

Jetweld[®] 2

AWS E6027 • Mild Steel, High Deposition

Conformances

AWS A5.1/A5.1M: 2004	E6027
ASME SFA-A5.1:	E6027
ABS:	E6027
Lloyd's Register:	3M
DNV Grade:	3
GL:	3
BV Grade:	3
CWB/CSA W48-06:	E4327
EN ISO 2560-B:	E4327 A

Welding Positions

Flat & Horizontal

Key Features

- ▶ High deposition rates
- ▶ Smooth bead appearance
- ▶ Shallow penetration for minimal dilution

Typical Applications

- ▶ Multiple pass welding
- ▶ Fast-fill single pass welds
- ▶ Fillet and lap welds

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	50 lb (22.7 kg) Carton
3/16 (3.2)	18 (450)	ED010501
1/4 (4.0)	18 (450)	ED010500

MECHANICAL PROPERTIES⁽¹⁾ – As Required per AWS A5.1/A5.1M: 2004

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft•lbf) @ -29°C (-20°F)
Requirements - AWS E6027	330 (48) min.	430 (60) min.	22 min.	27 (20) min.
Typical Results ⁽³⁾ - As-Welded	365-395 (53-57)	435-470 (63-68)	26-34	53-80 (39-60)

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

	%C	%Mn	%Si	%P	%S
Requirements - AWS E6027	0.20 max.	1.20 max.	1.00 max.	Not Specified	Not Specified
Typical Results ⁽³⁾ - As-Welded	0.02-0.05	0.56-0.96	0.12-0.41	0.016-0.024	0.005-0.013
	%Ni	%Cr	%Mo	%V	
Requirements - AWS E6027	0.30 max.	0.20 max.	0.30 max.	0.08 max.	
Typical Results ⁽³⁾ - As-Welded	0.03-0.07	0.02-0.05	0.01-0.04	≤ 0.002	

TYPICAL OPERATING PROCEDURES

Polarity ⁽⁴⁾	Current (Amps)	
	3/16 in (4.8 mm)	1/4 in (6.4 mm)
AC	250-300	350-450
DC±	230-270	315-405

⁽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

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