



Quality Management System
in accordance with
ISO 9001
Cert # 05-R0925

316LT1-1 Flux Cored Wire

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



ALLOY DESCRIPTION AND APPLICATION;

E316LT1-1/-4 is a flux cored wire for single or multi-pass welds on stainless steels. E316LT-1/-4 is noted for its low spatter generation, excellent bead shape and appearance and ease of slag removal. It has very good deposit efficiency when used for flat and fillet welds of medium and heavy thickness plates. It has been designed to be used with 100% CO₂ or 75-80% Argon + balance CO₂ mixed shield gas. E316LT1-1/-4 provides weld deposits with optimum ferrite content as its austenitic structure resulting in low susceptibility to cracking. The extra low carbon content of E316LT-1/-4 provides excellent resistance to inter-granular corrosion and stress corrosion cracking caused by carbide precipitation. E316LT1-1/-4 is used extensively in the fabrication of 18% Cr 12% Ni 2% Mo stainless steel structures, pressure vessels, tanks in dairy, pulp and paper, textile dyeing, refinery and chemical equipment. The extra low carbon content reduces carbide precipitation. E316LT1-1/-4 can be used to weld stainless steels of similar compositions when welds are required to meet higher corrosion resistance and higher creep strength requirements along with intergranular corrosion resistance requirements. E316LT0-1/-4 may be more fluid giving a flat to concave bead profile.

TYPICAL WELDING PROCEDURES; DCEP

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stickout	CO ₂ (cfh)
0.045"	215-550	140-380	23-35	1/2-1"	35-50
1/16"	125-615	150-410	24-36	5/8-1.25"	35-50

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.

CHEMISTRY (%) for Undiluted WELD METAL & PROPERTIES

	AWS Requirements) Typical			(AWS Requirements) Typical	
Carbon	0.04	0.03	Molybdenum	2.0-3.0	2.59
Manganese	0.05-2.5	0.75	Phosphorus	0.04	0.011
Silicon	1.00	0.75	Sulfur	0.03	0.010
Chromium	17.0-20.0	18.75	Nickel	11.0-14.0	12.30
		AWS Requirements		As Welded	
Tensile Strength (psi)		70,000 min.		86,600	
Yield Strength (psi)		N/A		68,750	
Elongation		30% min.		38%	

Iron balance and all single values are maximum percentages unless noted

AVAILABLE SIZES: TSF 316LT

Other sizes available – please inquire

SPECIFICATIONS; ANSI/AWS A5.22 E316LT0-1/-4 or E316LT1-1/-4
ASME SFA 5.22 E316LT0-1/-4 or E316LT1-1/-4
ASME F-6, A-8

T0 = flat and horizontal; T1 = all position: -1 is for 100% CO₂; -4 = 75-80 Ar / CO₂

EAST COAST	GULF COAST	WEST COAST
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