



Standards

AWS A5.1/ASME SFA5.1, Class E7018-H8

Description & Applications

It is an extremely versatile, user friendly, all-position, low hydrogen electrode. It is trusted by welders to withstand extreme conditions. In addition, it is used to weld “difficult-to-weld steels” requiring Charpy impacts down to -30°C (-20°F), combined with a low hydrogen weld deposit.

- Typical applications include structural steel, mining, forestry, maintenance, and repair.

The BLUESHIELD™ Advantage

- Touch Start™ feature makes re-striking the electrode effortless using AC or DC current.
- Special electrode coating reduces the tendency of moisture pick-up.
- Improved coating toughness compared to conventional low hydrogen electrodes.
- Low hydrogen weld deposit reduces the possibility of underbead “cold” cracking.
- Very good operator appeal, smooth arc, minimal spatter.
- Slag is self-peeling and very easily removed.
- Can be used with AC or DC current.

Typical Welding Parameters

- Either AC or DC electrode positive (DCEP) can be used.
- To obtain the best mechanical properties maintain the shortest arc length possible while using the drag technique and stringer beads with little or no weaving.



DIAMETER		AMPERAGE RANGE	OPTIMUM CURRENT
mm	in		
2.5	3/32	75 – 110	90
3.2	1/8	100 – 150	120
4.0	5/32	150 – 225	175

Typical Chemistry

C	Cr	Ni	Mo	P	S	Mn	Si	V	Cu	Mn + Ni + Cr + Mo + V
0.07	0.05	0.04	0.01	0.013	0.008	0.95	0.49	0.03	0.06	1.08

Typical Mechanical Properties*

	AS WELDED	
TENSILE STRENGTH	574 MPa	82 ksi
YIELD STRENGTH	499 MPa	72 ksi
ELONGATION	30 %	30 %
IMPACT (Charpy V-notch) TEST TEMPERATURE ENERGY	-30°C 83 J	-20°F 61 ft-lb

* Actual welding positions and procedures can impact results.

Packaging

DIAMETER		LENGTH		PACKAGING		ITEM NUMBER
mm	in	mm	in	kg	lb	
2.5	3/32	300	12	4 x 2.5	4 x 5.5	A0274407
3.2	1/8	350	14	4 x 5	4 x 11	A0274409
4.0	5/32	350	14	4 x 5	4 x 11	A0274411