

Product Type: HOBART14A
 Classification: E7014
 Specifications: AWSA5.1/A5.1M:2004
 Diameter Tested:
 Date Tested: 04/02/07
 Date Generated: 3/3/2008

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 dates 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 9000, ANSI/AWSA 5.01, and other specification and Military requirements, as applicable.

Test Settings

Amps	Volts	Size	Polarity	Preheat	Interpass	Travel Speed
250	28	3/16X14in	AC	300F(149C)	300F(149C)	+1 in/min
220	28	3/16X14in	DCEN	300F(149C)	300F(149C)	+1 in/min
190	28-27	5/32X14in	AC	225F(107C)	300F(149C)	+1 in/min
185	28-27	5/32X14in	DCEN	225F(107C)	300F(149C)	+1 in/min

Mechanical Properties-Tensile

Size/Polarity	Ref.No.	Testing Conditions	Ult. Tensile Strength	Yield Strength	Elong. % in 2"
5/32X14in/AC	PA5041	Aged 48Hrs 220F	80,000psi(550Mpa)	70,000psi(481Mpa)	21
5/32X14in/DCEN	PA5056	Aged 48Hrs 220F	78,000psi(539Mpa)	68,000psi(468Mpa)	23
3/16X14in/AC	PA4798	Aged 48Hrs 220F	78,000psi(541Mpa)	69,000psi(479Mpa)	24
3/16X14in/DCEN	PA4809	Aged 48Hrs 220F	76,000psi(522Mpa)	65,000psi(449Mpa)	25

Size/Polarity	Ref.No.	Radiograph	Fillet Weld Test			
5/32X14in/AC	PA5041	Conforms	Horizontal: Conforms	Overhead:	Vertical:	
5/32X14in/DCEN	PA5056	Conforms	Horizontal: Conforms	Overhead:	Vertical:	
3/16X14in/AC	PA4798	Conforms	Horizontal: Conforms	Overhead:	Vertical:	
3/16X14in/DCEN	PA4809	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
3/16X14in/DCEN/PA4809	0.065	0.47	0.01	0.01	0.30		0.06	0.01	0.09	0.02													
5/32X14in/DCEN/PA5056	0.074	0.47	0.01	0.01	0.27		0.06	0.02	0.05	0.01													



Steve Knostman, Quality Engineer



Guo Hao, R&D Engineer

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").