

Atom Arc 7018-B2L

Atom Arc 7018-B2L is a 1 1/4 Cr - 1/2 Mo electrode with extra low carbon content. The low carbon content in the weld metal is beneficial in reducing cracking of weldments. Atom Arc 7018-B2L is carefully engineered to produce a stable arc and good slag release when welding low-alloy steels in the categories of 1/2% Cr - 1/2% Mo, 1% Cr - 1/2% Mo, 1 1/4% Cr - 1/2% Mo steels. Most grades of these steels are used in power piping, boiler work, castings and forgings.

Specifications	
Classifications	ASME SFA 5.5 : E7018-B2LH4R AWS A5.5 : E7018-B2LH4R
Industry	Pipeline Power Generation

Welding Current	AC, DC+
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Low alloyed (Low Carbon - 1.25% Cr - 0.5% Mo)

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1 hour(s) 690 °C (1274 °F)	475 MPa (69 ksi)	558 MPa (81 ksi)	29 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
Stress Relieved	-20 °C (-4 °F)	196 J (145 ft-lb)

Typical Weld Metal Analysis %							
C	Mn	Si	S	P	Cr	Mo	X-bar
0.04	0.80	0.50	0.008	0.01	1.27	0.54	<15

Deposition Data					
Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
2.4 x 356.0 mm (3/32 x 14.0 in.)	70-110 A	23.2 V	69.01 %	60 sec	0.92 kg/h (2.0 lbs/h)
3.2 x 356.0 mm (1/8 x 14.0 in.)	90-160 A	23.9 V	72.23 %	70 sec	1.36 kg/h (3.0 lbs/h)
4.0 x 356.0 mm (5/32 x 14.0 in.)	130-220 A	24.3 V	72.06 %	75 sec	1.89 kg/h (4.2 lbs/h)
4.8 x 356.0 mm (3/16 x 14.0 in.)	200-300 A	24.3 V	71.04 %	74 sec	2.53 kg/h (5.6 lbs/h)