

Atom Arc 8018-B6

Atom Arc 8018-B6 is designed to weld 5% Cr - 1/2% Mo creep resisting steels such as ASTM A387 Grade 5, A213-T5 and A335-P5. These steels are normally used in pressure vessels and piping for high temperature service.

Specifications	
Classifications	ASME SFA 5.5 : E8018-B6H4R AWS A5.5 : E8018-B6H4R
Industry	Power Generation Pipeline Ship/Barge Building

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

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1 hour(s) 740 °C (1364 °F)	611 MPa (89 ksi)	656 MPa (95 ksi)	22 %

Typical Weld Metal Analysis %							
C	Mn	Si	S	P	Cr	Mo	X-bar
0.07	0.70	0.50	0.009	0.013	5.30	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)
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)