



# BLUESHIELD™ LA 10018-M

## Low Alloy Steel Electrode

### STANDARDS

CSA W48-01-M/W48-06, Class E6918-M  
AWS A5.5, Class E10018-M

### DESCRIPTION & APPLICATIONS

It is a basic low hydrogen type covered electrode with manganese, molybdenum and nickel added in the covering. Recommended for welding steels in the 690 MPa (100 ksi) minimum tensile strength range where good ductility, crack resistance and high notch toughness at low temperature are required.

### THE *BLUESHIELD*™ ADVANTAGE

- Smooth stable arc
- Easy slag removal
- High notch toughness at low temperature.

### 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

### TYPICAL CHEMISTRY

C	Cr	Ni	Mo	P	S	Mn	Si	Nb	Fe	V	Cu	Ti
0.06	0.25	1.60	0.30	0.018	0.005	1.58	0.46	–	–	0.01	–	–

### TYPICAL MECHANICAL PROPERTIES

	As Welded	
	MPa	ksi
Tensile Strength	710	103
Yield Strength	665	97
Elongation in 40 mm – 1.5 in	24 %	24 %
Impact (Charpy V-notch) Test Temperature	-50°C	-58°F
	35 J	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-32977508
4.0	5/32	350	14	4 x 5	4 x 11	BLU-32977510
5.0	3/16	350	14	4 x 5	4 x 11	BLU-32977512