



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

Hobart

Product Type: 316/316L Sterling AP
 Classification: E316L-16 E316-16
 Specifications: AWS A5.4, ASME SFA 5.4 EN10204 3.1
 Diameter Tested:
 Date Tested: 12/28/2015
 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	25	1/8X14 in	AC	250 F (121 C)	300 F (149 C)	+/- 1 in/min
110	25	1/8X14 in	DCEP	250 F (121 C)	300 F (149 C)	+/- 1 in/min
150	26	5/32X14 in	AC	250 F (121 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
180	26	3/16X14 in	AC	250 F (121 C)	250 F (121 C)	+/- 1 in/min
160	26	3/16X14 in	DCEP	250 F (121 C)	250 F (121 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	PC7696	As Welded	79,000 psi (547 Mpa)	46,000 psi (316 Mpa)	42
1/8X14 in / DCEP	PC7697	As Welded	79,000 psi (544 Mpa)	57,000 psi (390 Mpa)	42
5/32X14 in / AC	PC7698	As Welded	80,000 psi (550 Mpa)	61,000 psi (421 Mpa)	37
5/32X14 in / DCEP	PC7699	As Welded	79,000 psi (547 Mpa)	60,000 psi (410 Mpa)	41
3/16X14 in / AC	pd0151	As Welded	79,000 psi (544 Mpa)	62,000 psi (424 Mpa)	41
3/16X14 in / DCEP	pd0152	As Welded	80,000 psi (552 Mpa)	64,000 psi (439 Mpa)	41

Size / Polarity	Ref. No.	Radiograph	Fillet Weld Test			
1/8X14 in / AC	PC7696	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
1/8X14 in / DCEP	PC7697	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
5/32X14 in / AC	PC7698	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
5/32X14 in / DCEP	PC7699	Conforms	Horizontal :	Overhead :	Vertical :	Conforms
3/16X14 in / AC	PD0151	Conforms	Horizontal : Conforms	Overhead :	Vertical :	
3/16X14 in / DCEP	PD0152	Conforms	Horizontal : Conforms	Overhead :	Vertical :	

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 / PC7696	0.03	1.18	0.030	0.010	0.63	0.10	17.63		13.05	2.02													
1/8X14 in / DCEP / PC7697	0.04	1.32	0.029	0.009	0.60	0.10	17.60		13.53	2.00													
5/32X14 in / AC / PC7698	0.03	1.19	0.028	0.009	0.62	0.09	17.44		13.15	2.37													
5/32X14 in / DCEP / PC7699	0.04	1.26	0.029	0.010	0.58	0.09	17.80		12.84	2.51													
3/16X14 in / AC / PD0151	0.03	1.09	0.027	0.008	0.58	0.10	18.09		12.05	2.30													
3/16X14 in / DCEP / PD0152	0.03	1.06	0.035	0.010	0.55	0.11	17.41		12.28	2.51													

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").