

Basic Welding Symbols and Their Location Significance									
Location Significance	Fillet	Plug or Slot	Spot or Projection	Stud	Seam	Back or Backing	Surfacing	Flange Corner	Flange Edge
Arrow Side									
Other Side				Not Used			Not Used		
Both Sides		Not Used	Not Used	Not Used	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
Groove									Scarf for Brazed Joint
Location Significance	SQUARE	V	Bevel	U	J	Flare-V	Flare-Bevel		
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		

Supplementary Symbols				Location of Elements of a Welding Symbol			
Weld-All Around	Field Weld	Melt-Thru	Consumable Insert	Backing Spacer	Contour		
					Flush	Convex	Concave

Basic Joints Identification of Arrow Side and Other Side Joint	
Butt Joint	Corner Joint

T-Joint	Lap Joint	Edge Joint	Process Abbreviations
			Where process abbreviations are to be included in the tail of the welding symbol, reference is made to Table 1, Designation of Welding and Allied Processes by Letters, of ANSI/AWS A2.4-93
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Typical Welding Symbols		
Double-Fillet Welding Symbol	Chain Intermittent Fillet Welding Symbol	Staggered Intermittent Fillet Welding Symbol
Weld size: 1/4, 1/16 Length: 6, 4 Omission of length indicates that weld extends between abrupt changes in direction or as dimensioned	Pitch (distance between centers) of increments: 5/16, 2-5, 7/16, 2-6 Size (length of leg): 1/2 Length of increments: 2-5, 2-6	Pitch (distance between centers) of increments: 1/2, 3-5 Size (length of leg): 1/2 Length of increments: 3-5
Plug Welding Symbol	Back Welding Symbol	Backing Welding Symbol
Included angle of countersink: 30° Size (diameter of hole, at root): 1, 3/4, 4 Pitch (distance between centers) of welds: 4 Depth of filling in inches (omission indicates filling is complete)	Back weld 2nd operation 1st operation	Backing weld 1st operation 2nd operation
Spot Welding Symbol	Stud Welding Symbol	Seam Welding Symbol
Size or strength: 025 Number of welds: (5) Pitch: 4 Process: RSW	Size: 1/2 Pitch: 6 Number of studs: (7)	Size or strength: 030 Increment length: 3-9 Pitch: 3-9 Process: RSEW
Square-Groove Welding Symbol	Single-V Groove Welding Symbol	Double-Bevel-Groove Welding Symbol
Weld size: (3/16), 1/4 Root opening: 1/4	Depth of bevel: 1/2, (1/2) Weld size: 1/2 Root opening: 1/8 Groove angle: 60°	Weld size: (1) Weld size: (1-1/4) Arrow points toward member to be prepared
Symbol with Backgouging	Flare-V-Groove Welding Symbol	Flare-Bevel-Groove Welding Symbol
Depth of bevel: 3/8 Back gouge	Weld size: (1/4)	Weld size: (1/4)
Multiple Reference Lines	Complete Penetration	Edge Flange Welding Symbol
1st operation on line nearest arrow 2nd operation 3rd operation	Indicates complete joint penetration regardless of type of weld or joint preparation CJP	Radius: 3/64 + 1/16 Weld size: 1/16 Height above point of tangency
Flash or Upset Welding Symbol	Melt-Thru Symbol	Joint with Backing
Process reference: FW	Root reinforcement: 1/32	'R' Indicates backing removed after welding
Joint with Spacer	Flush Contour Symbol	Convex Contour Symbol
With modified groove weld symbol		
Double bevel groove		

* 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 A2.4.