



BLUESHIELD™ LA 12018-M

Low Alloy Steel Electrode

STANDARDS

CSA W48-01-M/W48-06, Class E8318-M
AWS A5.5, Class E12018-M

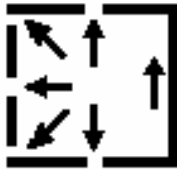
DESCRIPTION & APPLICATIONS

It is a basic low hydrogen type covered electrode with manganese, chromium, nickel and molybdenum added in the covering. Recommended for fabrication of low alloy high strength steel weldments where a minimum tensile strength of 830 MPa (120 ksi) is required.

THE BLUESHIELD™ ADVANTAGE

- Sound low temperature mechanical properties
- Good slag removal
- User friendly

TYPICAL WELDING PARAMETERS



- As with all basic type electrodes, as short an arc as possible should be maintained using either direct current electrode positive (DCEP) or alternating current.
- Stringer beads are preferred to weaving.
- Attention must be paid at the beginning of a bead to obtain full coverage with slag in order to prevent porosity.
- Preheating is governed by the hardenability and/or thickness of the steel being welded.

Diameter		Amperage Range	Optimum Current
mm	in		
3.2	1/8	90 – 160	130
4.0	5/32	130 – 220	175
5.0	3/16	160 – 315	250
6.0	1/4	280 – 380	310

TYPICAL CHEMISTRY

C	Cr	Ni	Mo	P	S	Mn	Si	Nb	Fe	V	Cu	Ti
0.06	0.90	2.22	0.31	0.021	0.011	1.90	3.34	–	–	–	–	–

TYPICAL MECHANICAL PROPERTIES

	As Welded	
Tensile Strength	910 MPa	132 ksi
Yield Strength	786 MPa	114 ksi
Elongation in 40 mm – 1.5 in	20 %	20 %
Impact (Charpy V-notch) Test Temperature Energy	-50°C 36 J	-58°F 26 ft-lb

PACKAGING

Diameter		Length		Packaging		Item Number
mm	in	mm	in	kg	lb	
3.2	1/8	350	14	4 x 5	4 x 11	BLU-32978008
4.0	5/32	350	14	4 x 5	4 x 11	BLU-32978010
5.0	3/16	450	18	4 x 5	4 x 11	BLU-32978012
6.0	1/4	450	18	4 x 5	4 x 11	BLU-32978016