TECHALLOY® 276

Nickel ▪ AWS ERNiCrMo-4

KEY FEATURES

- Used for welding materials of similar composition
- Due to high molybdenum content, this alloy offers excellent resistance to stress corrosion cracking, pitting and crevice corrosion
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011	ERNiCrMo-4
UNS	N10276

TYPICAL APPLICATIONS

- Low carbon, nickel-chromium-molybdenum filler metal can also be used for dissimilar welding between nickel base alloys and stainless steels for cladding
- Used in LNG applications

SHIELDING GAS

MIG 75% Ar / 25% He
TIG 100% Ar

DIAMETERS / PACKAGING

Diameter in (mm)	MIG 33 lb (15 kg) Steel Spool	MIG 250 lb (113.4 kg) Accu-Trak® Drum	TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton	SAW 55 lb (25 kg) Basket
0.035 (0.9)	MG276035667	MG276035684		
0.045 (1.1)	MG276045667			
1/16 (1.6)	MG276062667		TG276062638	
3/32 (2.4)			TG276093638	SA276093726
1/8 (3.2)			TG276125638	SA276125726
5/32 (4.0)			TG276156638	

WIRE COMPOSITION[1] - *As Required per AWS A5.14M: 2011*

	%C	%Mn	%Fe	%P	%S	%Si	%Cu
Requirements AWS ERNiCrMo-4	0.02 max	1.0 max	4.0 - 7.0	0.04 max	0.03 max	0.08 max	0.50 max
Typcial Performance[2] Techalloy® 276	0.01	0.5	5.8	0.01	0.002	0.01	0.01
	%Ni	**%Co**	**%Cr**	**%Mo**	**%V**	**%W**	**%Other**
Requirements AWS ERNiCrMo-4	Remainder	2.5 max	14.5 - 16.5	15.0 - 17.0	0.35 max	3.0 - 4.5	0.50 max
Typcial Performance[2] Techalloy® 276	58.0	0.07	15.5	16.0	0.04	4.0	<0.50

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9) 0.045 (1.1) 1/16 (1.6)	26-29 28-32 29-33	150-190 180-220 200-250	75% Argon / 25% Helium
SAW	3/32 (2.4) 1/8 (3.2)	28-30 29-32	275-350 350-450	Lincolnweld® P2007

[1]Typical all weld metal. [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

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.

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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