Shield-Arc® 70+

AWS E8010-G • Low Alloy, Cellulosic, Pipe

Conformances

AWS A5.5/A5.5M: 2006	E8010-G, E8010-P1*
ASME SFA-A5.5:	E8010-G, E8010-P1*
ABS:	E8010-G
CWB/CSA W48-06:	E5510-G
TUV:	DIN EN ISO 2560-A:E

* This product is classified as an E8010-G; however, it also meets the requirements of an E8010-P1.

Key Features

- Light slag for minimal arc interference
- Deep penetration
- Clean, visible weld puddle
- Superior puddle control

Welding Positions

All

Typical Applications

- Relatively high silicon pipe
- API 5L X56 through X70 grade pipe
- Cross country and in-plant pipe

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	50 lb (22.7 kg) Easy Open Can
1/8 (3.2)	14 (350)	ED012841
5/32 (4.0)	14 (350)	ED012849
3/16 (4.8)	14 (350)	ED012845

MECHANICAL PROPERTIES[1] – *As Required per AWS A5.5/A5.5M: 2006*

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft•lbf) @ -29°C (-20°F)	@ -46°C (-50°F)
Requirements - AWS E8010-G	460 (67) min.	550 (80) min.	19 min.	Not Specified	Not Specified
Typical Results[3] - As-Welded	460-620 (67-90)	585-690 (85-100)	19-31	37-81 (27-60)	26-64 (19-47)

DEPOSIT COMPOSITION[1]

	%C	%Mn	%Si	%P	%S
Requirements[4] - AWS E8010-G	Not Specified	1.00 min.	0.80 min.	0.03 max.	0.03 max.
Typical Results[3]	0.13-0.17	0.60-1.20	0.05-0.30	≤ 0.01	≤ 0.01

	%Ni	%Cr	%Mo	%V
Requirements[4] - AWS E8010-G	0.50 min.	0.30 min.	0.20 min.	0.10 min.
Typical Results[3]	0.75-0.97	0.01-0.20	0.05-0.15	0.02-0.04

TYPICAL OPERATING PROCEDURES

	Current (Amps)		
Polarity	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)
DC+	75-130	90-185	140-225

[1]Typical all weld metal. [2]Measured with 0.2% offset. [3]See test results disclaimer below. [4]In order to meet the alloy requirements of the "G" designation, the undiluted weld metal shall have the minimum of at least one of the elements listed.

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at 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.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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