



Tech-Rod 99

Description: Tech-Rod 99 is designed for welding of gray iron castings to themselves as well as joining them to mild steel. It is also used extensively to repair castings. The welds are quite machinable. A preheat and interpass temperature of not less than 350°F is recommended during welding.

Specifications & Approvals:

AWS A5.15:2006 ENi-CI UNS W82001 QSC-395

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Ti	Al	Other
.5	.3	.5	1.5			97			.005	.015		.06	

Typical Mechanical Properties

Tensile Strength	60,000 PSI	414 MPa
Yield Strength	56,500 PSI	390 MPa
Elongation	5%	

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