



## 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

<b>Tensile Strength</b>	
86,500 PSI	600 MPA
<b>Yield Strength</b>	
59,000 PSI	410 MPA
<b>Elongation</b>	
39%	

### WELDING PARAMETERS

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