Unibraze 310

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER310 UNS S31080

DESCRIPTION: Unibraze 310 is used for welding stainless of similar composition. The weld is fully austenitic and calls for low heat during welding. This filler metal can be used for dissimilar welding and works well in severe corrosive environments such as paper mill machinery**.**

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
.08-.15	25.0-28.0	20.0-22.5	.75 max	1.0-2.5	.30-.65	.03 max	.03 max	.75 max	0

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	89,500 psi (620MPa)
Yield Strength	60,500 psi (420 MPa)
Elongation	34%
Charpy Impacts@ RT	85 ft lbs. (115 J)

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