



Certificate of Conformance to Requirements for Welding Electrode

Hobart

Product Type: Rocket 7024
 Classification: E7024
 Specifications: AWS A5.1/A5.1M:2012
 Diameter Tested:
 Date Tested: 9/24/14
 Date Generated: 3/10/2015

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
200	31.5	5/32X14 in	AC	300 F (149 C)	350 F (177 C)	+ - 1 in/min
190	31.5	5/32X14 in	DCEN	300 F (149 C)	350 F (177 C)	+ - 1 in/min
210	34	3/16X18 in	AC	225 F (107 C)	350 F (177 C)	+ - 1 in/min
210	36	3/16X18 in	DCEN	225 F (107 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"
5/32X14 in / AC	pc2400	Aged 48 Hrs 220F	76,000 psi (524 Mpa)	66,000 psi (455 Mpa)	22
5/32X14 in / DCEN	pc2401	Aged 48 Hrs 220F	76,000 psi (522 Mpa)	68,000 psi (466 Mpa)	27
3/16X18 in / AC	PC4398	Aged 48 Hrs 220F	71,000 psi (492 Mpa)	64,000 psi (443 Mpa)	25
3/16X18 in / DCEN	PC4399	Aged 48 Hrs 220F	71,000 psi (492 Mpa)	65,000 psi (450 Mpa)	28

Size / Polarity	Ref. No.	Radiograph	Fillet Weld Test			
5/32X14 in / AC	PC2400	Conforms	Horizontal :	Conforms	Overhead :	Vertical :
5/32X14 in / DCEN	PC2401	Conforms	Horizontal :	Conforms	Overhead :	Vertical :
3/16X18 in / AC	PC4398	Conforms	Horizontal :	Conforms	Overhead :	Vertical :
3/16X18 in / DCEN	PC4399	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
5/32X14 in / DCEN / PC2401	0.04	0.64	0.009	0.011	0.36		0.04	0.02	0.06	0.01													
3/16X18 in / DCEN / PC4399	0.05	0.72	0.011	0.011	0.39		0.05	0.02	0.07	< .01													

Steve Knostman

Steve Knostman , Quality 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").