



## Tech-Rod Weld A

**Description:** Tech-Rod Weld A electrodes are used for welding of nickel-chromium-iron alloys to themselves as well as for dissimilar welding between various nickel alloys and carbon or stainless steels. These electrodes can also be used to overlay cladding where a similar composition is needed. These electrodes have wide applications ranging from cryogenic temperature up to 1500°F.

### Specifications & Approvals:

AWS A5.11:2010 ENiCrFe-2

UNS W86133

ASME QSC-395

CWB

### Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Ti	Al	Other
.03	2.5	.4	9.5	16.0	1.0	69	1.2		.005	.010			

### Typical Mechanical Properties

Tensile Strength	95,000 PSI	650 MPa
Yield Strength	61,000 PSI	420 MPa
Elongation	42%	

### 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