



**WA. ALLOY CO.**

WASHINGTON ALLOY'S Quality  
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Cert # 05-R0925

# USA 316L-16 Coated Electrode

U.S. ALLOY CO.  
dba Washington Alloy  
7010-G Reames Rd.  
Charlotte, NC 28216  
[www.weldingwire.com](http://www.weldingwire.com)



**American Welding Society**  
Sustaining Company Member



## ALLOY DESCRIPTION AND APPLICATION;

USA 316L electrodes produce weld deposits similar to that of USA 316, but with a maximum 0.04% carbon. This extra low carbon content gives the weld deposit excellent resistance against intergranular corrosion caused by carbide precipitation. USA 316L electrodes are used for welding 18% Cr – 12% Ni – 2.5% Mo stainless steels where the corrosion resistant qualities of AISI 316L are required. This electrode has a high deposition rate and produces a weld deposit with fine bead appearance and exceptional crack-resistance. USA 316L electrodes are most commonly used in the textile, paper, cellulose, and chemical equipment industries for the fabrication of 316L, 318 and 319L stainless steel products.

## TYPICAL WELDING PROCEDURES; DCEP & AC

Diameter	Amps	Diameter	Amps
1/16"	15-40	1/8"	75-110
5/64"	30-50	5/32"	100-140
3/32"	50-75	3/16"	160-200

Arc Length = short arc, Flat use 15° angle from 90°, Vertical up & Overhead use weaving techniques within puddle

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.  
When welding vertical reduce amperage 10-20%

## TYPICAL CHEMISTRY (%) & WELD METAL PROPERTIES

Carbon	0.030	Molybdenum	2.16
Manganese	1.25	Phosphorus	0.020
Silicon	0.48	Sulfur	0.012
Chromium	19.06	Nickel	12.12
	Elongation		46%
	Yield Strength (psi)		55,000
	Tensile Strength (psi)		80,000

Iron balance and all single values are maximum percentages

**AVAILABLE SIZES:** TF316L-16 = 1/16", 5/64", 3/32", 1/8", 5/32", 3/16"

**SPECIFICATIONS;** ANSI/AWS A5.4 E316L-16  
ASME SFA 5.4 E316L-16



2012 DC

**EAST COAST**  
7010-G Reames Rd  
Charlotte, NC 28216  
Tel (888) 522-8296  
Fax (704)598-6673

**GULF COAST**  
4755 Alpine Drive #100A  
Stafford, TX 77477  
Tel (877) 711-9274  
Fax (281)313-6332

**WEST COAST**  
8535 Utica Ave  
Rancho Cucamonga, CA 91730  
Tel(800)830-9033  
Fax (909)291-4586

Warehouse Distribution Center – Dayton, Ohio

Head Office – Puyallup, Washington

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