

# Certificate of Conformance to Requirements for Welding Electrode

Product Type: FabCO 105D2
Classification: E100T5-D2C

Specifications: AWS A5.29/A5.29M; ASME SFA 5.29

Diameter Tested: .045"; 3/32"

Date Tested: 4/4/2022

Date Generated: 4/7/2022

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.

## THE STEEL USED IN THIS LOT OF MATERIAL WAS MELTED AND MANUFACTURED IN THE U.S.A.

#### **Test Settings**

Shielding Medium	Amps / Polarity	Volts	WFS in/min(m/min)	ESO in(mm)	Preheat F(C)	Interpass F(C)	Travel Speed in/min(cm/min)
C1 (100% CO2)	300 / DCEP	27	265 (6.7)	.75 (19)	300(149)	300(149)	10 (25.4)
C1 (100% CO2)	425 / DCEP	26	170 (4.3)	1 (25)	300(149)	300(149)	12 (30.5)

#### **Mechanical Properties - Tensile**

Shielding Medium	Ref. No.	Testing Conditions	Ult. Tensile Strength psi (MPa)	Yield Strength psi (MPa)	Elong.% in 2"			
C1 (100% CO2)	PE3868	SR 1 Hr @ 1150F	103,000 ( 710 )	88,000 ( 604 )	23			
C1 (100% CO2)	PE3656	SR 1 Hr @ 1150F	105,000 ( 724 )	93,000 ( 638 )	23			

## **Mechanical Properties - Impact**

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Shielding Medium	Shielding Medium Ref. No.		Temp. F (C)	Individuals ft.lb.(J)	Avg. ft.lb.(J)	Туре
C1 (100% CO2)	PE3656	SR 1 Hr @ 1150F	-40 (-40)	42,41,37 (57,56,50)	40 ( 54 )	Charpy-V-Notch
C1 (100% CO2)	PE3868	SR 1 Hr @ 1150F	-40 (-40)	49,50,50 (66,68,68)	50 ( 67 )	Charpy-V-Notch
Ref No Radiograp	hic Inspection			Fillet Weld Test		$\overline{}$

Ref.No. Radiographic Inspection		Fillet Weld Test								
PE3678	Conforms	Horizontal :	Overhead :	Vertical :						
PE3656	Conforms	Horizontal :	Overhead :	Vertical:						

# **Chemical Analysis**

Shielding Medium / Ref. No	С	Mn	Р	S	Si	Cu	Cr	V	Ni	Мо	Αl	Ti	Nb	Со	ВW	Sn	Fe	Sb	N	Mg	Zn	Ве	Sb	As
C1 (100% CO2) / CD80628	0.11	2.06	0.010	0.008	0.45	0.03	0.04	< .01	0.01	0.49														
C1 (100% CO2) / CD82558	0.07	2.21	0.008	0.010	0.46	0.05	0.05	< .01	0.02	0.42														

Dave Thomas, Quality Assurance Rep.

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.