

TECH-ROD® 141

Nickel ▪ AWS ENi-1

KEY FEATURES

- Q2 Lot® - certificates showing actual deposit composition available online
- High nickel alloy

CONFORMANCES

AWS A5.11/A5.11M: 2010 ENi-1
ASME SFA-A5.11 ENi-1
UNS W82141

TYPICAL APPLICATIONS

- Used for joining Cu-Ni to stainless steels
- Welding of cast and wrought forms of pure Nickel alloys

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	8 lb (3.6 kg) Can 24 lb (10.9 kg) Master Carton	10 lb (4.5 kg) Can 30 lb (13.6 kg) Master Can
3/32 (2.4)	12 (305)	EL141093632	EL141125634 EL141156634 EL141187634
1/8 (3.2)	14 (355)		
5/32 (4.0)	14 (355)		
3/16 (4.8)	14 (355)		

MECHANICAL PROPERTIES - As Required per AWS A5.11/A5.11M: 2010

	Tensile Strength Mpa (ksi)	Elongation %
Requirements AWS A5.11/A5.11M:2010	410 (60 min)	20 min
Typical Performance Tech-Rod® 141	430 (63)	21

DEPOSIT COMPOSITION⁽¹⁾ - As Required per AWS A5.11/A5.11M: 2010

	%C	%Mn	%Fe	%P	%S	%Si
Requirements AWS ENi-1	0.10 max	0.75 max	0.75 max	0.03 max	0.02 max	1.25 max
Typical Performance⁽²⁾ Tech-Rod® 141	0.02	0.30	0.40	0.01	0.01	0.48
	%Cu	%Ni	%Ti	%Al	%Other	
Requirements AWS ENi-1	0.25 max	92.0 min	1.0 - 4.0	1.0 max	0.50 max.	
Typical Performance⁽²⁾ Tech-Rod® 141	0.01	96.7	1.2	0.03	-	

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

⁽¹⁾Typical all wire chemistry. ⁽²⁾See test results disclaimer on pg. 13.
 Safety Data Sheets (SDS) are available on our website at www.lincolnelectric.com

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.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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Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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