



ChromaWeld™ 316LT1

AWS E316LT1-4/1

Replaces 051012

190-O Index: 100129

DESCRIPTION:

ChromaWeld 316LT1 is an austenitic stainless steel all-purpose gas-shielded flux-cored wire with low carbon used for joining Types 316, 316L, CF-8M and CF-3M stainless steels.

Features	Benefits
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| <ul style="list-style-type: none"> • All-position • Self-detaching slag • Spray-like arc transfer • High moisture resistance | <ul style="list-style-type: none"> • Welds extremely well in vertical (up) position, as well as flat & horizontal • Excellent welder appeal • Low spatter and less clean-up • Good weld soundness and extended shelf-life |
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SHIELDING GAS: 75% Ar-25% CO₂ or 100% CO₂
Polarity: DCEP

*Gas mixtures of more than 75-80% Argon is not recommended.

			TYPICAL WELD METAL CHEMISTRY*(Chem Pad):	
			Weld Metal	AWS Spec
Carbon (C)	0.028	0.04 max		
Chromium (Cr)	18.80	17.0-20.0		
Nickel (Ni)	12.60	11.0-14.0		
Molybdenum (Mo)	2.65	2.0-3.0		
Manganese (Mn)	1.25	0.5-2.5		
Silicon (Si)	0.55	1.0 max		
Iron (Fe)	Bal.	Bal.		

Tensile Strength	82,000 psi (565 MPa)	70,000 psi (485 MPa)	TYPICAL WELD METAL PROPERTIES* (AS WELDED): AWS Spec
Yield Strength	60,000 psi (414 MPa)	Not Required	
Elongation % in 2"	39%	30% min.	
DeLong Ferrite Number	9	Not Required	
Impact Values @ 32°F	42 ft•lbs.	Not Required	

CONFORMANCES AND APPROVALS:

- AWS A5.22 • ASME SFA 5.22, (F-6, A-8) • Lloyd's



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WELDING DATA:

The information listed below was determined by welding performed with DCEP welding current with 75% Ar-25% CO₂.

RECOMMENDED OPERATING PARAMETERS:

Diameter Electric Stickout Position	Arc Voltage (Volts)	Current DCEP (+) (Amps)	Approx. Wire Feed Speed (in/min)	Deposition Rate (lbs/hr)
.045 (1.2 mm) 5/8" - 3/4" (16 mm - 19 mm) Flat, Horizontal & Vertical Up	24 25-29 33	140 160-200 300	210 275-380 680	5.0 6.0-8.0 12.7
1/16" (1.6 mm) 3/4" - 1" (19 mm - 25.4 mm) Flat, Horizontal & Vertical Up	28 29-33 35	200 240-280 350	155 230-290 420	6.5 8.5-11.0 16.0

*When using CO₂ shielding gas, add 1-2 volts.

BOLD - Optimum parameters for welder appeal.

AVAILABLE DIAMETERS AND PACKAGES:

Inches	Diameter mm	28-lb. Spool
.045"	1.2	S688612-Z78
1/16"	1.6	S688619-Z78

CAUTION:

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 550 NW LeJune Road, Miami, FL 33126; OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

Material Safety Data Sheets on any McKay product may be obtained from McKay Customer Service. Because McKay is constantly improving products, McKay reserves the right to change design and/or specifications without notice.

ChromaWeld is trademark of Hobart Brothers Company, Troy, Ohio.