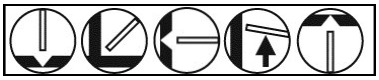
HOBALLOY®8018B2L

AWS E8018-B2L H4R/E7018 B2L H4R

WELDING POSITIONS:



FEATURES:	BENEFITS:
• Lower carbon than Hoballoy 8018B2	• More resistant to cracking
• Excellent arc characteristics	• Stable, easy to control arc
• Low spatter level	• Improves weld bead appearance, higher deposition
• Quick and easy slag removal	• Reduces clean-up time
• Low moisture reabsorption	• Prevents starting porosity
• Low smoke level	• Welder safety and comfort
• Low hydrogen, less than 4 ml/100 g	• Resistant to hydrogen-induced cracking

APPLICATIONS:

- Boiler fabrication and maintenance

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP) or AC

RECOMMENDED WELDING TECHNIQUES:

GENERAL:	Electrode positive, work negative (DCEP) or AC
ARC LENGTH:	Very short arc
FLAT:	Angle electrode 10°-15° from 90°
VERTICAL-UP:	Use weaving techniques
VERTICAL-DOWN:	Not recommended
OVERHEAD:	Use slight weaving motion within the puddle

STORAGE: After opening, store in holding oven (220°F to 350°F) until used.

RECONDITIONING If exposed to atmosphere for extended periods, reconditioned for one (1) hour at 600°F.

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec
Carbon (C)	0.03	0.05 max
Manganese (Mn)	0.63	0.90 max
Phosphorus (P)	0.014	0.03 max
Sulphur (S)	0.01	0.03 max
Silicon (Si)	0.56	0.80 max
Chromium (Cr)	1.48	1.00 - 1.50
Molybdenum (Mo)	0.53	0.40 - 0.65

TYPICAL MECHANICAL PROPERTIES* (SR):

	Stress relieved 1 hour at 1275°F	AWS Spec (minimum)
Tensile Strength	89,000 psi (612 MPa)	80,000 psi (550 MPa)
Yield Strength	74,000 psi (510 MPa)	67,000 psi (460 MPa)
Elongation % in 2”	28%	19%

TYPICAL CHARPY V-NOTCH IMPACT VALUES* (As Welded) (Reported for information only):

		AWS Spec (min)
Avg. at -20°F (-29°C)	46 ft•lbs (62 Joules)	Not required
Avg. at -40°F (-40°C)	30 ft•lbs (41 Joules)	Not required

TYPICAL DIFFUSIBLE HYDROGEN:

Hydrogen Equipment		AWS Spec
(GAS CHROMATOGRAPHY)	3.5 ml/100 g	—

Hobart Brothers Company • 101 Trade Square East • Troy, OH 45373
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HOBALLOY®8018B2L

Diameter Inches	mm	Type of Power	Minimum Amps	Optimum* Amps	Maximum Amps
3/32	2.4	DCEP or AC	70	100	110
1/8	3.2	DCEP or AC	90	135	160
5/32	4.0	DCEP or AC	130	170	220
3/16	4.8	DCEP or AC	200	250	300
7/32	5.6	DCEP or AC	275	325	375
1/4	6.4	DCEP or AC	300	350	400

*For out of position welding, reduce amperages shown by 15%.

TYPICAL DEPOSITION DATA (at optimum):

Diameter Inches	mm	Type of Power	Amps	Deposition Rate lbs/hr
3/32	2.4	DCEP	100	2.51
1/8	3.2	DCEP	135	3.66
5/32	4.0	DCEP	170	4.06
3/16	4.8	DCEP	250	5.88
7/32	5.6	DCEP	325	8.00
1/4	6.4	DCEP	350	8.90

*Allowance made for 2" stub loss included.

- **Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.**

STANDARD DIAMETERS AND PACKAGES: For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543 or (937) 332-5188 for International Customer Service.

Diameter Inches	mm	Length Inches	mm	10-lb Can	50-lb Can
3/32	2.4	14	355	S126132-033	S126132-035
1/8	3.2	14	355	S126144-033	S126144-035
5/32	4.0	14	355	S126151-033	S126151-035
3/16	4.8	14	355	—	S126158-035
7/32	5.6	18	457	—	S126170-035
1/4	6.4	18	457	—	S126181-035

CONFORMANCES AND APPROVALS:

- **AWS A5.5,** E8018-B2L H4R/E7018 B2L H4R
- **ASME SFA 5.5,** F-4, A-3, E8018-B2L
- **ABS** E8018-B2L

TECHNICAL QUESTIONS? For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at Applications.Engineering@hobartbrothers.com

CAUTION:
Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36th St., Miami, FL 33166 (can also be downloaded online at www.aws.org); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Material Safety Data Sheets on any Hobart Brothers Company product may be obtained from Hobart Customer Service or at www.hobartbrothers.com.

Because Hobart Brothers Company is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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HOBART FILLER METALS