



Unibraze 2209

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER2209 UNS S39209

DESCRIPTION: Unibraze 2209 is a corrosion resistant duplex stainless steel wire designed to weld 22% Cr duplex stainless steels such as UNS S31803 (2205). Unibraze 2209 provides high tensile and yield strength . The chemical composition results in a lower ferrite content than the base metal for improved weldability. Applications include pipe and fabrication work in offshore, gas and chemical industries.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	PREN
.03 max	21.5- 23.5	7.5- 9.5	2.5- 3.5	.50- 2.0	.90 max	.03 max	.03 max	.08- .20	.75 max	40 min

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	108,000 psi (740 MPa)
Yield Strength	93,000 psi (640 MPa)
Elongation	42%

TYPICAL WELDING PARAMETERS:

	Shielding Gas	Gas Flow	Diameter	Voltage	Amperage
MIG	Argon + 2-5% CO2	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	Argon with up to 2% Nitrogen		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.