Pipeliner® 19P

AWS E10018-G H4R • Low Alloy, Low Hydrogen, Pipe

Typical Applications

- Fill and cap pass welding of up to X80 grade pipe

Conformances

AWS A5.5/A5.5M: 2006	E10018-G H4R
ASME SFA-A5.5:	E10018-G H4R

Welding Positions

All, except vertical down

Key Features

- Low hydrogen, vertical up capability on X80 grade pipe
- Charpy V-Notch impact toughness tested to -46°C (-50°F)
- Q2 Lot® - Certificate showing actual deposit chemistry available online

DIAMETERS / PACKAGING

Diameter mm (in)	Length in (mm)	10 lb (4.5 kg) Easy Open Can 30 lb (13.6 kg) Master Carton
3.2 (1/8)	14 (350)	ED032622
4.0 (5/32)	14 (350)	ED032623

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)	Charpy V-Notch J (ft•lbf) @ -46°C (-50°F)
Requirements - AWS E10018-G H4R	600 (87) min.	690 (100) min.	15 min.	Not Specified	Not Specified
Typical Results[3] - As-Welded	660-740 (96-107)	740-825 (107-120)	20-26	91-129 (69-95)	81-111 (60-82)

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

	%C	%Mn	%Si	%P	%S	%Ni[4]
Requirements - AWS E10018-G H4R	Not Specified	1.00 min.	0.80 min.	0.03 max.	0.03 max.	0.50 min.
Typical Results[3] - As-Welded	0.03-0.05	1.44-1.78	0.34-0.57	0.01-0.02	≤ 0.01	1.92-2.36

	%Cr[4]	%Mo[4]	%V[4]	%Cu[4]	Diffusible Hydrogen (mL/100g weld deposit)
Requirements - AWS E10018-G H4R	0.30 min.	0.20 min.	0.10 min.	0.20 min.	4.0 max.
Typical Results[3] - As-Welded	0.02-0.07	0.37-0.47	0.01-0.02	0.01-0.07	2-3

TYPICAL OPERATING PROCEDURES

Polarity[5]	Current (Amps) 3.2 mm (1/8 in)	Current (Amps) 4.0 mm (5/32 in)
DC+	80-155	130-210
AC	80-160	140-215

[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" group, the undiluted weld metal shall have the minimum of at least one of the elements listed.
[5]Preferred polarity is listed first.

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.

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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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