

Characteristics and Applications:

HOBART 309LT1-1 is designed for 100% CO₂ gas shielding and all position welding. It is commonly used for welding similar alloys in wrought or cast forms, or used in dissimilar welding, such as low alloy steel, heat-resistant steel and clad steel.

Note on Usage:

1. Before welding, the base metal should be cleaned from oil, rusty, moisture and the welding place should have the proper protection from the wind.
2. Use 99.8% purity or higher CO₂ shielding gas.
3. Keep dry while in storage and delivery.

Typical Chemical Composition of Weld Metal (wt%)

	C	Mn	Si	P	S	Cr	Ni	Mo	Cu
AWS	≤ 0.04	0.5-2.5	≤ 1.0	≤ 0.04	≤ 0.03	22.0-25.0	12.0-14.0	≤ 0.75	≤ 0.75
EN ISO	≤ 0.04	≤ 2.5	≤ 1.2	≤ 0.030	≤ 0.025	22.0-25.0	11.0-14.0	≤ 0.3	≤ 0.5
Typical value	0.026	1.40	0.55	0.021	0.008	24.07	12.78	0.08	0.12

Typical Mechanical Properties of Weld Metal

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -46°C (-51°F)
AWS	-	≥ 520(75)	≥ 30	-
EN ISO	≥ 320(46)	≥ 510(74)	≥ 25	-
Typical value	420(61)	546(79)	36	42(31)

Welding Position



Sizes and Recommended Operating Range (DC<+>)

Stick Out:15-20(mm), Flow Rate:20-25(l/min)

Diameter (mm)		1.2	1.6
Position			
F, HF		130A-220A/24V-33V	200A-300A / 27V-35V
H		140A-180A/25V-29V	200A-300A / 27V-35V
V-UP		130A-160A/24V-28V	160A-200A / 24V-27V
OH		150A-180A/25V-29V	--