



308L



Description:

Techniweld 308L has the same analysis as type 308 except the carbon content has been held to a maximum of .03% to reduce the possibility of intergranular carbide precipitation. Ideal for welding Types 304L, 321, and 47 stainless steels. This is a suitable wire for applications at cryogenic temperatures

Approvals:

Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.9 class ER308L. Approved by Canadian Welding Bureau.

CHEMICAL COMPOSITION

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

MECHANICAL PROPERTIES

Tensile Strength	
85,000 PSI	590 MPA
Yield Strength	
57,000 PSI	390 MPA
Elongation	40%

WELDING PARAMETERS

- a) **MIG WELDING:** 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) **TIG WELDING:** Direct Current; Electrode -Ve
 Shielding Gas 100% Argon
 Gas Flow 30 to 40 CFH
- c) **SUB-ARC WELDING:** 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.