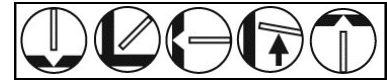


HOBALLOY[®] 10018D2



AWS 10018D2 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:

- Manganese-moly castings
- Alloy forgings
- Structures and pressure vessel applications

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, recondition for one (1) hour at 600°F.

STORAGE: After opening, store in holding oven (250°F to 400°F) until used.

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec
Carbon (C)	0.05	0.15 max
Manganese (Mn)	1.96	1.69 - 2.00
Phosphorus (P)	0.02	0.03 max
Sulphur (S)	0.01	0.03 max
Silicon (Si)	0.17	0.80 max
Nickel (Ni)	0.47	0.90 max
Molybdenum (Mo)	0.40	0.25 - 0.45

TYPICAL MECHANICAL PROPERTIES* (SR):

Mechanical Tests	Stress relieved 1 hour at 1150°F	AWS Spec
Tensile Strength	109,000 psi (750 MPa)	100,000 psi (690 MPa)
Yield Strength	96,000 psi (661 MPa)	87,000 psi (600 MPa)
Elongation % in 2" (50 mm)	23%	16%

TYPICAL CHARPY V-NOTCH IMPACT VALUES* (SR):

	Stress relieved 1 hour at 1150°F	AWS Spec
Avg. at -60°F (-51°C)	40 ft •lbs (54 Joules)	20 ft •lbs (27 Joules)

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	
(GAS CHROMATOGRAPHY)	3.2 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.

HOBALLOY® 10018D2

Diameter		Type of Power	Minimum Amps	Optimum* Amps	Maximum Amps
Inches	mm				
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
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	2.35
1/8	3.2	DCEP	135	2.80
5/32	4.0	DCEP	170	4.00
3/16	4.8	DCEP	250	5.55
1/4	6.4	DCEP	300	7.80

- **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		50# Cans
Inches	mm	Inches	mm	
3/32	2.4	14"	355	S125732-035
1/8	3.2	14"	355	S125744-035
5/32	4.0	14"	355	S125751-035
3/16	4.8	14"	355	S125758-035
1/4	6.4	18"	455	S125781-035

CONFORMANCES AND APPROVALS:

- AWS A5.5, E10018-D2 H4R
- ASME SFA 5.5, E10018-D2 H4R
- ABS

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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Revision Date: 160418 (Replaces 131001)
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