

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER308L UNS S30883

## **DESCRIPTION:**

Unibraze 308L is used for GTAW, GMAW, and SAW welding of 304L, 321, and 347 stainless steels with service temperatures below 700°F. Unibraze 308L has carbon content is .03% maximum to reduce the possibility of intergranular carbide precipitation. It is an excellent choice in general purpose applications where corrosion conditions are moderate.

## **TYPICAL CHEMISTRY:**

С	Cr	Ni	Мо	Mn	Si	Р	S	Ν	Cu	FN
.03	19.5-	9.0-	.75	1.0-	.30-	.03	.03		.75	8
max	22.0	11.0	max	2.5	.65	max	max		max	(WRC)

## **TYPICAL MECHANICAL PROPERTIES:**

Tensile Strength	88,500 psi (610MPa)		
Yield Strength	59,500 psi (410 MPa)		
Elongation	39%		
Charpy Impacts@-320°F	45 ft lbs		

## **TYPICAL WELDING PARAMETERS:**

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

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.

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