

# Unibraze 321

**CLASSIFICATIONS:** AWS A5.9/ASME SFA 5.9 Class ER321 UNS S32180

**DESCRIPTION:** Unibraze 321 is a 19.5% Chromium 9.5% Nickel with added Titanium that is used to weld Cr-Ni stainless steels of similar chemical composition. The addition of titanium increases the resistance to intergranular corrosion.

**TYPICAL CHEMISTRY:**

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Ti
.08	18.5-20.5	9.0-10.5	.75	1.0-2.5	.30-.65	.03	.03	.75	9xC-1.0

**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)	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

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.