

LARGE DIAMETER MILLENNIUM ARC® 7018-1

A Low-Hydrogen Electrode designed for pipe spooling

Designed for pipe spooling

- Engineered for efficient welds in 360° rotation
- Uniform slag coverage even on a roundabout
- Excellent slag removal in the fill and cap passes
- 8 out of 10 welders choose Millennium Arc in a blind test

Protection against starting porosity

- Patented silver strike end prep for porosity-free, consistent arc starts
- Square burn off of electrode to further reduce starting porosity

Less Moisture pickup

- Triple protection against exposure to humid conditions with our Tri-Dri™ packaging
- Less moisture means less hydrogen in the weld deposit
- 40% less moisture out of the package when compared to the competition

Built in Features

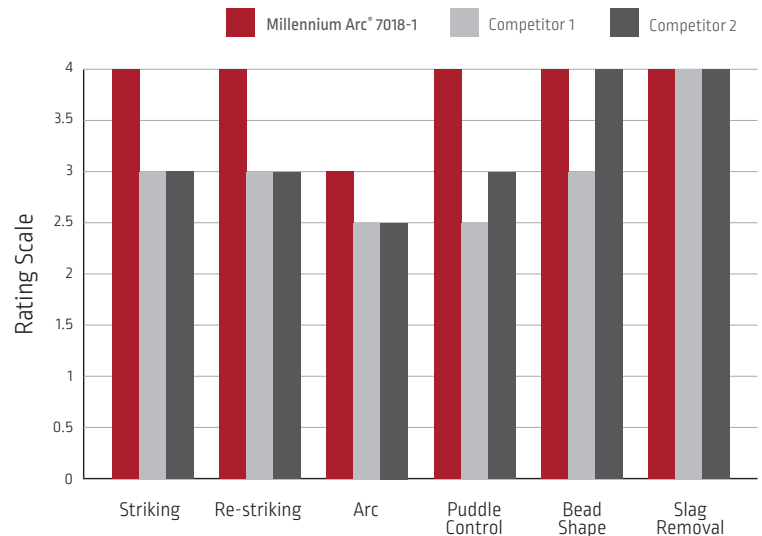
- Standard Q2 Lot® Control and Test Certificates show actual chemistry and actual mechanical properties per lot
- CWB approved
- Manufactured in metric diameters

Better looking welds

- Greater puddle control results in improved bead profile
- Consistent shape from one weld to the next

The Symbol of Dependability

- Our stick electrodes are easily identified by Three Dots®, which are our symbol of quality, consistency and unparalleled welding expertise



Q2 Actual Lot® Testing

Every Lot, Every Time –
No Additional Cost



Three Dots® Symbol of Dependability

DIAMETERS / PACKAGING (CANADA ONLY)

Diameter mm	Length mm	5 kg Carton/ 20 kg Tri-Dri™ Master Carton	10 kg Carton/ 20 kg Tri-Dri™ Master Carton
2.4	350	ED036521	-
3.2	350	ED036522	-
4.0	350	ED036523	-
5.0	350	ED036524	-
5.0	450	-	ED036525
6.0	450	-	ED036526

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

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @ -29°C (-20°F)
Requirements - AWS E7018-1 H4R	400 [58] min	480 [70] min	22 min	27 [20] min
Test Results⁽³⁾ - As-Welded	440-550 [64-72]	540-600 [78-86]	>27	120-180 [90-130]

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

	%C	%Mn	%Si	%P	%S	%Ni
Requirements - AWS E7018-1 H4R	0.15 max	1.60 max	0.75 max	0.035 max	0.035 max	0.30 max
Test Results⁽³⁾ - As-Welded	0.06-0.08	1.2-1.5	0.4-0.6	0.01-0.02	0.01-0.02	<0.1
	%Cr	%Mo	%V	%Mn + Ni + Cr + Mo + V	Diffusible Hydrogen (mL/100g weld metal)	
Requirements - AWS E7018-1 H4R	0.20 max	0.30 max	0.08 max	1.75 max	4.0 max	
Test Results⁽³⁾ - As-Welded	<0.1	<0.1	<0.01	1.3-1.5	1-3	

⁽¹⁾Typical all weld metal. ⁽²⁾Measured with 0.2% offset. ⁽³⁾See test results disclaimer.

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.