



Tech-Rod 410NiMo

Description

Tech-Rod 410NiMo is designed to weld materials of similar chemical composition in cast and wrought forms. Preheat and inter-pass temperatures of not less than 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.

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

Specifications & Approvals

AWS A5.4 E410NiMo-16

UNS W41016

ISO 3581:2003 (13 4)

CWB

ASME QSC-395

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	N	S	P	Cu	FN
.03	.52	.45	BAL	12.10	.52	4.55		*	.019	.018		

* Nitrogen in these weld deposits is usually between .04% and .08%

Typical Mechanical Properties

Tensile Strength	110,500 PSI	800 MPA
Yield Strength	91,000 PSI	630 MPA
Elongation	17%	

Welding Parameters

Process	Diameter x Length	Voltage	Amperage	
			Flat	Vertical & Overhead
SMAW	3/32" (2.4mm) x 12" (305mm)	24-28	70-85	65-75
	1/8" (3.2mm) x 14" (355mm)	26-30	85-110	80-90
	5/32" (4.0mm) x 14" (355mm)	28-32	110-140	100-120
	3/16" (4.8mm) x 14" (355mm)	28-32	120-160	110-130

Standard Packages:

3/32" Diameter	8 Lb (3.6Kg) Can	24 Lb (10.9Kg) Master Carton	26 Electrodes per Lb
1/8" Diameter	10 Lb (4.5Kg) Can	30 Lb (13.6Kg) Master Carton	14 Electrodes per Lb
5/32" Diameter	10 Lb (4.5Kg) Can	30 Lb (13.6Kg) Master Carton	9 Electrodes per Lb
3/16" Diameter	10 Lb (4.5Kg) Can	30 Lb (13.6Kg) Master Carton	6 Electrodes per Lb