

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

Specifications

Classifications	ASME SFA 5.1 : E7018-1 H4R / E7018 H4R AWS A5.1 : E7018-1 H4R / E7018 H4R
Approvals	ABS : 4Y(H5) ABS : E7018-1 (H4R) CWB : E4918-1-H4 DNV-GL : 4 YH5 LR : 4Y H5
Industry	Civil Construction Mobile Equipment Ship/Barge Building Bridge Construction Railcars Automotive Industrial and General Fabrication

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

Welding Current	AC, DC+
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Carbon Manganese

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	467 MPa (68 ksi)	551 MPa (80 ksi)	36 %
PWHT 2 hour(s) 600 °C (1112 °F)	567 MPa (82 ksi)	456 MPa (66 ksi)	67 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-46 °C (-51 °F)	123 J (91 ft-lb)
PWHT	-40 °C (-40 °F)	45 J (33 ft-lb)
PWHT	-60 °C (-76 °F)	56 J (41 ft-lb)
PWHT	-50 °C (-58 °F)	56 J (41 ft-lb)
PWHT	-60 °C (-76 °F)	56 J (41 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.05	1.20	0.45	0.008	0.01

Deposition Data

Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
2.4 x 356.0 mm (3/32 x 14.0 in.)	70-110 A	23.2 V	69.01 %	60 sec	0.92 kg/h (2.0 lbs/h)

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Deposition Data					
Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
3.2 x 356.0 mm (1/8 x 14.0 in.)	90-160 A	23.9 V	72.23 %	70 sec	1.36 kg/h (3.0 lbs/h)
4.0 x 356.0 mm (5/32 x 14.0 in.)	130-220 A	24.3 V	72.06 %	75 sec	1.89 kg/h (4.2 lbs/h)
4.8 x 356.0 mm (3/16 x 14.0 in.)	200-300 A	24.3 V	71.04 %	74 sec	2.53 kg/h (5.6 lbs/h)