Unibraze 385

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER385 UNS N08904

DESCRIPTION: Unibraze 385 (formerly 904L) is used for welding materials for the handling of sulfuric acid and many chloride containing media. Unibraze 385 also used to join 317L where improved corrosion resistance is required. Carbon, Sulfur , Phosphorus , and Silicon are specified at lower maximum levels to minimize weld metal hot cracking, and fissuring that are often encountered in fully austenitic weld metals while maintaining its corrosion resistance.

TYPICAL CHEMISTRY:

C-	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
.025 max	19.0-21.5	24.0-26.0	4.2-5.2	1.0-2.0	.50 max	.02 max	.03 max	.1.2-2.0	0

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	86,500 psi (600 MPa)
Yield Strength	59,500 psi (410 MPa)
Elongation	36%

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) .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