



Unibraze 410NiMo (Modified)

CLASSIFICATIONS: EN ISO 14343
Similar to AWS A5.9 ER410NiMo (Modified Chemistry)

DESCRIPTION: Unibraze 410NiMo (Modified) is used to weld cast and wrought material of similar composition. Post weld heat treatment should not exceed 1150°F, as higher temperatures may result in rehardening due to untempered martensite in the microstructure after cooling at room temperature. The modified chemical composition contains increased Mn and Cr. Extra low carbon provides improved crack resistance and ductility over 410 base material.

CHEMICAL COMPOSITION OF WELD METAL (%)

	C	Cr	Ni	Mo	Mn	Si	P	S	Cu
Typical	.02	12.65	4.20	.56	.79	.40	.01	.01	.10

**Note: Call Unibraze at 1-800-364-6900 with inquiries for AWS 5.9 qualified material.*

TYPICAL MECHANICAL PROPERTIES

Tensile Strength	118,500 psi (820 MPa)
Yield Strength	92,000 psi (630 MPa)
Elongation	20%

TYPICAL WELDING PARAMETERS (DCEP)

	Diameter	Voltage	Amperage	Shielding Gas
MIG	.035" (.9mm)	29-33	160-180	99% Ar+1% CO ₂
	.045" (1.14mm)	29-33	180-220	
	.062" (1.6mm)	29-33	210-250	
TIG	1/16" (1.6mm)	14-18	90-130	Argon (100%)
	3/32" (2.4mm)	15-20	120-175	
	1/8" (3.2mm)	15-20	150-220	
SUBARC	3/32" (2.4mm)	28-30	275-350	Suitable Flux
	1/8" (3.2mm)	29-32	350-450	

Call for additional shielding gas and flux recommendations

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.