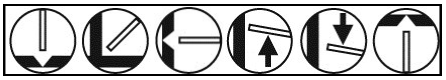
Hobart® 14A

AWS E7014 (E4914*)

WELDING POSITIONS:



FEATURES:	BENEFITS:
• Smooth, stable arc	• Easy to use, good control
• Iron powder added to coating	• Increased deposition rate, faster travel
• Slag detaches easily	• Fast clean-up, good bead appearance
• All position	• Welds in the flat, horizontal, vertical and overhead positions

APPLICATIONS:

- Frames
- Heavy sheet metal
- Machine bases

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

ARC LENGTH: Short (1/8" or less)

FLAT: Angle electrode 10-15° from 90° with higher heat than E6012 electrodes

VERTICAL-UP: Use slight whipping or weaving technique

VERTICAL-DOWN: Use higher amperage and faster travel, staying ahead of puddle

OVERHEAD: Use slight whipping motion

STORAGE: 60° to 100°F, (20° to 40°C) and below 50% relative humidity or holding oven @ 100° to 120°F (38° to 49°C)

RECONDITIONING: 250° to 300°F, (121° to 149°C) for one hour @ temperature

TYPICAL WELD METAL CHEMISTRY* (Chem Pad):

Weld Metal Analysis (%)		AWS Spec (max)
Carbon (C)	0.063	0.15
Manganese (Mn)	0.42	1.25
Phosphorus (P)	0.013	0.035
Sulphur (S)	0.014	0.035
Silicon (Si)	0.22	0.90
Nickel (Ni)	0.07	0.30
Chromium (Cr)	0.06	0.20
Molybdenum (Mo)	<0.01	0.30
Vanadium (V)	0.02	0.08

Note: AWS specification single values are maximums.

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests		AWS Spec (min)
Tensile Strength	81,000 psi (561 MPa)	70,000 psi (483 MPa)
Yield Strength	73,000 psi (504 MPa)	58,000 psi (400 MPa)
Elongation % in 2" (50 mm)	26%	17%
Reduction of Area	33% to 55%	Not required

TYPICAL CHARPY V-NOTCH IMPACT VALUES* (As Welded):
Not applicable

*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.

Hobart Brothers Company • 101 Trade Square East • Troy, OH 45373
PH: (800) 424-1543 • FX: 800-541-6607 • www.hobartbrothers.com

Hobart® 14A

Diameter Inches	(mm)	Type of Current	Minimum Amps	Optimum Amps	Maximum Amps
3/32	(2.4)	DCEN, AC or DCEP	70	80	90
1/8	(3.2)	DCEN, AC or DCEP	120	130	145
5/32	(4.0)	DCEN, AC or DCEP	140	200	210
3/16	(4.8)	DCEN, AC or DCEP	180	240	280

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

Diameter Inches	(mm)	Type of Current	Amps	Volts	Deposition Rate lbs/hr	(kg/hr)	Deposition Efficiency %
3/32	(2.4)	DCEN, AC or DCEP	80	26-29	1.49	(0.7)	64.8
1/8	(3.2)	DCEN, AC or DCEP	130	26-27	2.39	(1.0)	61.7
5/32	(4.0)	DCEN, AC or DCEP	200	26-28	3.91	(1.8)	60.7
3/16	(4.8)	DCEN, AC or DCEP	240	26-28	5.29	(2.4)	66.1

- **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 Inches	(mm)	5-lb. (2.3kg) Plastic Pak	10-lb. (4.5kg) Plastic Pak	50-lb. (22.7kg) Carton
3/32	(2.4)	S114232-045	S114232-089	S114232-031
1/8	(3.2)	S114244-045	S114244-089	S114244-031
5/32	(4.0)	S114251-045	S114251-089	S114251-031
3/16	(4.8)	—	—	S114258-031

CONFORMANCES AND APPROVALS:

- **AWS A5.1,** E7014
- **ASME SFA 5.1,** F3, A-1
- **ABS,** E7014
- **CWB,** E4914

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: 130809 (Replaces 100226)
612-H, INDEX

HOBART FILLER METALS