BLUESHIELD™ LA 18 PLUS™

Low-Hydrogen Electrode

STANDARDS

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

DESCRIPTION & APPLICATIONS

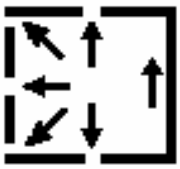
It is a basic low hydrogen all-position electrode designed to meet severe impact requirements down to -50°F (-45°C), and operate on DC or AC current. It requires improved Charpy impacts at temperatures down to -45°C (-50°F).

- Typical applications include equipment for arctic service, boiler and pressure vessel, piping, low temperature structural work and bridges.

THE *BLUESHIELD*™ ADVANTAGE

- Excellent low temperature toughness properties with consistent weld metal soundness.
- Ease of application, low spatter and excellent bead appearance.
- Smooth soft stable arc

TYPICAL WELDING PARAMETERS



- Either DC electrode positive (DCEP) or AC current can be used.
- To reduce the possibility of starting porosity, strike the electrode ahead of the crater of the previously finished weld bead and quickly move back into the crater while shortening the arc length.
- 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 – 160	130
4.0	5/32	135 – 220	175
5.0	3/16	200 – 300	250
6.0	1/4	275 – 360	310

TYPICAL CHEMISTRY

C	Cr	Ni	Mo	P	S	Mn	Si	V	Mn + Ni + Cr + Mo + V
0.06	0.04	0.03	0.01	0.011	0.012	1.17	0.43	0.01	1.26

TYPICAL MECHANICAL PROPERTIES

	As Welded	
Tensile Strength	568 MPa	82.4 ksi
Yield Strength	483 MPa	70.1 ksi
Elongation in 40 mm – 1.5 in	30.3 %	30.3 %
Impact (Charpy V-notch) **Test Temperature** **Energy**	 -45°C 130 J*	 -50°F 96 ft-lb*

*Values of impact strength as measured from deposits in the flat position according to CSA W45.1-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-32972106
3.2	1/8	350	14	4 x 5	4 x 11	BLU-32972108
4.0	5/32	350	14	4 x 5	4 x 11	BLU-32972110
5.0	3/16	450	18	4 x 5	4 x 11	BLU-32972112
6.0	1/4	450	18	4 x 5	4 x 11	BLU-32972116

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