BLUESHIELD™ LA 18 LMP

Low-Hydrogen Electrode

STANDARDS

CSA W48-01-M/W48-06, Class E4918-1-H4
AWS A5.1, Class E7018-1

DESCRIPTION & APPLICATIONS

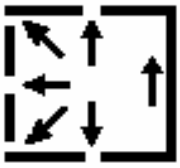
It is a premium-code quality, all-position, basic low hydrogen electrode (E7018-1). It can be used with either DC (preferred) or AC current. The special low-moisture pick-up and moisture resistant (MR) electrode coating resists the pick-up of moisture when exposed to high humidity environments. It is trusted by welders to withstand extreme conditions. Furthermore, it is commonly used where electrodes maybe exposed to high humidity environments prior to use. This electrode is used in welding steels requiring weld metal toughness (Charpy impacts) down to -45°C (-49°F), combined with a low-hydrogen weld deposit.

- Include boiler and pressure vessel work, structural steel fabrication, pressure piping and maintenance.

THE *BLUESHIELD*™ ADVANTAGE

- Special electrode coating reduces the tendency of moisture pick-up.
- Permits reduced preheat temperatures compared to conventional basic welding electrodes.
- Lower hydrogen levels compared to conventional "7018's".
- Reduce the possibility of underbead "cold" cracking.

TYPICAL WELDING PARAMETERS



- Either DC electrode positive (DCEP) or AC current can be used.
- To obtain the best mechanical properties, maintain the shortest possible arc length 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 – 160	130
4.0	5/32	135 – 220	175
5.0	3/16	200 – 300	250

TYPICAL CHEMISTRY

C	Cr	Ni	Mo	P	S	Mn	Si	V	Mn + Ni + Cr + Mo + V
0.05	0.04	0.03	0.011	0.011	0.013	1.16	0.53	0.006	1.25

TYPICAL MECHANICAL PROPERTIES

	As Welded	
Tensile Strength	579 MPa	84 ksi
Yield Strength	483 MPa	70.1 ksi
Elongation in 40 mm – 1.5 in	31.6 %	31.6 %
Impact (Charpy V-notch) **Test Temperature** **Energy**	 -45°C 81 J*	 -50°F 60 ft-lb*

* Values of impact strength from weld deposits in the flat position according to CSA W48.1-M/W48-06 Standard.

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	BLU-32972706
3.2	1/8	350	14	4 x 5	4 x 11	BLU-32972708
4.0	5/32	350	14	4 x 5	4 x 11	BLU-32972710
5.0	3/16	450	18	4 x 5	4 x 11	BLU-32972712

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