

SUPERCORE® 625P

Nickel ▪ AWS ENiCrMo3T1-4

KEY FEATURES

- Smooth all position weldability
- Vacuum sealed foil package
- Excellent slag removal
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

SHIELDING GAS

75-80% Argon / Balance CO₂
100% CO₂

CONFORMANCES

AWS A5.34/A5.34M (R2007) ENiCrMo3T1-4
UNS W86625

TYPICAL APPLICATIONS

- Furnace Equipment
- Petrochemical
- 9% Ni for LNG storage tanks
- Dissimilar welds between Nickel alloys, stainless steels, and mild steel.

DIAMETERS / PACKAGING

Diameter mm (in)	15 kg (33 lb) Spool
1.2 (0.047)	ED034130, SC625P-12*

*The Metrode part number will be replacing the current EDO numbers after the inventory has been depleted.

MECHANICAL PROPERTIES⁽¹⁾ - As Required per AWS A5.34

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @ 20 °C (68 °F)
Requirements AWS ENiCrMo3T1-4	–	690 min	25 min	–
Typical Results As-Welded	500	770	46	95

DEPOSIT COMPOSITION⁽¹⁾ - As Required per AWS A5.34

	%C	%Mn	%Si	%S	%P	%Cr
Requirements AWS ENiCrMo3T1-4	0.10 max	0.50 max	0.50 max	0.015 max	0.02 max	20.0 - 23.0
Typical Results⁽³⁾	0.02	0.30	0.20	0.005	0.005	21.0
	%Ni	%Mo	%Nb	%Cu	%Ti	%Fe
Requirements AWS ENiCrMo3T1-4	58.0 min	8.0 - 10.0	3.15 - 4.15	0.50 max	0.40 max	5.0 max
Typical Results⁽³⁾	66.0	8.50	3.40	0.02	0.20	0.5 max

TYPICAL OPERATING PROCEDURES

Diameter in (mm)	Voltage (volts)	Amperage	Typical	Stickout in (mm)
1.2 (0.047) DC+	25 - 28V	150 - 180A	160A, 26V	5/8-1" (15-20 mm)

⁽¹⁾Typical all weld metal. ⁽²⁾Measured with 0.2% offset. ⁽³⁾See test results disclaimer
NOTE: Additional test data available upon request.

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

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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