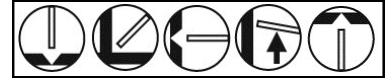


HOBALLOY® 11018M



AWS 11018-M H4R

WELDING POSITIONS:



FEATURES:

- Good arc characteristics
- Good ductility
- Low spatter level
- Quick and easy slag removal
- Low moisture reabsorption
- Low smoke level
- Low hydrogen less than 4 ml/100 g

BENEFITS:

- Stable, easy to control arc
- High impact resistance
- Improves weld bead appearance, higher deposition
- Reduces clean-up time
- Prevents starting porosity
- Welder safety and comfort
- Resistant to hydrogen-induced cracking

APPLICATIONS:

- Reinforcing steel
- High-tensile steels

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

STANDARD DIAMETERS: 3/32" (2.4 mm), 1/8" (3.2 mm), 5/32" (4.0 mm), 3/16" (4.8 mm), 1/4" (6.4 mm)

RE-DRYING: If exposed to atmosphere for extended periods, the electrode should be reconditioned for one (1) hour at 600°F.

STORAGE: After opening, store in holding oven (250°F to 300°F) until used.

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec
Carbon (C)	0.04	0.10 Maximum
Manganese (Mn)	1.57	1.30 - 1.80
Phosphorus (P)	0.015	0.03 Maximum
Sulphur (S)	0.010	0.03 Maximum
Silicon (Si)	0.34	0.60 Maximum
Chromium (Cr)	0.19	0.40 Maximum
Vanadium (V)	0.010	0.05 Maximum
Nickel (Ni)	1.99	1.25 - 2.50
Molybdenum (Mo)	0.29	0.25 - 0.50

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests		AWS Spec
Tensile Strength	116,000 psi (799 MPa)	110,000 psi Minimum
Yield Strength	107,000 psi (736 MPa)	98,000 to 110,000 psi
Elongation % in 2" (50 mm)	22%	20%

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

		AWS Spec
Avg. at -60°F	56 ft •lbs (76 Joules)	20 ft •lbs

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	
(GAS CHROMATOGRAPHY)	2.0 ml/100g

*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	75	90	115
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
1/4	6.4	DCEP or AC	300	350	400

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

TYPICAL DEPOSITION RATES (at Optimum):

Diameter		Type of Power	Amperage	Deposition Rate Lbs/Hr.
Inches	mm			
3/32	2.4	DCEP	100	2.0
1/8	3.2	DCEP	135	2.5
5/32	4.0	DCEP	175	3.9
3/16	4.8	DCEP	250	5.1
1/4	6.4	DCEP	300	7.8

- 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		10# Cans	50# Cans
Inches	mm	Inches	mm		
3/32	2.4	14"	355	S126032-033	S126032-035
1/8	3.2	14"	355	S126044-033	S126044-035
5/32	4.0	14"	355	S126051-033	S126051-035
3/16	4.8	14"	355	S126058-033	S126058-035
1/4	6.4	18"	455		S126081-035

CONFORMANCES AND APPROVALS:

- AWS A5.5, E11018M H4R
- ASME SFA 5.5, F-4, A-12, E11018M H4R
- ABS
- MIL-E-22200/1 (1/8" diameter)
- DNV 5 Y69 H5 (1/8" diameter)

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, 550 NW LeJune Road, Miami, FL 33126; 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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Revision Date: 131001 (Replaces 100705)

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