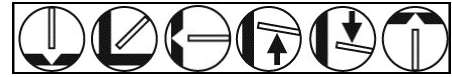


# Pipemaster® 60



AWS E6010 [E4310\*]

## WELDING POSITIONS:



### FEATURES:

- Quick-starting efficiency
- 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
- Easy weld lay-in and smooth bead appearance
- Quick and easy cleaning of weld bead

### APPLICATIONS:

- Construction
- Shipbuilding
- General purpose fabrication
- Maintenance
- Out-of-position X-ray welds
- Pipe and vertical or overhead plate welding

**TYPE OF CURRENT:** Direct Current Electrode Positive (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 CHEMISTRY\* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec (max)
Carbon (C)	0.11	0.20
Manganese (Mn)	0.28	1.20
Silicon (Si)	0.14	1.00
Nickel (Ni)	0.02	0.30
Chromium (Cr)	0.02	0.20
Molybdenum (Mo)	<0.01	0.30
Vanadium (V)	0.01	0.08

**Note:** AWS specification single values are maximums.

### TYPICAL MECHANICAL PROPERTIES\* (As Welded):

Mechanical Tests		AWS Spec (min)
Tensile Strength	73,000 psi (504 MPa)	60,000 psi (414 MPa)
Yield Strength	63,000 psi (432 MPa)	48,000 psi (331 MPa)
Elongation % in 2" (50 mm)	26%	22%
Reduction of Area	64%	Not required

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

		AWS Spec (min)
Avg. @-20°F (-29°C)	52 ft•lbs (70 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 A5.1 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.

# Pipemaster® 60

Diameter		Type of Current	Minimum Amps	Optimum Amps	Maximum Amps
Inches	(mm)				
3/32	(2.4)	DCEP	40	50	70
1/8	(3.2)	DCEP	65	100	130
5/32	(4.0)	DCEP	90	140	175
3/16	(4.8)	DCEP	140	170	225

\*For out-of-position welding, reduce amperage shown by 15%.

Diameter		Type of Current	Amps	Volts	Deposition Rate		Deposition Efficiency %
Inches	(mm)				lbs/hr	(kg/hr)	
3/32	(2.4)	DCEP	50	26-29	1.3	(0.6)	53
1/8	(3.2)	DCEP	100	26-27	1.6	(0.7)	54
5/32	(4.0)	DCEP	140	26-28	1.9	(0.9)	55
3/16	(4.8)	DCEP	170	26-28	2.6	(1.2)	54

- 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		5-lb. (2.3kg)	10-lb. (4.5kg)	50-lb. (22.7kg)
Inches	(mm)	Plastic Pak	Plastic Pak	Can
3/32	(2.4)	S116532-045	S116532-089	S116532-035
1/8	(3.2)	S116544-045	S116544-089	S116544-035
5/32	(4.0)	S116551-045	S116551-089	S116551-035
3/16	(4.8)	—	—	S116558-035

#### CONFORMANCES AND APPROVALS:

- AWS A5.1, E6010
- ASME SFA 5.1, F3, A1, E6010
- ABS, E6010
- Lloyd's Grade 3m

#### 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](http://www.hobartbrothers.com).

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

Pipemaster is a registered trademark of Hobart Brothers Company, Troy, Ohio.

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