Techalloy® 410NiMo

AWS ER410

CONFORMANCES

AWS A5.9 ER410NiMo
UNS S41086
ISO 14343: 2009 (13 4)

Techalloy® 410NiMo is designed to weld materials of similar chemical composition in cast and wrought forms. This electrode is also used to overlay mild and low alloy steels. Preheat and inter-pass temperatures of not less that 300°F (150°C) are recommended during welding. Post-weld heat treatment should not exceed 1150°F (620°C) as higher temperatures may result in hardening.

Applications: Turbines, Valve bodies, High pressure piping, Offshore, Power generation

DIAMETERS / PACKAGING

Diameter in	(mm)	MIG WIRE 33 lb (14.9 kg) Wire Basket	TIG 10 lb (4.5 kg) 30 lb (13.6 kg) Master Carton	SAW WIRE 60 lb (27.2 kg) Coil
0.035	(0.9)	MG410NM035667		
0.045	(1.2)	MG410NM045667		
1/16	(1.6)		TG410NM062638	
3/32	(2.4)		TG410NM093638	
1/8	(3.2)			SA410NM125726

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DEPOSIT COMPOSITION

	%C	%Cr	%Ni	%Mo	%Mn
Requirements AWS ER410NiMo	0.06 max.	11.0 - 12.5	4.0 - 5.0	0.4 - 0.7	0.6 max.
Typical Performance Techalloy® 410NiMo	0.02	11.7	4.7	0.5	0.2
	%Si	**%P**	**%S**	**%Cu**	
Requirements AWS ER410NiMo	0.5 max.	0.03 max.	0.03 max.	0.75 max.	
Typical Performance Techalloy® 410NiMo	0.2	0.01	0.002	0.06	

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas
MIG	0.035 (0.9) 0.045 (1.2)	26-29 28-32	160-210 180-250	30-50 CFH	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO_2
TIG	1/16 (1.6) 3/32 (2.4)		60-85 120-175	20-40 CFH	100% Argon
SAW	1/8 (3.2)	29-32	350-450		Lincolnweld® P2007

Material Safety Data Sheets (MSDS) are available on our website at www.techalloy.com

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