



Tech-Rod 55

Description: Tech-Rod 55 is used for welding of cast irons to themselves as well as for joining cast irons to mild steels. It is also employed for the repair of castings. The welds are moderately hard and require carbide tipped tools for machining. A preheat and inter-pass temperature of not less than 350°F is required during welding.

Specifications & Approvals:

AWS A5.15:2006

ENiFe-CI

UNS W82002

ASME QSC-395

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Ti	Al	Other
.7	.5	.3	Rem			54			.006	.012		.01	

Typical Mechanical Properties

Tensile Strength	84,000 PSI	580 MPa
Yield Strength	59,500 PSI	410 MPa
Elongation	8%	

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