

Tech-Rod® 347

AWS E347-16

CONFORMANCES

AWS A5.4 E347-16

ASME SFA-A5.4 E347-16



Tech-Rod® 347 electrodes are niobium stabilized stainless steel electrodes used for the welding of types 347 and 321 stainless and stainless clad steels. The addition of niobium reduces intergranular corrosion in severe operating conditions.

Applications: Food processing, Pharmaceutical equipment

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	8 lb (3.6 kg) Tube 24 lb (10.9 kg) Master Carton	10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton
3/32 (2.4)	12 (305)	EL34716093632	
1/8 (3.2)	14 (355)		EL34716125634
5/32 (4.0)	14 (355)		EL34716156634
3/16 (4.8)	14 (355)		EL34716187634

DEPOSIT COMPOSITION

	%C	%Cr	%Ni	%Mo	%Nb+Ta	%Mn
Requirements AWS E347-16	0.08 max.	18.0 - 21.0	9.0 - 11.0	0.75 max.	8 x C to 1.00 max.	0.5 - 2.5
Typical Results Tech-Rod® 347	0.03	19.5	10.1	0.19	0.36	1.5
	%Si	%P	%S	%Cu	FN	
Requirements AWS E347-16	1.00 max.	0.04 max.	0.03 max.	0.75 max.	Not Required	
Typical Results Tech-Rod® 347	0.54	0.02	0.01	0.16	5 - 10	

* Nitrogen in these weld deposits is usually between 0.04% and 0.08%

TYPICAL OPERATING PROCEDURES

Diameter in (mm)	Length in (mm)	Amperage	
		Flat	Vertical & Overhead
3/32 (2.4)	12 (305)	70-85	65-75
1/8 (3.2)	14 (355)	85-110	80-90
5/32 (4.0)	14 (355)	110-140	100-120
3/16 (4.8)	14 (355)	120-160	110-130

Material Safety Data Sheets (MSDS) are available on our website at www.techalloy.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

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