



Techalloy 410NiMo

Description

Techalloy 410NiMo is used primarily to weld cast and wrought material of similar chemical composition. Preheating and inter-pass temperatures of not less than 300°F are required. Post-weld heat treatment should not exceed 1150°F, as higher temperatures may result in hardening. Extra low carbon provides better protection against cracks and increased ductility over 410 filler metal.

NOTE: Mechanical properties listed below reflect utilization of post-weld heat treatment between 1100°F and 1150°F for one hour.

Specifications & Approvals

AWS A5.9 ER410NiMo

UNS S41086

ISO 14343:2009 (13 4)

CWB

Typical Chemical Composition

C	Mn	Si	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.02	.45	.40	11.8	.55	4.50			.009	.012		

Typical Mechanical Properties

Tensile Strength	118,500 PSI	820 MPA
Yield Strength	92,000 PSI	630 MPA
Elongation	20%	

Welding Parameters

	Shielding	Gas Flow	Diameter	Voltage	Amperage
Mig Welding	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO2	30 to 50 CFH	.035" (0.9mm)	26 to 29	160/210
			.045" (1.14mm)	28 TO 32	180/250
			.062" (1.6mm))	29 TO 33	200/280
Tig Welding	100% Argon				
Sub Arc Welding	Suitable flux may be used		3/32" (2.5mm)	28 to 33	275/350
			1/8" (3.14mm)	29 TO 32	350/450
			5/32" (4.0mm)	30 TO 33	400/550

Standard Packages:

Mig Wire– 33# wire basket	Tig Wire– 10# tube/30# Master Carton	SAW– 60# Coil
---------------------------	--------------------------------------	---------------