Unibraze 59

CLASSIFICATIONS: AWS A5.14 ERNiCrMo-13 UNS N06059

DESCRIPTION: Unibraze 59 is a 59% nickel 23% chromium 16% molybdenum wire with excellent corrosion resistance and high mechanical strength. It is used to weld low carbon Ni-Cr-Mo alloys, Ni-Cr-Mo alloys to steel and 625, 825, C22 (622) and C276 nickel alloys, and stainless steels. The low carbon and silicon content and the absence of Tungsten ensure that Unibraze 59 is not prone to grain-boundary precipitation during hot forming and welding. Applications for Unibraze 59 include scrubbers for flue gas desulphurization (FGD), digesters, chemical processing plants, papermaking equipment, corrosion resistant overlays and in severe offshore and petrochemical environments.

TYPICAL CHEMISTRY:

Ni	Cr	Mo	C	Si	Fe	S	Al	P	Mn	Others
59.0	23.0	16.0	.005	.005	.50	.003	.20	.01	.30	.50

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	**101,500 psi (700 MPa)**
Yield Strength	**58,000 psi (400 MPa)**
Elongation	**30%**

TYPICAL WELDING PARAMETERS:

	Shielding Gas	Current	Diameter	Voltage	Amperage
MIG	100%Argon or 75% Argon /25% Helium	Pulsed	.045” (1.14mm)	28	160
TIG	100% Argon	DC-	3/32” (2.4mm)	12	100

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.