



Tech-Rod 309L

Description

Tech-Rod 309L electrodes give a weld deposit similar to 309, with reduced carbon levels (.04% max) that offers increased resistance to inter-granular corrosion. Type 309L is ideal for joining stainless steels to themselves or to carbon or low alloy steels. Tech-Rod 309L is preferred to Tech-Rod 309 or cladding over carbon or low alloy steels, as well as dissimilar joints, which undergo heat treatment.

Specifications & Approvals

AWS A5.4 E309L-16

UNS W30913

ISO 3581:2003 (23 12 L)

CWB

ASME QSC-395

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.08	1.7	.52	BAL	23.5		12.3		.05	.021	.024		8

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

Typical Mechanical Properties

Tensile Strength	88,500 PSI	555 MPA
Yield Strength	59,000 PSI	410 MPA
Elongation	36%	

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