content cannot be canceled or refunded**.

DVD Warranty:

All Hobart Institute of Welding Technology DVDs are warranted for a period of ninety (90) days after invoice date against defects including dropout or loss of signal. This does not include mechanical operation of equipment components. DVDs have been inspected by the manufacturer and the duplicator. All questions involving warranty should be directed to the bookstore prior to returning any defective DVDs.

To avoid damage to the DVDs, they should be returned to their original cases after use. Maintenance of equipment should follow the manufacturers' instruction.

Additional Terms:

Each of the products and services identified in these Terms and Conditions of Sale may be governed by additional terms and agreements that are hereby incorporated by reference as if fully rewritten herein. Prior to purchasing, please be sure to review all applicable agreements, privacy policies, and terms of use. Each may be made available upon request at orders@welding.org.

Prices: All prices are in U.S. dollars. Prices subject to change without notice.

ONLINE EDUCATION



OL-001 Symbols For Welding Online Course .4 CEU \$89.00 SELF-PACED

This online version of Symbols for Welding course is based on the AWS® A2.4 Symbols for Welding and Nondestructive Examination Standard. This system of communication provides the vital link between the designer and the people responsible for producing and planning welding.

Within the online course you will have the opportunity to download the EW-342 Symbols for Welding Learning Packet and work on specific problems; view the Symbols for Welding videos which are broken down into topic sections; take each of the 3 required test. Each test may be taken two times.

Your password is good for a period of one year with unlimited log-ins during that time. Completion time for the course varies with each individual. Take into consideration the necessary time required to watch the videos in addition to the time needed to work through the learning packet and the time to take the test. You may start and stop at any point.

Upon purchase of the course, you will receive an email of your online receipt of purchase and a separate email with account access instructions and link to online course.

You may add the optional paper version of the Symbols for Welding Programmed Learning Packet (EW342) containing 113 pages, which will be mailed to you. Three test are included with each student packet.

OL-002 Visual Inspection Welding Online Course .4 CEU \$89.00 SELF-PACED

This course concentrates on the single most used method of welding inspection — what we can see with the naked eye. Anyone involved with arc welding inspection, quality control, engineering or supervision should know the fundamentals of what to observe, prior to, during and after welding.

Contains 5 video segments totaling a run time of 60 minutes.

During this course you will learn about common weld gauges, temperature indicators, marking repair welds, visual inspection prior to, during, and after welding, terminology of weld defects, general requirements for equipment and workmanship standards, and a visual inspection checklist.

At your own pace from your computer you will view videos and will be able to take (and retake) online competency exams.

OL-003 Welding Discontinuities & Defects Online Course .4 CEU \$89.00 SELF-PACED

This course concentrates on defects and discontinuities related to welding and is intended to assist anyone involved in arc welding inspection, quality control, engineering or supervision. The objective is to be able to identify and determine the common causes of weld discontinuities and defects.

Contains 5 video segments totaling a run time of 70 minutes. Quizzes are provided to measure progress along the way with a final test to obtain a certificate of completion.

IMPORTANT

HIWT reviews each order for accuracy and to protect you and HIWT from fraud. After authorization and capture of your payment by HIWT personnel, you will be sent an email (typically within 1 business day) with access instructions for your course. Make sure to watch your incoming mail and spam folder. When you score 76% or higher, a Certificate of Completion will be issued for you to print that will contain the continuing education units earned for the online course. In addition, please add "welding.org" to your trusted/safe sender's list.

ONLINE EDUCATION



OL-004 Destructive Testing Methods Online Course .4 CEU \$89.00 SELF-PACED

This course concentrates on the various destructive testing methods used to evaluate welds including tensile and impact tests, guided bend tests, nick break tests, fillet weld break tests, and etch tests. It is intended for those involved in welding inspection, quality control, engineering or supervision. The objective is to be able to perform tests and determine the weld defects.

Contains 7 video segments totaling a run time of 43 minutes. Quizzes are provided to measure progress along the way with a final test to obtain a certificate of completion.

OL-005 Nondestructive Testing Methods Online Course .4 CEU \$89.00 SELF-PACED

This course concentrates on the various nondestructive testing methods used to evaluate welds including visual inspection, liquid penetrant testing, magnetic particle testing, ultrasonic testing, and radiographic testing. It is intended for those involved in welding inspection, quality control, engineering or supervision. The objective is to be able to evaluate welds and determine the weld defects.

Contains 6 video segments totaling a run time of 45 minutes. Quizzes are provided to measure progress along the way with a final test to obtain a certificate of completion.

OL-006 Welding Characteristics Of Steel, Stainless Steel, & Other Metals .4 CEU \$89.00 SELF-PACED

This course will provide the non-metallurgist with basic knowledge of various metals and their weldability. Anyone involved with welding will benefit from better understanding of welding with different metals. Students will learn the basic principles of metal properties, heat input, preheating, postheating, selecting filler metals plus many more topics including:

- Welding stainless steels
- Welding tool and die steels
- Welding aluminum alloys
- · Welding magnesium alloys
- · Welding cast iron
- Hard surfacing
- Metals identification for welding
- Welding carbon and low alloy steels

The course consists of 4 main topics:

- 1. The Metallurgy & Weldability of Carbon Steel
- 2. The Welding Characteristics of Stainless Steel and Tool Steels
- 3. The Welding Characteristics of Aluminum and Magnesium
- 4. Welding Cast Iron and Hard Surfacing Welds

Each topic contains slide segments, video segments and quizzes. The total running time for the video segments is approximately 60 minutes. Once you have completed the 4 topic quizzes and achieved at least a 76% you will then be able to generate a certificate of completion.

OL-007 Welding Procedures & Qualification .4 CEU \$89.00 SELF-PACED

This course concentrates on the steps typically followed when developing and qualifying Welding Procedure Specifications (WPS). Additionally, welder and welding operator performance qualification will be discussed.

Contains 1 main topic covering welding codes, procedures, and welder qualification plus 5 video segments totaling a run time of 25 minutes. Quizzes are provided to measure progress along the way with a final test to obtain a cerficate of completion.

At your own pace from your computer you will view videos and will be able to take (and retake) online competency exams.

Check us out on social media!



facebook.







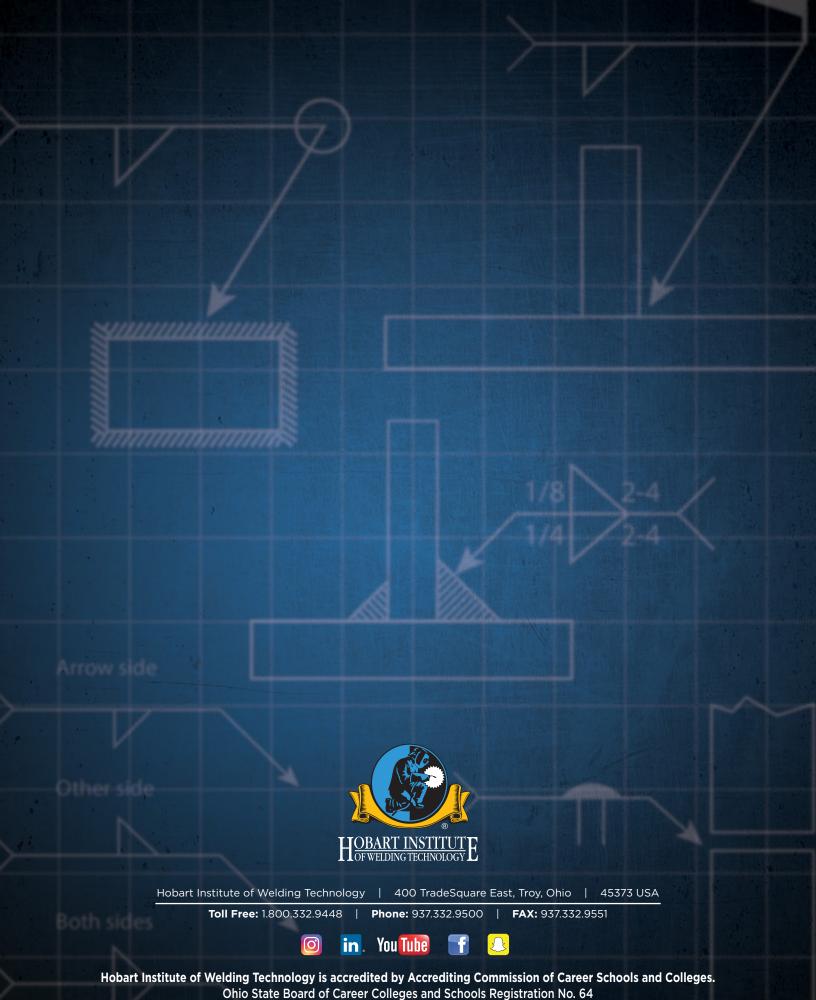
Linked in.







Snapchat



Hobart Institute of Welding Technology does not and will not discriminate on the basis of disability, race, color, religion, sex, national origin, or age.