

welding symbols

Type of weld	Arrow side	Other side	Both sides	No arrow side or other side significance
FILLET				NOT USED
PLUG OR SLOT			NOT USED	NOT USED
SPOT ON PROJECTION			NOT USED	NOT USED
SEAM			NOT USED	NOT USED
GROOVE	SQUARE			
	V			NOT USED
	BEVEL			NOT USED
	U			NOT USED
	J			NOT USED
	FLARE-V			NOT USED
FLARE BEVEL			NOT USED	NOT USED
BACK OR BACKING			NOT USED	NOT USED
SURFACING		NOT USED	NOT USED	NOT USED
FLANGE	EDGE		NOT USED	NOT USED
	CORNER		NOT USED	NOT USED

Supplementary welding symbols

FIELD WELD SYMBOL
Field Weld Symbol indicates that weld is to be made at a place other than that of initial construction.

WELD-ALL-AROUND SYMBOL
Weld-All-Around Symbol indicates that weld extends completely around the joint.

CONVEX-CONTOUR SYMBOL
Convex-Contour Symbol indicates face of weld to be finished to convex contour.

FLUSH-CONTOUR SYMBOL
Flush-Contour Symbol indicates face of weld to be made flush. When used without a finish symbol, indicates weld to be welded flush without subsequent finishing.

CONCAVE-CONTOUR SYMBOL
Concave-Contour Symbol indicates face of weld to be finished to concave contour.

Finish Symbol (user's std.)
indicates method of obtaining specified contour but not degree of finish.

DOUBLE-BEVEL GROOVE WELDING SYMBOL

Groove Angle—45°
Root Opening—1/8"
Omission of size dimension indicates a total depth of chamfering equal to thickness of members

PLUG WELDING SYMBOL

Size (Dia. of Hole at Root)
Depth of Filling in Inches
Included Angle of Countersink

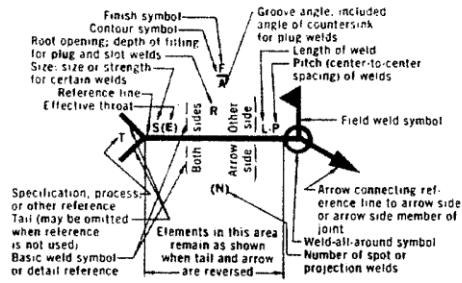
SLOT WELDING SYMBOL

Orientation Must be Shown on Drawing
Depth of Filling in Inches
Omission indicates Filling is Complete

SPOT WELDING SYMBOL

Size (diameter of weld) strength in lb. per weld may be used instead
Process reference may be used to indicate process desired
Pitch (distance between centers) of welds
Number of Welds

LOCATION OF INFORMATION ON WELDING SYMBOLS



typical welding symbols

UNEQUAL DOUBLE FILLET WELDING SYMBOL

Size (Length of Leg)
Desired Weld
Symbol

CHAIN INTERMITTENT-FILLET WELDING SYMBOL

Locate Welds at Ends of Joint
Length of Increments
Pitch (Distance Between Centers) of Increments
Desired Welds
Symbol

STAGGERED INTERMITTENT-FILLET WELDING SYMBOL

Locate Welds at Ends of Joint
Length of Increments
Pitch (Distance Between Centers) of Increments
Desired Welds
Symbol

SINGLE V-GROOVE WELDING SYMBOL

45°
Root Opening
Groove Angle
Desired Weld
Symbol

SINGLE V-GROOVE WELDING SYMBOL INDICATING ROOT PENETRATION

60°
Effective Throat
Groove Angle
Size Depth of Bevel Plus Root Penetration
Desired Weld
Symbol

USE OF BEAD WELD SYMBOL TO INDICATE SINGLE-PASS BACK WELD

Groove Weld Made Before Welding Other Side
Back Weld
Desired Weld
Symbol

DOUBLE V-GROOVE WELD INDICATING A SPACER IS TO BE USED

M—Material as specified
Note: Material and dimension of spacer as specified
Desired Weld
Symbol

SINGLE V-GROOVE WELD INDICATING A BACKING STRIP IS TO BE USED

Backing Strip
Desired Weld
M—Material as specified
MR—Same as M but removed after welding

SIZE OF SURFACE BUILT UP BY WELDING

Size (Height of Deposit)
Desired Weld
Symbol

SYMBOLS WITH MULTIPLE REFERENCE LINES

1st
2nd
3rd
First operation shown on reference line nearest arrow.
Second operation or supplementary data.
Third operation or text information.
Symbol

EDGE FLANGE WELD SYMBOL

1/8
Radius
Size of Weld
Height Above Point of Tangency
Symbol