



# Tech-Rod 310

## Description

Tech-Rod 310 electrodes are used for welding stainless steels of similar composition in cast and wrought forms. The weld deposit is fully austenitic, and as such, calls for minimum heat input during welding.

## Specifications & Approvals

AWS A5.4 E3010-16

UNS W31010

ISO 3581:2003 (25 20)

CWB

ASME QSC-395

## Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.11	1.9	.52	BAL	26.2		20.95		*	.012	.016		0

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

## Typical Mechanical Properties

Tensile Strength	90,500 PSI	625 MPA
Yield Strength	61,500 PSI	425 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