

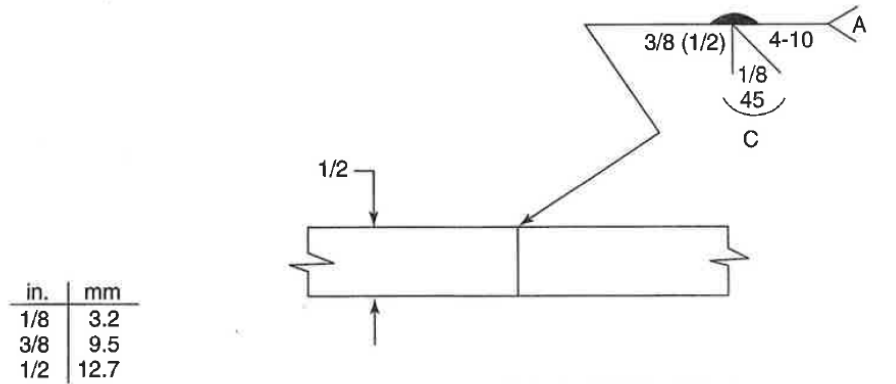
Welding Fundamentals I

April 13-17

This week your homework is to watch the youtube video "How to Read Weld Symbols-part 1".

The video is by Weld.com and is about 30 minutes long. After the video answer the question below using the chart as a reference to what you learned in the video.

1. Answer the following questions based on the information provided in the welding symbol:



Note A: GMAW, .030 wire.
Use company welding code #24

- A. Type of joint: _____
- B. Weld root opening size: _____
- C. Total groove angle: _____
- D. Beveled piece (left or right): _____
- E. Weld size: _____
- F. Welding process: _____
- G. Welding wire diameter: _____
- H. Welding code: _____
- I. Weld groove depth: _____
- J. Continuous or intermittent weld: _____
- K. Weld length: _____
- L. Pitch of welds: _____
- M. Bead contour shape: _____
- N. Weld finish: _____
- O. What does the melt-through symbol indicate? _____



American Welding Society Welding Symbol Chart

A2.1:1998
Second Printing

Location Significance	Flare	Plug or Slot	Spot or Projection	Stud	Seam	Back or Backing	Surfacing	Edge
Arrow Side								
Other Side				Not Used			Not Used	
Both Sides		Not Used	Not Used	Not Used		Not Used	Not Used	
No Arrow Side or Other Side Significance	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used

Location Significance	Square	V	Bevel	U	Groove	Flare-V	Flare-Bevel	Scarf for Brazed Joint
Arrow Side								
Other Side								
Both Sides								
No Arrow Side or Other Side Significance	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used

Supplementary Symbols				Location of Elements of a Welding Symbol			
Weld-All-Around	Flare Weld	Web-Thru	Consumable Insert	Finishing Symbol	Groove Angle	Indicated Angle of Countersink for Plug Welds	Plush (Distance Between Centers) of Segments
Backing/Spacer (Rectangular)	Flush or Flat	Convex	Concave	Groove Weld Size	Depth of Bevel	Size or Strength for Certain Welds	Plush (Center-to-Center Spacing) of Weld Segments
Back	Flare	Convex	Concave	Depth of Filing	Specification, Process, or Other Reference	Process	Plush (Center-to-Center Spacing) of Weld Segments
Back	Flare	Convex	Concave	Depth of Bevel	Specification, Process, or Other Reference	Process	Plush (Center-to-Center Spacing) of Weld Segments

Basic Joints		Identification of Arrow Side and Other Side Joint	
Butt Joint	Center Joint	Butt Joint	Center Joint
Lap Joint	Lap Joint	Lap Joint	Lap Joint
Edge Joint	Edge Joint	Edge Joint	Edge Joint

Where letter designations are to be included in the tail of the welding symbol, reference is made to Table 1, Letter Designations of Welding and Allied Processes and Their Variations, of AWS A2.4-98.

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Typical Welding Symbols		
Double-Flare Welding Symbol	Chain-Intermittent Flare Welding Symbol	Staggered Intermittent Flare Welding Symbol
Plug Welding Symbol	Back Welding Symbol	Backing Welding Symbol
Spot Welding Symbol	Stud Welding Symbol	Seam Welding Symbol
Square-Groove Welding Symbol	V-Groove Welding Symbol	Double-Bevel-Groove Welding Symbol
Symbol with Backspacing	Flare-V-Groove Welding Symbol	Flare-Bevel-Groove Welding Symbol
Multiple Reference Lines	Complete Joint Penetration	Edge Welding Symbol
Flush or Upset Welding Symbol	Web-Thru Symbol	Joint with Backing
Joint with Spacer	Flush Contour Symbol	Convex Contour Symbol

It should be understood that these charts are intended only as shop aids. The only complete and official presentation of the standard welding symbols is in AWS A2.4, Standard Symbols for Welding, Brazing, and Nondestructive Examination.