



## Certificate of Conformance to Requirements for Welding Electrode

**Product Type:** HOBART 447A  
**Classification:** E6013  
**Specifications:** AWS A5.1/A5.1M; ASME SFA 5.1  
**Diameter Tested:** 1/8", 5/32"  
**Date Tested:** 4/23/2025  
**Date Generated:** 10/9/2025

This is to certify that the product named above and supplied on the referenced order number is of the same classification, manufacturing process, and material requirements as the material which was used for the test that was concluded on the date shown, the results of which are shown below. All tests required by the specifications shown for classification were performed at that time and the material tested met all requirements. It was manufactured and supplied by the Quality System Program of Hobart Brothers, which meets the requirements of ISO 9001, ANSI/AWS A5.01, and other specification and Military requirements, as applicable. This document supplies actual test results of non-specific inspection in conformance with the requirements of EN 10204, type 2.2 certification.

**MADE IN THE U.S. OF U.S. AND IMPORTED MATERIALS.**

### Test Settings

Size	Polarity	Amps	Volts	Preheat F(C)	Interpass F(C)
1/8X14 in	AC	125	27	225 (107)	300 (149)
1/8X14 in	DCEN	110	27	225 (107)	300 (149)
5/32X14 in	DCEN	145	25	225 (107)	350 (177)
5/32X14 in	AC	150	25	225 (107)	350 (177)

### Mechanical Properties - Tensile

Size / Polarity	Ref. No.	Testing Conditions	Ult. Tensile Strength psi(MPa)	Yield Strength psi(MPa)	Elong. % in 2"
1/8X14 in / AC	PE9648	Aged 48 Hrs 220F	81,000 ( 557 )	69,000 ( 476 )	<b>24</b>
1/8X14 in / DCEN	PE9810	Aged 48 Hrs 220F	78,000 ( 535 )	66,000 ( 455 )	<b>26</b>
5/32X14 in / DCEN	PF0284	Aged 48 Hrs 220F	72,000 ( 497 )	62,000 ( 431 )	<b>26</b>
5/32X14 in / AC	PF0290	Aged 48 Hrs 220F	74,000 ( 513 )	64,000 ( 445 )	<b>22</b>

Size / Polarity	Ref. No.	Radiograph	Fillet Weld Test			
1/8X14 in / AC	PE9648	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
1/8X14 in / DCEN	PE9810	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
5/32X14 in / DCEN	PF0284	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
5/32X14 in / AC	PF0290	Conforms	Horizontal :	Overhead :	Vertical :	Conforms

### Chemical Analysis

Size / Polarity / Ref. No.	C	Mn	P	S	Si	Cu	Cr	V	Ni	Mo	Al	Ti	Nb	Co	B	W	Sn	Fe	Sb	N	Mg	Zn	Be	Sb	As
1/8X14 in / AC / PE9648	0.10	0.42			0.40		0.06	0.01	0.08	0.01															
1/8X14 in / DCEN / PE9810	0.09	0.37			0.35		0.05	0.01	0.09	0.01															
5/32X14 in / DCEN / PF0284	0.08	0.37			0.32		0.05	0.01	0.07	< .01															
5/32X14 in / AC / PF0290	0.09	0.39			0.41		0.06	0.01	0.08	< .01															

James A. Owens, Q.A. Specialist

Certification and Limited Warranty - Data for the above supplied product are those obtained when welded and tested in accordance with the above specification. All tests for the above classification were satisfied. Other tests and procedures may produce different results.