

Certificate of Conformance to Requirements for Welding Electrode

Product Type:	HOBALLOY 9018M
Classification:	E9018M H4R
Specifications:	AWS A5.5/A5.5M; ASME SFA 5.5
Diameter Tested:	5/32"-1/4"
Date Tested:	9/30/2022
Date Generated:	12/28/2022

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 ISO 9001, ANSI/AWS A5.01, and other specification and Military requirements, as applicable. This document supplies actual test results of non-specific inspection in conformance with the requirements of EN 10204, type 2.2 certification.

MADE IN THE U.S. OF U.S. AND IMPORTED MATERIALS.

		P	olarity				A									(0)			1		FIO			
		Polarity					Amps Volts					Preheat F(C)						Interpass F(C)						
		D	CEP		170						225				25F () 225F (()				
	DCEP					340 27 - 26					3 250 (121)						250 (121)							
				Me	chanic	al Pr	operti	es - Tei	nsile															
f. No.	Testi	ing Cor	nditions	Ult.												Elong.% in 2"								
4475	Age	d 48 Hi	rs 220F		· · · · · ·						,					25								
4475	Age	d 48 Hi	rs 220F		96,000 (661) 86						3,000 (592)					25								
4655	Age	d 48 Hi	rs 220F		94,000 (645) 85						5,000 (585)					24								
				Me	chanic	al Pr	operti	es - Im	pact															
f. No.	Testi	ing Cor	Te	Test Temp. F(C)					ndividuals ft.lb.(J)) Average ft.lb.(J)					Туре						
4221	A	As Wel		-60 F (-51 C)				2,80 (103,111	,108)	108) 79 ()		Charpy-V-Notch							
4655	A	As Wel	ded		-60 F (-51 C) 66,40,48				,40,48	8 (89,54,65) 51				51 (70)			Charpy-V-Notch						
														-										
4655 JC	ontorn	ns								(Jvern	ead						vert	icai :					
0.	С	Mn	Р	S	Si	Cu	Cr	V	Ni	Mo	AI T	Nb	Co	ВW	Sn	Fe	Sb	NI	Mg	Zn B	e Sb	As		
1072										i T		1			\square							┢		
1074	0.04	0.97	0.016	0.012	0.22		0.05	< .01	1.54	0.27					\square							\square		
1221	0.05	1.11	0.011	0.010	0.27		0.06	0.01	1.48	0.30		İ										T		
1475	0.05	1.06	0.010	0.009	0.22		0.06	0.01	1.55	0.29		İ										T		
655	0.05	0.91	0.014	0.014	0.22		0.07	0.01	1.59	0.30		Ī							T					
072		Total H2O Method : Train - 9 Hour									Total Coating Moisture : 0.43													
074		Total H2O Method : Train - As Received									Total Coating Moisture : 0.061													
221		Total H2O Method : Train - As Received										Total Coating Moisture : 0.04												
475		Total H2O Method : Train - 9 Hour										Total Coating Moisture : 0.43												
55		Total H2O Method : Train - 9 Hour Total Coating Moisture : 0.06											;											
						0																		
	2.	8 ml/10	00g of v	veld met	al for	5/32)	(14 in	diamet	er 36%	% relati	ve hı	ımid	ity											
	3	.3 ml/1	00g of v	weld me	tal for	1/4X	18 in d	liamete	er 36%	relativ	/e hu	midi	ty											
		4475 Age 4475 Age 4475 Age 4475 Age 4655 Age 4655 Age 4475 Age 4655 Age 4655 Age 4655 Age 4655 Age 4655 Age 4655 Conform 4655 Conform 4655 Conform 4655 Conform 4655 0.05 1074 0.04 4221 0.05 4475 0.05 1072 0.05 1072 0.05 1072 0.05 1072 0.05 5055 S	4475 Aged 48 Hi 4475 Aged 48 Hi 4475 Aged 48 Hi 4475 Aged 48 Hi 4655 As Wel 4655 As Wel 4655 Conforms 4655 Conforms 4655 Conforms 1074 0.04 0.97 4221 0.05 1.01 4475 0.05 0.91 1072 Total H 074 Total H 221 Total H 475 Total H 555 Total H 2.8 ml/10 1.41	4475 Aged 48 Hrs 220F 4475 Aged 48 Hrs 220F 4475 Aged 48 Hrs 220F 4475 Aged 48 Hrs 220F 4655 As Welded 4655 As Welded 4655 Conforms 44221 Conforms 4655 Conforms 1074 0.04 0.97 0.016 4221 0.05 1.11 0.011 4475 0.05 1.06 0.010 4555 0.05 0.91 0.014 1072 Total H2O Met 074 Total H2O Met 221 Total H2O Met 355 Total H2O Met 355 Total H2O Met Di 2.8 ml/100 g of v	f. 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James A. Owens, Q.A. Specialist

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.