



Unibraze 625

CLASSIFICATIONS: AWS A5.14/ASME SFA 5.14 Class ERNiCrMo-3 UNS N06625

DESCRIPTION: Unibraze 625 is a low iron (less than 1%) bare nickel alloy with Cr, Mo and W a used for GTAW, GMAW and SAW welding of alloys 625, 825, 25-6Mo, as well as high alloy and super austenitic stainless steels, 9% Ni steels and various corrosion resistant alloys. Unibraze 625 offers resistance to stress corrosion cracking, pitting and crevice corrosion.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Fe	Cu	Nb + Ta	Al	Ti	Others
.10 max	20.0- 23.0	58 min	8.0- 10.0	.50 max	.50 max	.02 max	.015 max	5.0 max	.50 max	3.15- 4.15	.40 max	.40 max	.50 max

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	114,500 psi (790 MPa)
Yield Strength	85,000 psi (590 MPa)
Elongation	27%

TYPICAL WELDING PARAMETERS:

	Diameter	Voltage	Amperage	Shielding Gas
MIG	.035" (.9mm)	26-29	150/190	75% Ar/25% He
	.045" (1.14mm)	28-32	180/220	
	.062" (1.6mm)	29-33	200/250	
TIG	.035" (.9mm)	12-15	60-90	100% Ar
	.045" (1.14mm)	13-16	80-110	
	1/16" (1.6mm)	14-18	90-130	
	3/32" (2.4mm)	15-20	120-175	
	1/8" (3.2mm)	15-20	150-220	
SAW	3/32" (2.4mm)	28-30	275-350	Suitable Flux
	1/8" (3.2mm)	29-32	350-450	
	5/32" (4.0mm)	30-33	400-550	

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.