TECHALLOY® 606

Nickel ▪ AWS ERNiCr-3

KEY FEATURES

- Used for TIG, MIG and SAW welding of base materials such as ASTM B163, B166, B167 and B168 alloys which have UNS Number N06600
- Suitable for applications ranging from cryogenic to high temperatures making this alloy on of the most used in the nickel family
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011	ERNiCr-3
UNS	N06082

TYPICAL APPLICATIONS

- This filler metal can also be used for dissimilar welding applications between various nickel alloys and stainless or carbon steels, as well as for overlay

SHIELDING GAS

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

DIAMETERS / PACKAGING

Diameter in (mm)	MIG 33 lb (15 kg) Steel Spool	TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton	SAW 55 lb (25 kg) Coil
0.035 (0.9)	MG606035667		
0.045 (1.1)	MG606045667		
1/16 (1.6)	MG606062667	TG606062638	
5/64 (2.0)		TG606078638	
3/32 (2.4)		TG606093638	SA606093726
1/8 (3.2)		TG606125638	SA606125726
5/32 (4.0)		TG606156638	

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

	%C	%Mn	%Fe	%P	%S	%Si
Requirements AWS ERNiCr-3	0.10 max	2.5 - 3.5	3.0 max	0.03 max	0.015	0.50 max
Typical Performance[2] Techalloy® 606	0.04	2.8	1.5	0.003	0.002	0.09
	%Cu	**%Ni**	**%Ti**	**%Cr**	**%Nb + Ta**	**%Others**
Requirements AWS ERNiCr-3	0.50 max	67.0 min	0.75 max	18.0 - 22.0	2.0 - 3.0	0.50 max
Typical Performance[2] Techalloy® 606	0.03	73.0	0.40	20.0	2.4	<0.50

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9)	26-29	150-190	75% Argon / 25% Helium
	0.045 (1.1)	28-32	180-220	
	1/16 (1.6)	29-33	200-250	
SAW	3/32 (2.4)	28-30	275-350	Lincolnweld® P2000
	1/8 (3.2)	29-32	350-450	

[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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