



E308LHS/LSI

Specifications / Certifications:

ANSI/AWS A5.9 ER308LSi
ASME SFA 5.9 ER308LSi

Features

- Ideal for welding base metals of similar composition, including AISI 201, 202, 205, 301, 302, 304, 305, and 308, and other low carbon grades.
- Higher silicon content offers improved arc stability and smooth bead formation.
- Better wetting ensures cleaner, more uniform welds.
- Low carbon content minimizes carbide precipitation, enhancing weld strength.
- Versatile and reliable for applications demanding high-quality, durable welds
- Perfect for high-performance jobs requiring corrosion resistance and toughness.

Technical Specifications

Typical Chemical Composition (%):

Chemical	C	Mn	Si	Mo	Ni	Cr	Cu	P	S	N
AWS	0.01	1.54	0.46	0.10	9.77	19.58	0.13	0.022	0.001	0.034

Typical Mechanical Properties:

	Tensile Strength (psi)	Yield Strength (psi)	Elongation
AWS	86,500 min psi	59,000 min psi	41% min

Recommended GMAW Weld Parameters:

Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stick-Out	Tri-mix Gas (cfh) (90%He + 7.5%Ar + 2.5%CO ₂)
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"	20-30
Spray					
Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stick-Out	98% AR, 2% O ₂
0.030"	280-600	160-220	24-28	3/8-1/2"	25-35
0.035"	250-470	170-295	23-29	1/2-3/4"	25-35
0.045"	200-385	195-360	24-30	1/2-3/4"	30-35
1/16"	110-200	210-380	25-31	1/2-3/4"	35-40

Recommended GTAW Weld Parameters (DCEN with 2% Thoriated Tungsten truncated conical tip):

Diameter	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	3/8"	20	1/4-1/2"

Diameters & Packages

Diameter		Lbs	Pkg
0.023"	23/1000"	2	Spool
		5	Spool
		10	Spool
		30	Spool
0.025"	1/40"	10	Tube
		30	Spool
0.030"	1/32"	1	Spool
		2	Spool
		10	Spool
		10	Tube
		25	Spool
		30	Spool
		33	Spool
0.035"	7/200"	1	Tube
		2	Spool
		10	Spool
		10	Tube
		25	Spool
		30	Spool
		33	Spool
0.045"	3/64"	1	Tube
		2	Spool
		5	Spool
		10	Spool
		10	Tube
		25	Spool
		30	Spool
		33	Spool
0.052"	13/250"	25	Spool
0.062"	1/16"	1	Tube
		5	Tube
		10	Tube
		30	Spool
0.093"	3/32"	1	Tube
		5	Tube
		10	Tube
		60	Coil
		330	Reel
0.125"	1/8"	1	Tube
		5	Tube
		10	Tube