



BLUESHIELD™ LA 7018-A1

Low Alloy Steel Electrode

STANDARDS

AWS A5.5, CLASS E7018-A1

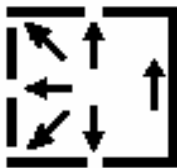
DESCRIPTION & APPLICATIONS

It is a basic low hydrogen covered electrode with approximately 0.50% molybdenum added in the covering. It is used in all positions for the fabrication of the 1/2% moly steels, such as boiler and pressure vessel work, piping and tubing. Also used extensively for the welding of low alloy high tensile steels having a minimum yield strength of 345 MPa (50 ksi).

THE **BLUESHIELD™** ADVANTAGE

- Smooth stable arc
- Maintains mechanical properties after heat treatment
- Easy slag removal

TYPICAL WELDING PARAMETERS



- All positions.
- 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.
- Stinger 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		
2.5	3/32	75 – 115	100
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	Ta	V	Cu	Ti
0.05	0.05	0.06	0.49	0.011	0.009	0.86	0.49	–	–	–	–	–

TYPICAL MECHANICAL PROPERTIES

	Stress Relieved 1h @ 620°C (1148°F)	
Tensile Strength	545 MPa	79 ksi
Yield Strength	480 MPa	70 ksi
Elongation in 40 mm – 1.5 in	30 %	30 %

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-32973006
3.2	1/8	350	14	4 x 5	4 x 11	BLU-32973008
4.0	5/32	350	14	4 x 5	4 x 11	BLU-32973010
5.0	3/16	350	14	4 x 5	4 x 11	BLU-32973012