The Lincoln Electric Company
22801 St. Clair Avenue
Cleveland, Ohio 44117-1199

CERTIFICATE OF CONFORMANCE

LINCOLN ELECTRIC
THE WELDING EXPERTS®

Product: **SuperArc® L-56®**

Classification: **AWS D1.5 ER70S-6**

Also meets the requirements of **AWS D1.1 ER70S-6**

Date **January 04, 2021**

This is to certify that the product named above is of the same classification(s) and design as the material used for the tests reported herein. The material was tested according to the specification(s) indicated and met all requirements. It was manufactured and supplied according to a Quality System Program that meets the requirements of ISO9001 among others as documented on The Lincoln Electric web page (*http://www.lincolnelectric.com/en-us/company/Pages/certifications.aspx*).

Operating Settings	ER70S-6 Requirements	RESULTS
Electrode Size		.045" (1.1 mm)
Current Type/Polarity	DC+	DC+
Shielding Gas	Not Specified	98% Ar, 2% O2
Wire Feed Speed, cm/min (in/min)	Not Specified	889 (350)
Nominal Voltage, V	Not Specified	26
Nominal Current, A	Not Specified	330
Average Heat Input, kJ/cm (kJ/in)		1.5 (38.7)
Travel Speed, cm/min (in/min)	Not Specified	34 (13.4)
Contact Tip to Work Distance, mm (in	Not Specified	13 (1/2)
Pass/Layers		16/6
Preheat Temperature, °C (°F)	(60 min.)	20 (72)
Interpass Temperature, °C (°F)	(325 max.)	150 (300)
Postweld Heat Treatment	As-welded	As-welded

Mechanical properties of weld deposits

Tensile Strength, MPa (ksi)	(70 min.)	580 (85)
Yield Strength, 0.2% Offset, MPa (ksi)	(58 min.)	480 (69)
Elongation %	22 min.	28
Average Impact Energy Joules @ -29 °C (ft-lbs @ -20 °F)	(20 min.)	251 (185) 225,255,273 (166,188,201)

Chemical composition of weld deposits (weight %)

C	Info. Only	0.08
Cr	Info. Only	0.02
Mn	Info. Only	1.33
Mo	Info. Only	<0.00
Si	Info. Only	0.78
Ni	Info. Only	0.01
P	Info. Only	0.007
S	Info. Only	0.008
V	Info. Only	<0.003
Cu	Info. Only	0.13
Ti	Info. Only	0.00
Zr	Info. Only	<0.001
Al	Info. Only	0.00

1. This document meets the requirements of AWS A5.01M/A5.01 Schedule G. When a specific lot number is referenced it also meets the requirements of EN10204, type 2.2. It does not meet the requirements of type 3.1.
2. Strength values in SI units are reported to the nearest 10 MPa converted from actual data. Preheat and interpass temperature values in SI units are reported to the nearest 5 degrees.

January 04, 2021

Daniel Gaul, Certification Supervisor — Date

January 05, 2021

Jon Ogborn, Manager, Consumable Compliance — Date

Cert. No. 010560-D1.5-0.045 in-New-041