Unibraze 320LR

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER320LR UNS S08022

DESCRIPTION: Unibraze 320LR (low residual) is similar to Unibraze 320 however Carbon, Silicon, Phosphorus and Sulfur are specified at lower maximum levels and the Niobium and Manganese are controlled at tighter ranges. These changes reduce the weld metal hot cracking and fissuring (while maintaining the corrosion resistance) frequently encountered in fully austenitic stainless steel weld metals. Welding practices typically used for austenitic stainless steel weld metals containing ferrite can be used.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Nb+Ta	FN (WRC)
.025 max	19.0-21.0	32.0-36.0	2.0-3.0	1.0-2.0	.15 max	.015 max	.02 max	3.0-4.0	8xC min - .40 max	0

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	86,000 psi (590 MPa)
Yield Strength	57,500 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) .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

Unibraze Corporation 1050 Penner Crest Houston, TX 77055 1-800-364-6900 www.unibraze.com