

PIPELINER[®] ARC 80

The Preferred Pipe Rod

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- Expert pipeline welders agree in blind test – Pipeliner Arc 80 is easiest to use⁽¹⁾
- Clear puddle allows the operator to easily see and manipulate the puddle
- Fast freezing slag helps to keep the welder in control
- Easier to use, so more pipe joints are completed each day

Higher Quality, Fewer Repairs

- Measurably less porosity
- Square burn-off at the tip helps to reduce unnecessary arc manipulation and produce a sound weld deposit
- Consistent coating eliminates arc wander
- Easier to pass qualification testing

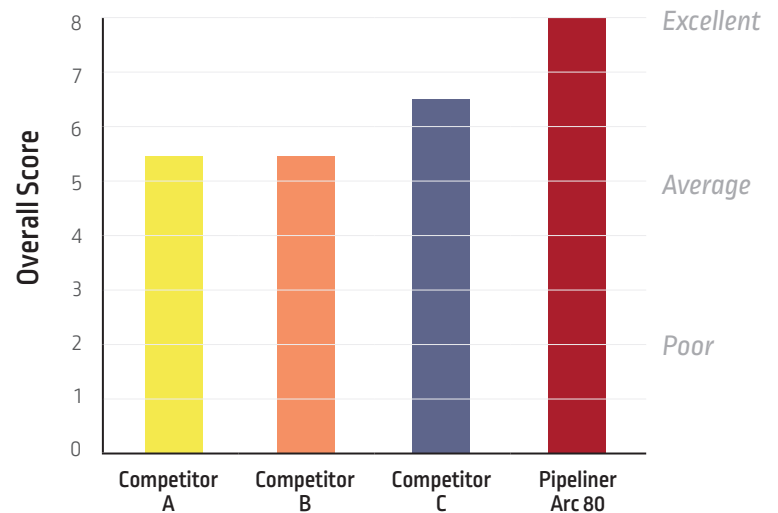
The Symbol of Dependability

- Lincoln Electric stick electrodes are easily identified by Three Dots[®], a recognized symbol of quality, consistency and unparalleled welding expertise



- Open a can and use every rod – 100% coating integrity
- Standard Q2 Lot[®] Control and Test Certificates show actual chemistry and actual mechanical properties per lot

More Welders Prefer Pipeliner Arc 80 Over Competitive Products



Ideal square burn-off with Pipeliner Arc 80



Uneven burn-off with competitive electrodes requires more arc manipulation and results in a poor weld



Q2 Actual Lot Testing

Every Lot, Every Time – No Additional Cost

⁽¹⁾ Parameters rated by actual pipeline welders included arc force, puddle fluidity, arc stability, resistance to blistering (non-uniform swelling of the coating), fingernailing (arc wandering on the joint legs), visible porosity, bug holes, spatter and slag interference. Conducted December, 2015.

*All trademarks and registered trademarks are the property of their respective owners.

Processes

Stick (SMAW)

Welding Positions

All

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

Applications

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

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 ⁽¹⁾	14 [350]	ED034458
5.0 mm	14 [350]	ED034457

⁽¹⁾ Manufactured to US standard units.

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

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf)	
				@ 29°C [20°F]	@ -40°C [-40°F]
Requirements AWS E8010-P1	460 [67] min	550 [80] min	19 min	27 [20] min	Not Specified
Typical Results⁽³⁾ As-Welded	475-545 [69-79]	560-670 [81-97]	19-32	49-149 [36-110]	41-119 [30-88]

DEPOSIT COMPOSITION⁽¹⁾ – As Required per AWS A5.5/A5.5M

	%C	%Mn	%Si	%P	%S
Requirements 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	%Mo	%V	
Requirements AWS E8010-P1	1.00 max	0.30 max	0.50 max	0.10 max	
Typical Results⁽³⁾	0.73-1.00	0.02-0.05	0.13-0.22	0.01 max	

TYPICAL OPERATING PROCEDURES

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

⁽¹⁾ 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.
 NOTE: This product contains micro alloying elements. Additional information available on request.

Safety data sheets (SDS) and certificates of conformance available from our website 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.