

# 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

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

## MECHANICAL PROPERTIES<sup>(1)</sup>

	Yield Strength <sup>(2)</sup> 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 <sup>(3)</sup> - As-Welded	455-490 (66-71)	530-565 (77-82)	22-31	27-60 (20-44)

## DEPOSIT COMPOSITION<sup>(1)</sup> – 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 <sup>(3)</sup> - 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	0.30 max.	0.20 max.	0.30 max.	0.08 max.	1.50 max.
Typical Results <sup>(3)</sup> - As-Welded	≤ 0.06	0.01-0.04	≤ 0.02	0.01 max.	0.75

## TYPICAL OPERATING PROCEDURES

Polarity <sup>(4)</sup>	Current (Amps)				
	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

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

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://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

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