



**Certificate of Conformance
to Requirements for Welding Electrode**

Hobart

Product Type: Hobart 447C
 Classification: E6013
 Specifications: AWS A5.1/A5.1M:2012
 Diameter Tested:
 Date Tested: 9/30/2016
 Date Generated: 12/1/2016

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 ISO9000, ANSI/AWS A5.01, and other specification and Military requirements, as applicable.

Test Settings

Amps	Volts	Size	Polarity	Preheat	Interpass	Travel Speed
140	20	1/8X14 in	AC	300 F (149 C)	350 F (177 C)	+ - 1 in/min
140	20	1/8X14 in	DCEN	300 F (149 C)	350 F (177 C)	+ - 1 in/min
170	23	5/32X14 in	AC	300 F (149 C)	350 F (177 C)	+ - 1 in/min
170	23	5/32X14 in	DCEN	300 F (149 C)	350 F (177 C)	+ - 1 in/min

Mechanical Properties - Tensile

Size / Polarity	Ref. No.	Testing Conditions	Ult. Tensile Strength	Yield Strength	Elong.% in 2"
1/8X14 in / AC	PD0816	Aged 48 Hrs 220F	78,000 psi (538 Mpa)	66,000 psi (454 Mpa)	25
1/8X14 in / DCEN	pd0817	Aged 48 Hrs 220F	73,000 psi (505 Mpa)	60,000 psi (417 Mpa)	23
5/32X14 in / AC	PD2232	Aged 48 Hrs 220F	74,000 psi (509 Mpa)	66,000 psi (453 Mpa)	21
5/32X14 in / DCEN	PD2233	Aged 48 Hrs 220F	73,000 psi (503 Mpa)	65,000 psi (448 Mpa)	25

Size / Polarity	Ref. No.	Radiograph	Fillet Weld Test			
1/8X14 in / AC	PD0816	Conforms	Horizontal :	Overhead :	Conforms	Vertical : Conforms
1/8X14 in / DCEN	PD0817	Conforms	Horizontal :	Overhead :	Conforms	Vertical : Conforms
5/32X14 in / AC	PD2232	Conforms	Horizontal :	Overhead :	Conforms	Vertical : Conforms
5/32X14 in / DCEN	PD2233	Conforms	Horizontal :	Overhead :	Conforms	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
1/8X14 in / DCEN / PD0817	0.08	0.37			0.23		0.02	0.01	0.07	0.01													
5/32X14 in / DCEN / PD2233	0.08	0.40			0.29		0.03	0.01	0.01	< .01													

Dave A. Thomas

Dave Thomas , Quality Assurance Rep.

The information 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. Hobart Brothers produces welding consumables under continuing quality assurance programs audited and approved by the American Bureau of Shipping ("ABS").