



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

Hobart

Product Type: 308/308L Sterling AP
 Classification: E308-16/E308L-16
 Specifications: AWS A5.4, ASME SFA 5.4
 Diameter Tested:
 Date Tested: 11/09/2015
 Date Generated: 7/22/2016

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
120	24	1/8X14 in	AC	rmt F (C)	300 F (149 C)	+ - 1 in/min
105	25	1/8X14 in	DCEP	rmt F (C)	300 F (149 C)	+ - 1 in/min
140	26	5/32X14 in	DCEP	250 F (121 C)	300 F (149 C)	+ - 1 in/min
140	26-29	5/32X14 in	DCEP	250 F (121 C)	300 F (149 C)	+ - 1 in/min
180	25	3/16X14 in	AC	250 F (121 C)	300 F (149 C)	+ - 1 in/min
160	25	3/16X14 in	DCEP	250 F (121 C)	300 F (149 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	PC7686	As Welded	86,000 psi (596 Mpa)	59,000 psi (409 Mpa)	49
1/8X14 in / DCEP	PC7687	As Welded	87,000 psi (603 Mpa)	60,000 psi (416 Mpa)	43
3/16X14 in / AC	PC7690	As Welded	83,000 psi (570 Mpa)	59,000 psi (405 Mpa)	45
3/16X14 in / DCEP	PC7691	As Welded	82,000 psi (567 Mpa)	58,000 psi (403 Mpa)	47
5/32X14 in / DCEP	PC7688	As Welded	84,000 psi (581 Mpa)	61,000 psi (421 Mpa)	42
5/32X14 in / DCEP	pc7689	As Welded	84,000 psi (581 Mpa)	60,000 psi (417 Mpa)	37

Size / Polarity	Ref. No.	Radiograph	Fillet Weld Test			
1/8X14 in / AC	PC7686	Conforms	Horizontal : Conforms	Overhead : Conforms	Vertical : Conforms	Vertical : Conforms
1/8X14 in / DCEP	PC7687	Conforms	Horizontal : Conforms	Overhead : Conforms	Vertical : Conforms	Vertical : Conforms
3/16X14 in / AC	PC7690	Conforms	Horizontal : Conforms	Overhead :	Vertical :	Vertical :
3/16X14 in / DCEP	PC7691	Conforms	Horizontal : Conforms	Overhead :	Vertical :	Vertical :
5/32X14 in / DCEP	PC7688	Conforms	Horizontal :	Overhead : Conforms	Vertical : Conforms	Vertical : Conforms
5/32X14 in / DCEP	PC7689	Conforms	Horizontal :	Overhead : Conforms	Vertical : 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 / AC / PC7686	0.043	1.241	0.032	0.007	0.691	0.085	19.155		10.022	0.110													
1/8X14 in / DCEP / PC7687	0.035	1.229	0.029	0.008	0.649	0.084	19.291		9.880	0.116													
5/32X14 in / DCEP / PC7688	0.043	1.199	0.029	0.010	0.627	0.093	19.333		9.890	0.097													
5/32X14 in / DCEP / PC7689	0.030	1.200	0.030	0.009	0.673	0.083	19.269		10.143	0.113													
3/16X14 in / AC / PC7690	0.030	1.152	0.028	0.008	0.651	0.085	19.179		10.037	0.136													
3/16X14 in / DCEP / PC7691	0.030	1.210	0.028	0.008	0.641	0.090	19.095		10.298	0.180													

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").