



USA 309L-16 Coated Electrode

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

WASHINGTON ALLOY'S Quality
Management System is
Certified to **ISO 9001:2008**
Cert # 05-R0925



ALLOY DESCRIPTION AND APPLICATION;

USA 309L-16 stainless steel electrodes are 24% chromium and 13% Nickel filler which is the same as 309, except for the reduced carbon amount. Low carbon alloys reduce the possibility of intergranular carbide precipitation while providing a good crack resistance. These all-position rods have easy strike and re-strike with spatter-free arc, self-releasing slag leaving a smooth bead appearance to slightly convex. 309L electrodes may also be a good choice when welding stainless to carbon steels.

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	0.025	Phosphorus	0.02
Manganese	1.64	Sulfur	0.009
Silicon	0.44	Nickel	13.00
Chromium	24.00		
	Elongation		38%
	Yield Strength (psi)		64,000
	Tensile Strength (psi)		86,000

Iron balance and all single values are maximum percentages

AVAILABLE SIZES: TF309L-16 = 1/16", 5/64", 3/32", 1.8", 5/32", 5/32"

SPECIFICATIONS; ANSI/AWS A5.4 E309L-16
ASME SFA 5.4 E309L-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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