



308L-HS Welding Wire and Rod

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;

308L-HS is a austenitic stainless steel used to weld base

metal of similar composition types such as AISI 201(17-4 Mn), 202(18-5 Mn), 205, 301(17-7), 302(18-8), 304(19-9), 305(18-10), 308(20-10) also the low carbon grades. The increased silicon provides better arc stability, smoother bead appearance and wetting while the low carbon reduces carbide precipitation (Tri-mix gas = 90%He+7.5%Ar+2.5%CO₂)

TYPICAL GMAW WELDING PROCEDURES; DCEP Short Circuit

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stick-out	Tri-mix (cfh)
0.023	180-400	30-85	14-19	3/8-1/2"	20-25
0.030	150-350	45-125	15-20	3/8-1/2"	20-25
0.035	120-330	60-150	16-22	3/8-1/2"	20-30
0.045	100-280	90-210	17-22	3/8-1/2"	25-30
<i>Spray 0.030</i>	<i>280-600</i>	<i>160-220</i>	<i>24-28</i>	<i>3/8-1/2"</i>	<i>(1)25-35</i>
<i>0.035</i>	<i>250-470</i>	<i>170-295</i>	<i>23-29</i>	<i>1/2-3/4"</i>	<i>(1)25-35</i>
<i>0.045</i>	<i>200-385</i>	<i>195-360</i>	<i>24-30</i>	<i>1/2-3/4"</i>	<i>(1)30-35</i>
<i>1/16"</i>	<i>110-200</i>	<i>210-380</i>	<i>25-31</i>	<i>1/2-3/4"</i>	<i>(1)35-40</i>

⁽¹⁾ 98%Ar
2%O₂

TYPICAL GTAW WELDING PROCEDURES; DCEN with EWTh-2 truncated conical tip

Filler Wire Size	Tungsten	Amps	Volts	Gas Cup Size	Argon (cfh)	Base thickness
1/16"	1/16"	80-150	12	3/8"	20	1/16-1/8"
3/32"	3/32"	150-250	12	3/8"	20	1/8- 3/16"
1/8"	1/8"	200-375	12	1/2"	25	1/4-1/2"

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

TYPICAL WIRE CHEMISTRY (%) & WELD METAL PROPERTIES

Carbon	0.01	Tensile Strength (psi)	86,500
Manganese	1.54	Yield Strength (psi)	59,000
Silicon	0.46	Elongation	41 %
Molybdenum	0.10		
Nickel	9.77	Phosphorus	0.022
Chromium	19.58	Sulfur	0.001
Copper	0.13	Nitrogen	0.034

AVAILABLE SIZES: TS308-HS = Spools of 023, 030, 035, 045, .052, 1/16

TT308-HS = Cut lengths of 023, 030, 035, 045, 1/16, 3/32, 1/8, 5/32. 3/16

Other sizes available – please inquire

SPECIFICATIONS; ANSI/AWS A5.9 ER308LSi
ASME SFA 5.9 ER308LSi

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



2012 DC

Warehouse Distribution Center – Dayton, Ohio

Head Office – Puyallup, Washington

Washington Alloy Company believes that all information and data given is correct. Use this information to assist in making your own evaluations or decisions and this information should not be mistaken as an expressed or implied warranty. U.S. ALLOY CO. assumes no liability for results or damages incurred from the use of any information contained herein, in whole or in part.