ATOM ARC 8018-B3L

AWS A5.5: E8018-B3LH4R

FEATURES

Atom Arc 8018-B3L electrodes contain 2.25% Cr and 1% Mo alloy additions with low carbon content. The electrode is designed for welding 2.25% Cr - 1% Mo steels. The rod operates with a very stable arc and minimal spatter. The low carbon analysis of the weld metal contributes to its crack resistance. The addition of Cr and Mo provide for the excellent creep and stress rupture properties of weldments subjected to elevated temperature service.

TYPICAL MECHANICAL PROPERTIES

Stress Relieved 1 hr. @ 1275°F (691°C)	
Yield Strength	78 ksi, 538 MPa
Tensile Strength	93 ksi, 641 MPa
Elongation in 2”	25%

CLASSIFICATIONS AND APPROVALS

- AWS A5.5: E8018-B3LH4R
- ASME SFA 5.5

WELD METAL ANALYSIS

C	0.04%
Mn	0.7%
Si	0.4%
P	0.017%
S	0.015%
Cr	2.3%
Mo	1.1%

WELDING PROCESS

- SMAW (Stick)

INDUSTRIES

- Mobile Machinery
- Pipeline
- Power Generation

ATOM ARC 8018-B3L

DEPOSITION TABLE				
Diameter in (mm)	Optimal Current Amps	Current Range Amps	Deposition Rate lb/hr (kg/hr)	Efficiency %
3/32 (2.4)	90	70 - 100	1.7 (0.8)	66.3
1/8 (3.2)	120	90 - 160	2.6 (1.2)	71.6
	140	90 - 160	2.7 (1.2)	70.9%
5/32 (4.0)	140	130 - 220	3.1 (1.1)	75
	170	130 - 220	3.8 (1.7)	73.5

PART NUMBER / PRODUCT INFORMATION	
Part Number	Description
255173320	AA 8018-B3L 3/32X14X10#HS
255173312	AA 8018-B3L 3/32X14X50#HS
255171829	AA 8018-B3L 1/8X14X10#HS
255171811	AA 8018-B3L 1/8X14X50#HS
255175325	AA 8018-B3L 5/32X14X10#HS