



U.S. ALLOY CO.

Quality Management System
in accordance with
ISO 9001:2000
Cert # 05-R0925

8018-B2L

(Reclassified as 7018-B2L by AWS)

Low-Alloy Steel Electrode

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



ALLOY DESCRIPTION AND APPLICATION;

USA7018-B2L (formerly 8018-B2L) is Cr-Mo covered electrodes commonly used in maintenance and fabrication of 1/2 % Mo and 1/2 -1.25 % Cr where base metals in the power / boiler piping and equipment may be found. The low hydrogen potassium, iron powder covering has high deposition with good smooth arc, low spatter and easy slag removal. Typical base metals in the 75-85,000 psi range may be welded with this product. The composition ranges were not changed from previous revisions of this classification, only the strength designaion.

TYPICAL WELDING PROCEDURES; DCEP or AC - OPTIMUM IN BOLD

Diameter	3/32"	1/8"	5/32"	3/16"	1/4"
Length	14"	14"	14"	14"	18"
Amps Flat	70- 90 -100	90- 140 -160	130- 170 -220	190- 245 -290	285- 315 -400
Vertical up & Overhead	60- 85 -90	80- 110 -120	110- 145 -170		

Arc Length = Very short arc, Flat use 15°angle from 90°, Vertical up & Overhead use weaving techniques within puddle

Procedures may vary with change in position, base metals, filler metals, equipment and other changes. Preheat and postheat recommended

TYPICAL WELD METAL CHEMISTRY (%) AND WELD METAL PROPERTIES;

Carbon	AWS Spec. 0.05 max		AWS Spec
Manganese	0.90 max	Tensile Strength (psi)	75,000 min.
Silicon	0.80 max	Yield Strength (psi)	57,000
Phosphorus	0.030 max.	Elongation in 2"	19 % min.
Sulfur	0.030 max.		
Chromium	1.00-1.50		
Molybdenum	0.40-0.65		

AVAILABLE SIZES: TEX018-B2L = 10 # containers of 3/32, 5/32, 3/16

Other sizes may be available – please inquire

SPECIFICATIONS; ANSI/AWS A5.5 E7018-B2L
ASME SFA A5.5 E7018-B2L
(Formerly AWS A 5.5, 1981 Class E8018-B2L)

EAST COAST	GULF COAST	WEST COAST
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9-2007 DC

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