TECH-ROD® 112LFE

Nickel ▪ AWS ENiCrMo-3

KEY FEATURES

- A low iron version of the standard Tech-Rod® 112 covered electrode which is used to weld nickel-chromium-molybdenum alloys
- The product is designed to have less than 1% Iron (Fe) for overlay applications to minimize dilution of parent metal iron in the deposit

CONFORMANCES

AWS A5.11/A5.11M: 2010	ENiCrMo-3
UNS	W86112
ASME SFA-5.11	ENiCrMo-3

DIAMETERS / PACKAGING

Diameter in	(mm)	Length in (mm)	10 lb (4.5 kg) Can 30 lb (13.6 kg) Master Can
1/8	(3.2)	14 (355)	EL112LFE125634
5/32	(4.0)	14 (355)	EL112LFE156634
3/16	(4.8)	14 (355)	EL112LFE187634

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

	Tensile Strength Mpa (ksi)	Elongation %
Requirements		
AWS A5.11/A5.11M:2010	690 (110 min)	30 min
Typcial Performance		
Tech-Rod® 112LFe	770 (111)	42

DEPOSIT COMPOSITION[1] *- As Required per AWS A5.11: 2010*

	%C	%Mn	%Fe	%P	%S	%Si
Requirements						
AWS ENiCrMo-3	0.10 max	1.0 max	7.0 max	0.03	0.02 max	0.75 max
Typcial Performance[2]						
Tech-Rod® 112LFe	0.02	0.5	0.9	0.01	0.01	0.3
	%Cu	**%Ni**	**%Cr**	**%Nb+Ta**	**%Mo**	**%Other**
Requirements						
AWS ENiCrMo-3	0.50 max	55.00 min	20.0 - 23.0	3.15 - 4.15	8.0 - 10.0	0.50 max
Typcial Performance[2]						
Tech-Rod® 112LFe	0.01	62.7	22.5	3.72	8.7	–

TYPICAL OPERATING PROCEDURES

Diameter in (mm)	Length in (mm)	Amperage	
		Flat	Vertical & Overhead
1/8 (3.2)	14 (355)	85-110	80-90
5/32 (4.0)	14 (355)	110-140	110-120
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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Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

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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