BOILERMAKER™ B2

FILLER METALS HOBART
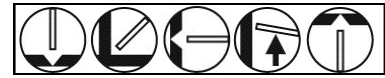
AWS E8018-B2 H4R

FEATURES:
- Good arc characteristics
- Low spatter level
- Quick, easy slag removal
- Low moisture absorption
- Low hydrogen less than 4 ml/100 g

BENEFITS:
- Stable easy to control arc, x-ray clear welds
- Improved weld bead appearance, less clean-up
- No slag inclusions, increased welding efficiency
- Reduces chance of starting porosity
- Resistant to hydrogen induced cracking

APPLICATIONS:
- Boilers
- Tubing

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)	0.05	0.12 max
Manganese (Mn)	0.68	0.90 max
Sulphur (S)	0.01	0.03 max
Phosphorus (P)	0.01	0.03 max
Silicon (Si)	0.36	0.80 max
Chromium (Cr)	1.12	1.00 - 1.50
Molybdenum (Mo)	0.40	0.40 - 0.65

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Stress relieved 1 hr. @ 1275°F		AWS Spec
Tensile Strength	98,000 psi (673 MPa)	80,000 psi
Yield Strength	86,000 psi (592 MPa)	67,000 psi
Elongation % in 2"	23%	19%

TYPICAL CHARPY V-NOTCH IMPACT VALUES* (As Welded):

Stress relieved 1 hr. @ 1275°F		AWS Spec
Avg. at -20°F (-29°C)	54 ft•lbs (73 Joules)	Not required

TYPICAL DIFFUSIBLE HYDROGEN:

Hydrogen Equipment		AWS Spec
(GAS CHROMATOGRAPHY)	2.3 ml/100 g	—

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers Company expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the AWS A5.5 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers Company.

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| Diameter | | Type of Power | Minimum Amps | Optimum* Amps | Maximum Amps |
Inches	mm				
3/32	2.4	DCEP or AC	60	85-95	105
1/8	3.2	DCEP or AC	90	140	160

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

TYPICAL DEPOSITION DATA (at optimum):

| Diameter | | Type of Power | Amps | Deposition Rate lbs/hr |
Inches	mm			
3/32	2.4	DCEP	85	1.73
1/8	3.2	DCEP	140	2.22

*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 | | Length | | 8 - 10-lb Can | 45 - 50-lb Can |
Inches	mm	Inches	mm		
3/32	2.4	12	305	S147931-008	S147931-037
1/8	3.2	14	356	S147944-033	S147944-035

CONFORMANCES AND APPROVALS:
• **AWS A5.5,** E8018-B2 H4R, ASME SFA 5.5, F-4, A-3, E8018-B2

HOBART
FILLER METALS