

Product Type: HOBART335A
 Classification: E6011
 Specifications: AWSA5.1/A5.1M:2004
 Diameter Tested:
 Date Tested: 11/13/07
 Date Generated: 2/12/2008

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
140	24	5/32X14in	DCEP	225F(107C)	300F(149C)	+1 in/min
150	27 1/2-26	5/32X14in	AC	225F(107C)	300F(149C)	+1 in/min
180	25	3/16X14in	DCEP	225F(107C)	350F(177C)	+1 in/min
190	25	3/16X14in	AC	275F(135C)	350F(177C)	+1 in/min

Mechanical Properties-Tensile

Size/Polarity	Ref.No.	Testing Conditions	Ult. Tensile Strength	Yield Strength	Elong. % in 2"
5/32X14in/DCEP	PA6565	Aged 48 Hrs 220F	82,000psi(564Mpa)	72,000psi(494Mpa)	23
5/32X14in/AC	PA6566	Aged 48 Hrs 220F	80,000psi(554Mpa)	67,000psi(462Mpa)	24
3/16X14in/DCEP	PA6567	Aged 48 Hrs 220F	78,000psi(534Mpa)	67,000psi(461Mpa)	26
3/16X14in/AC	PA6568	Aged 48 Hrs 220F	76,000psi(525Mpa)	66,000psi(452Mpa)	27

Mechanical Properties-Impact

Size/Polarity	Ref.No.	Testing Conditions	Test Temp.	Individuals	Average	Type
5/32X14in/DCEP	PA6565	As Welded	-20F(-29C)	46,50,41ft.lb	46ft.lb(62J)	Charpy-V-Notch
5/32X14in/AC	PA6566	As Welded	-20F(-29C)	49,46,47ft.lb	47ft.lb(64J)	Charpy-V-Notch
3/16X14in/DCEP	PA6567	As Welded	-20F(-29C)	53,59,58ft.lb	57ft.lb(77J)	Charpy-V-Notch
3/16X14in/AC	PA6568	As Welded	-20F(-29C)	58,50,54ft.lb	54ft.lb(73J)	Charpy-V-Notch

Size/Polarity	Ref.No.	Radiograph	Fillet Weld Test			
5/32X14in/DCEP	PA6565	Conforms	Horizontal:		Overhead: Conforms	Vertical: Conforms
5/32X14in/AC	PA6566	Conforms	Horizontal:		Overhead: Conforms	Vertical: Conforms
3/16X14in/DCEP	PA6567	Conforms	Horizontal:		Overhead: Conforms	Vertical: Conforms
3/16X14in/AC	PA6568	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
5/32X14in/DCEP/PA6565	0.16	0.74			0.37		0.08	0.01	0.08	0.01													
3/16X14in/DCEP/PA6567	0.12	0.65			0.30		0.08	0.01	0.07	<.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").