



7018 Covered Electrodes

Atom Arc 7018
Atom Arc 7018 Acclaim
ESAB 7018



Atom Arc 7018 Acclaim

Raising the bar.

At ESAB, innovation and continual improvement are the cornerstones of our design philosophy. Following in that tradition, the newest addition to the Atom Arc family – Atom Arc 7018 Acclaim – takes the low-hydrogen, iron-powder covered electrode to a new level. Atom Arc 7018 Acclaim offers the same drive and dig that has made Atom Arc the industry standard, but now with improved puddle control, resulting in easier out-of-position welding. Whether you're a novice or seasoned welder, you'll find Atom Arc Acclaim easy to use – offering easier arc initiation, low arc wander, and easy slag removal.



In critical weld situations, Atom Arc 7018 Acclaim gives you the confidence you need:

- + Excellent puddle control, resulting in easier out-of-position welding
- + Ease of use
- + Easier arc initiation
- + Minimal cleanup
- + Wider operating range
- + E7018H4R Classification



Atom Arc 7018

Setting the standard.

Atom Arc 7018 continues to lead the way for high-production, radiographic-quality welds in mild- and low-alloy steel. Experienced welders find Atom Arc 7018 electrodes surprisingly easy to use in comparison to conventional low-hydrogen electrodes, and quite different from ordinary mild-steel electrodes. Atom Arc 7018 produces a deep penetrating arc, with excellent control and minimal cleanup.

These low-hydrogen, moisture-resistant electrodes are known for their superior welding performance, tough mechanical properties, crack resistance, high operator appeal, and consistent quality. That's why Atom Arc 7018 was used on some of the most prestigious projects in recent history.



Atom Arc 7018 is industry renowned for its:

- + Long heritage of quality and toughness
- + Broad package and diameter range
- + Complete line of agency and military approvals
- + E7018H4R Classification



ESAB 7018

Your all-purpose solution.

Low-hydrogen welding is a mainstay of many fabrication and maintenance applications. Covered electrodes are often used in all types of weather and in hard-to-reach locations. Expert welders want a stick electrode they can rely on for deep penetration, consistent quality, and X-ray caliber welds. But not all covered electrodes are created equal. The same quality and expertise that goes into the Atom Arc line also goes into the ESAB 7018 covered electrode. ESAB 7018 electrodes are perfect for general fabrication and welding, offering consistent performance and welder appeal.

ESAB 7018 is designed to help you get the job done:

- + Ideal for maintenance and general repair applications
- + A simple electrode for the price-conscious fabricator
- + Good weldability in horizontal and vertical positions
- + Excellent re-striking and slag removal
- + E7018 AWS Classification



When it comes to covered electrodes, ESAB has you covered.

ESAB's 7018 family is a complete line of low-hydrogen covered electrodes. In addition to providing outstanding performance for your application needs, all 7018 products are proudly manufactured in the United States.

ESAB's 7018 family offers you:

- + Ease of use
- + Excellent control
- + Superior welding performance
- + Tough mechanical properties
- + Out-of-position welding
- + Deep penetrating arc
- + Consistent quality
- + Minimal cleanup



Typical Mechanical Properties	Atom Arc 7018	Atom Arc 7018 Acclaim	ESAB 7018
As welded			
Yield strength	68 ksi (470 Mpa)	65 ksi (450 Mpa)	66 ksi (450 Mpa)
Tensile strength	78 ksi (540 Mpa)	79 ksi (550 Mpa)	80 ksi (550 Mpa)
Elongation in 2 in.	33%	36%	32%
Typical Charpy V-Notch Impact Properties			
Testing temperature -20°F (-29°C)			
As welded	168 ft-lb (225 J)	170 ft-lb (227 J)	120 ft-lb (160 J)
Typical Undiluted Weld Metal Analysis			
C	0.045%	0.05%	0.05%
Mn	1.10%	1.20%	1.20%
Si	0.40%	0.45%	0.50%
P	0.015%	0.011%	0.012%
S	0.014%	0.008%	0.010%

Deposition Table

Diameter	Optimal Amperage	Range Amperage	Deposition Rate	Efficiency
3/32 in.	90 A	70–100	1.7 lb/hr	66.3%
1/8 in.	120 A	90–160	2.6 lb/hr	71.6%
1/8 in.	140 A	90–160	2.7 lb/hr	70.9%
5/32 in.	140 A	130–220	3.1 lb/hr	75%
5/32 in.	170 A	130–220	3.8 lb/hr	73.5%
3/16 in.	200 A	200–300	4.9 lb/hr	76.4%
3/16 in.	250 A	200–300	5.4 lb/hr	74.6%
7/32 in.	250 A	250–350	6.5 lb/hr	75%
7/32 in.	300 A	250–350	7.2 lb/hr	74%
1/4 in.	300 A	300–400	7.7 lb/hr	78%
1/4 in.	350 A	300–400	8.7 lb/hr	77%

World leader in welding and cutting technology and systems.

ESAB operates in the forefront of welding and cutting technology. More than one hundred years of continuous improvements in products and processes enables us to meet the challenges of technological advances globally and in every industry segment.

Quality, environmental, and safety standards.

At ESAB, quality, environment, and safety are ongoing processes and areas of key focus at all our production processes and facilities worldwide. ESAB is one of the few international companies to have achieved the ISO 9001 Quality Standard, ISO 14001 Environmental Standard, and OHSAS 18001 Safety Standard certifications across all our global manufacturing facilities.

Multinational manufacturing, local representation, and an international network of distributors bring the benefits of ESAB quality and unrivaled expertise in materials and processes within reach of all our customers, wherever they may be located.

Be safe when welding or cutting.

Please read and understand the safety labels, instruction manuals, and/or safety data sheet for your welding or cutting product before you weld or cut. Always follow safe practices and use adequate ventilation when welding or cutting. More information on welding health and safety can be found at www.esabna.com.



Global solutions for local customers – everywhere.

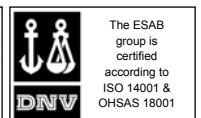
Find out more at www.esabna.com

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The ESAB group is certified according to ISO 14001 & OHSAS 18001