

Atom Arc 7018 Acclaim



Atom Arc 7018 Acclaim offers softer arc and excellent mechanical properties compared to the original Atom Arc 7018. Results include greater puddle control for ease of use in out-of-position welding applications and superior arc initiation desired by many newer welders. Both novice and seasoned welders can appreciate its excellent weld performance, wide operating range and easy clean up. Greater puddle control resulting in easier out-of-position welds, superior arc initiation and ease of use with wider operating range and minimal clean-up

Classifications	AWS A5.1 : E7018-1 H4R AWS A5.1 : E7018 H4R ASME SFA 5.1
Approvals	ABS 4Y (H5)/AWS A5.1: E7018-1 H4R LR 4Ym (H5) DNV/GL 4Y (H5) CWB CSA W48 E4918-1-H4
Industry	Automotive Bridge Construction Civil Construction Industrial and General Fabrication Mobile Equipment Railcars Ship/Barge Building

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	AC or DC+
Coating Type	Low-hydrogen iron powder

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	500 MPa (72 ksi)	599 MPa (87 ksi)	32 %
As Welded	450 MPa (65 ksi)	550 MPa (79 ksi)	36 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-45 °C (-50 °F)	115 J (85 ft-lb)
As Welded	29 °C (-20 °F)	230 J (170 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si
0.05	1.20	0.45

Typical Weld Metal Analysis %

S	P
0.008	0.01

Deposition Data

Diameter	Optimal Amps	Current	Deposition Rate	Deposition Efficiency %
3.2 mm (1/8 in.)	120 A	90-160 A	1.2 kg/h (2.6 lb/h)	71.6 %
3.2 mm (1/8 in.)	140 A	90-160 A	1.2 kg/h (2.6 lb/h)	70.9 %
4.8 mm (3/16 in.)	200 A	200-300 A	2.2 kg/h (4.9 lb/h)	76.4 %
4.8 mm (3/16 in.)	250 A	200-300 A	2.4 kg/h (5.4 lb/h)	74.6 %
2.4 mm (3/32 in.)	90 A	70-100 A	0.8 kg/h (1.7 lb/h)	66.3 %
4.0 mm (5/32 in.)	140 A	130-220 A	1.4 kg/h (3.1 lb/h)	75 %
4.0 mm (5/32 in.)	170 A	130-220 A	1.7 kg/h (3.8 lb/h)	73.5 %