



Unibraze 317L

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER317L UNS S31783

DESCRIPTION: Unibraze 317L is used for welding stainless steels with similar composition or 316/316L type materials. The higher molybdenum content offers high resistance to pitting and crevice corrosion. The low carbon makes the weld metal less susceptible to intergranular corrosion.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
.03 max	18.5- 20.5	13.0- 15.0	3.0- 4.0	1.0- 2.5	.30- .65	.03 max	.03 max	.75 max	6

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	84,500 psi (480 MPa)
Yield Strength	58,000 psi (400 MPa)
Elongation	35%

TYPICAL WELDING PARAMETERS:

	Shielding Gas	Gas Flow	Diameter	Voltage	Amperage
MIG	98/99% Ar +2/1% O 97%Ar + 3% CO ₂	30 to 50 CFH	.035" (.9mm)	26-29	160 /210
			.045" (1.14mm)	28-32	180/250
			.062" (1.6mm)	29-33	200/280
TIG	100% Ar		1/16" (1.6mm)	14-18	90/130
			3/32" (2.4mm)	15-20	120/175
			1/8" (3.2mm)	15-20	150/220
SUBARC	Suitable Flux		3/32" (2.4mm)	28-33	275/350
			1/8" (3.2mm)	29-32	350/450

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.