Jetweld[®] 1

Mild Steel, High Deposition • AWS E7024-1

Key Features

- High deposition rates
- Smooth bead appearance
- Minimal spatter
- Shallow penetration

Typical Applications

- Large welds
- Slightly downhill (15° max) positions
- Multiple pass welding

Conformances

AWS A5.1/A5.1M: 2004	E7024-1
ASME SFA-A5.1:	E7024-1
ABS:	E7024-1
Lloyd's Register:	1M
DNV Grade:	1
GL:	1
BV Grade:	1
CWB/CSA W48-06:	E4924-1
EN ISO 2560-B:	E4924-1 A

Welding Positions

Flat & Horizontal

DIAMETERS / PACKAGING

DIAMETERO/TAORAGING						
Diameter in (mm)	Length in (mm)	50 lb (22.7 kg) Carton				
1/8 (3.2) 5/32 (4.0) 3/16 (4.8) 7/32 (5.6) 1/4 (6.4)	14 (350) 14 (350) 18 (450) 18 (450) 18 (450) 18 (450)	ED010362 ED010372 ED010366 ED010375 ED010360				

MECHANICAL PROPERTIES⁽¹⁾

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft•lbf) @ -18°C (0°F)
Requirements - AWS E7024-1	400 (58) min.	490 (70) min.	22 min.	27 (20) min.
Typical Results ⁽³⁾ - As-Welded	455-490 (66-71)	530-565 (77-82)	22-31	27-60 (20-44)

DEPOSIT COMPOSITION(1) – As Required per AWS A5.1/A5.1M: 2004

	%C	%Mn	%Si	%P	%S
Requirements - AWS E7024-1	0.15 max.	1.21 max.	0.90 max.	0.035 max.	0.035 max.
Typical Results ⁽³⁾ - As-Welded	0.03-0.06	0.63-1.02	0.13-0.68	0.010-0.022	0.005-0.011
	%Ni	%Cr	%Mo	%V	%Mn + Ni + Cr + Mo + V
Requirements - AWS E7024-1	%Ni 0.30 max.	% Cr 0.20 max.	%Mo 0.30 max.	% V 0.08 max.	

TYPICAL OPERATING PROCEDURES

	Current (Amps)					
Polarity ⁽⁴⁾	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)	7/32 in (5.6 mm)	1/4 in (6.4 mm)	
AC	115-175	180-240	240-300	300-380	340-440	
DC±	100-160	160-215	220-280	270-340	320-400	

⁽¹⁾Typical all weld metal. ⁽²⁾Measured with 0.2% offset. ⁽³⁾See test results disclaimer below. ⁽⁴⁾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.

