

# SUPERGLAZE® 5183

Aluminum ■ AWS ER5183

## KEY FEATURES

- Designed for applications where higher strength is required
- For 5083 and 5456 base materials

## WELDING POSITIONS

All, except vertical down

## SHIELDING GAS

100% Argon  
Argon / Helium Mixtures  
Flow Rate: 30 - 50 CFH

## NOTE

- Typical Joint Designs and Operating Procedures on pg. I-14 - I-16

## CONFORMANCES

<b>SFA/AWS A5.10:</b>	ER5183
<b>ASME SFA-A5.10:</b>	ER5183
<b>ABS:</b>	IACS W26 Grade WC
<b>Lloyd's Register:</b>	WC/I-1 S
<b>DNV Grade:</b>	5183
<b>GL:</b>	RAIMg4,5
<b>BV Grade:</b>	WC
<b>CWB/CSA W48-06:</b>	ER5183

## TYPICAL APPLICATIONS

- Marine fabrication and repair
- Cryogenic tanks
- Shipbuilding and other high strength structural aluminum applications
- Bicycle frames
- Railing industry
- Offshore industry

## DIAMETERS / PACKAGING

Diameter in (mm)	1 lb (0.5 kg) Plastic Spool 20 lb (9.1 kg) Master Carton	16 lb (7.3 kg) Plastic Spool	300 lb (136 kg) Gem-Pak™ Box
0.035 (0.9)	EDS30322	EDS28437	ED034789
3/64 (1.2)			ED034791
1/16 (1.6)		EDS28438	ED034792

## WIRE COMPOSITION<sup>(1)</sup> – As Required per SFA/AWSA5.10

	%Al	%Si	%Fe	%Cu	%Mn
<b>Requirements</b> - AWS ER5183	Remainder	0.40 max	0.40 max	0.10 max	0.50 - 1.00
<b>Typical Results</b> <sup>(2)</sup>	Remainder	0.03	0.13	0.001	0.65
	%Mg	%Cr	%Zn	%Ti	%Be
<b>Requirements</b> - AWS ER5183	4.30 - 5.20	0.05 - 0.25	0.25 max	0.15 max	0.0003 max
<b>Typical Results</b> <sup>(2)</sup>	4.99	0.10	0.02	0.07	0.0002

<sup>(1)</sup>Typical all weld metal. <sup>(2)</sup>See test results disclaimer

*Safety Data Sheets (SDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://www.lincolnelectric.com)*

#### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

#### CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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