



Tech-Rod 112

Description: Tech-Rod 112 is a covered electrode which is used to weld nickel-chromium-molybdenum alloys. It is also used extensively in overlay cladding where similar chemical composition is required on the clad side. Its applications include dissimilar joints between nickel-chromium-molybdenum alloys to stainless steels, carbon or low alloy steels. These electrodes are used in applications where the temperature ranges from cryogenic up to 1800°F. The deposit chemistry is similar to a 625 solid wire.

Specifications & Approvals: AWS A5.11:2010 ENiCrMo-3

UNS W86112 ASME QSC-395 CWB FBTS ABS

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Ti	Al	Other
.03	.3	.3	1.5	21.5	9.0	63	3.5		.005	.005			

Typical Mechanical Properties

Tensile Strength	114,500 PSI	790 MPa
Yield Strength	89,500 PSI	620 MPa
Elongation	34%	

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