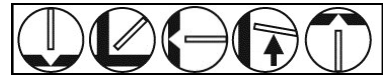


Pipemaster[®] 80



AWS E8010-P1 (E4310*)

WELDING POSITIONS:



FEATURES:

- Quick-starting
- All-position
- Excellent vertical down
- Excellent arc stability
- Superior arc drive
- Excellent wash-in
- Light slag

BENEFITS:

- Easy arc striking and increased welding efficiency
- Welds in flat, horizontal, vertical and overhead positions
- Faster travel speeds
- Welding accuracy and efficiency
- Excellent penetration
- Maximizes fusion of joints
- Quick and easy cleaning of weld bead

APPLICATIONS:

- Drill platforms
- Shipbuilding
- Pipe welding using downhill travel
- Storage tanks
- Welding of high-yield pipe steels

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

RECOMMENDED WELDING TECHNIQUES:

- GENERAL:** Electrode positive, work negative (DCEP)
- ARC LENGTH:** Average length (1/8" to 1/4")
- FLAT:** Stay ahead of puddle and use slight whipping motion
- VERTICAL-UP:** Slight whipping or weaving technique
- VERTICAL-DOWN:** Use higher amperage and faster travel, staying ahead of puddle
- OVERHEAD:** Use similar technique as for vertical-up, multi-pass for build-up
- PIPE:** Use downhill travel

STORAGE: Dry at room temperature.

RECONDITIONING: Not recommended

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec (max)
Carbon (C)	0.19	0.20
Manganese (Mn)	0.84	1.20
Phosphorus (P)	0.008	0.03
Sulphur (S)	0.015	0.03
Silicon (Si)	0.25	0.60
Chromium (Cr)	0.07	0.30
Vanadium (V)	0.01	0.10
Nickel (Ni)	0.87	1.00
Molybdenum (Mo)	0.14	0.50

TYPICAL MECHANICAL PROPERTIES* (As Welded):

		AWS Spec (min)
Tensile Strength	98,000 psi (672 MPa)	80,000 psi
Yield Strength	81,000 psi (560 MPa)	67,000 psi
Elongation % in 2"	19%	19%

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

		AWS Spec (min)
Avg. at -20°F (-29°C)	42 ft•lbs (57 Joules)	20 ft•lbs (27 Joules)

*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				
1/8	3.2	DCEP	70	110	140
5/32	4.0	DCEP	80	160	190
3/16	4.8	DCEP	130	190	240

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

TYPICAL DEPOSITION DATA (at optimum):

Diameter		Type of Power	Amps	Volts	Deposition Rate lbs/hr	Deposition Efficiency*%
Inches	mm					
1/8	3.2	DCEP	110	26-28	1.93	66.0
5/32	4.0	DCEP	140	26-28	2.71	69.0
3/16	4.8	DCEP	180	26-28	3.64	70.0

*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		50-lb Can
Inches	mm	Inches	mm	
1/8	3.2	14	355	S116744-035
5/32	4.0	14	355	S116751-035
3/16	4.8	14	355	S116758-035

CONFORMANCES AND APPROVALS:

- **AWS A5.5**, E8010-P1
- **ASME SFA 5.5**, F-3, A-1, E8010-P1
- **ABS** E8010-P1
- **Lloyd's** Grade 3m, 3Ym

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, 550 NW LeJune Road, Miami, FL 33126 (can 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: 150128 (Replaces 140606)

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