



308LSi

DESCRIPTION: Weldcote Metals 308LSi, a stainless steel welding wire for TIG, MIG, and submerged arc welding. This wire is used to weld equipment made with 304 and 308 stainless grades. Welding speed is higher than 308 or 308L due to improved wettability of weld metal.

APPROVALS: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.9 Class ER308LSi. Approved by Canadian Welding Bureau.

CHEMICAL COMPOSITION

Carbon	0.030
Manganese	1.000-2.500
Silicon	0.650-1.000
Chromium	19.500-21.000
Nickel	9.000-11.000
Sulfur	0.020
Phosphorus	0.030
Molybdenum	0.300
Copper	0.300

MECHANICAL PROPERTIES

Tensile Strength	
86,500 PSI	600 MPA
Yield Strength	
59,000 PSI	410 MPA
Elongation	
39%	

WELDING PARAMETERS

a)	<u>MIG WELDING:</u>	Direct current; Electrode +Ve
	Shielding Gas	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO2
	Gas Flow	30 to 50 CFH
	Voltage	29 to 33
	Amperage	160/180 for .035" (0.9mm) 180/220 for .045" (1.14mm) 210/250 for .062" (1.6mm)
b)	<u>TIG WELDING:</u>	Direct Current; Electrode -Ve
	Shielding Gas	100% Argon
	Gas Flow	30 to 40 CFH
c)	<u>SUB-ARC WELDING:</u>	Direct Current; Electrode + Ve
	Voltage	29 to 32
	Amperage	300 to 350 for 3/32" (2.5mm) 400 to 550 for 1/8" (3.14mm) 500 to 650 for 5/32" (4.0mm)
	Speed of Welding	20 to 30 IPM (500 to 750mm)/min.