



Tech-Rod 2209

Description

Tech-Rod 2209 is used to weld duplex stainless steels such as UNS Number N31803. The welds offer excellent resistance to stress corrosion, cracking and pitting. The microstructure of the weld metal consists of austenite and ferrite. The ferrite content of the weld metal will be lower than the ferrite content of type 2205 base metal. Welding of duplex stainless steels calls for controlled parameters to achieve specified mechanical and corrosion resistant properties.

Specifications & Approvals

AWS A5.4 E2209-16

UNS W39209

ISO 3581:2003 (22 9 3 N L)

CWB

ASME QSC-395

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.02	1.65	.52	BAL	22.4	3.3	8.9		.16				35 min

Typical Mechanical Properties

Tensile Strength	102,000 PSI	700 MPA
Yield Strength	87,000 PSI	600 MPA
Elongation	22%	

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