

Atom Arc 8018-B6L

Atom Arc 8018-B6L deposits a low carbon 5% Cr, 1/2% Mo weld metal. It is designed for welding ASTM A200-T5, A335-P5, A387-Gr5 and similar steels. Applications tend to be in the petrochemical and petroleum industries, especially where hydrogen attack accelerates metal failure. Additionally, these steels are used in pressure vessels and piping for high temperature service.

Specifications	
Classifications	ASME SFA 5.5 : E8018-B6LH4R AWS A5.5 : E8018-B6LH4R
Approvals	MIL : MIL-502-15
Industry	Pipeline Power Generation

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	AC, DC+
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Low alloyed (Low Carbon - 5% Cr - 0.5% Mo)

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1 hour(s) 740 °C (1364 °F)	468 MPa (68 ksi)	614 MPa (89 ksi)	25 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
Stress Relieved	-20 °C (-4 °F)	41 J (30 ft-lb)

Typical Weld Metal Analysis %								
C	Mn	Si	S	P	Ni	Cr	Mo	X-bar
0.04	0.60	0.60	0.011	0.015	0.05	5.40	0.60	<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)