# **PIPELINER® ARC 80**

Low Alloy, Cellulosic, Pipe - AWS E8010-P1

## **KEY FEATURES**

- Excellent impact properties without the intentional addition of Boron
- High productivity in vertical down and out of position pipe welding
- Deep penetration
- Q2 Lot® Control and Tested Certificate showing actual deposit chemistry per lot available online.
- Clean, visible weld puddle
- Superior puddle control

#### **CONFORMANCES**

AWS A5.5/A5.5M: E8010 P1, E8010 G
ASME SFA A5.5: E8010 P1, E8010 G
CSA/CWB W48-06: E5510-P1, E5510-G

### **TYPICAL APPLICATIONS**

- Root pass welding of up to X80 grade pipe
- Hot, fill and cap pass welding on up to X70 grade pipe

#### **WELDING POSITIONS**

ΑII

## **DIAMETERS / PACKAGING**

Diameter	Length in (mm)	50 lb. (22.7 kg) Easy Open Can
4.0 mm (5/32 in)	14 (350)	ED034456
3/16 in <sup>(5)</sup>	14 (350)	ED034458
5.0 mm	14 (350)	ED034457

**MECHANICAL PROPERTIES**(1) – As Required per AWS A5.5/A5.5M

	Yield Strength <sup>(2)</sup> MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @ 29°C ( 20°F)	
<b>Requirements</b> AWS E8010 P1	460 (67) min	550 (80) min	19 min	27 (20) min	Not Specified
Typical Results <sup>(3)</sup> As-Welded	475-545 (69-79)	560 670 (81-97)	19-32	49-149 (36-110)	41-119 (30-88)

**DEPOSIT COMPOSITION**<sup>(1)</sup> – As Required per AWS A5.5/A5.5M

	%C	%Mn	%Si	%P	%S
<b>Requirements</b> AWS E8010 P1	0.20 max	1.20 max	0.60 max	0.30 max	0.03 max
Typical Results(3)	0.09-0.20	0.55-0.98	0.07-0.27	0.01-0.02	0.01-0.02
	%Ni	%Cr	%Мо		% <b>V</b>
Requirements				0.10 max	
AWS E8010 P1	1.00 max	0.30 max	0.50 max		0.10 max

## **TYPICAL OPERATING PROCEDURES**

Polarity <sup>(4)</sup>	Current (Amps)					
	4.0 mm (5/32 in)	3/16 in <sup>(5)</sup>	5.0 mm			
DC+	100-165	125-205	130-210			

<sup>(1)</sup> Typical all weld metal. (2) Measured with 0.2% offset. (3) See test results disclaimer (4) Preferred polarity is listed first. (5) Manufactured to US standard units.

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 rowsion 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.

