

Hobart® 24



AWS E7024, E7024-1 (E4924-1*)

WELDING POSITIONS:



FEATURES:

BENEFITS:

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| <ul style="list-style-type: none"> • High deposition • Uses drag welding technique • Self-removing slag • Meets E7024-1 specifications | <ul style="list-style-type: none"> • Faster travel speed • Easy to use • Easy clean-up • Hobart 24 can be used wherever an E7024 or E7024-1 is called for |
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APPLICATIONS:

- | | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> • Earthmoving equipment • Railroad cars | <ul style="list-style-type: none"> • Mining machinery • Structural | <ul style="list-style-type: none"> • Plate fabrication • Shipbuilding | <ul style="list-style-type: none"> • Mobile trailers |
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TYPE OF CURRENT: Direct Current Electrode Negative (DCEN) or AC

ARC LENGTH: Short arc or drag technique

FLAT: Use faster speed of travel; angle electrode 30° from 90°

VERTICAL-UP: Not recommended

VERTICAL-DOWN: Not recommended

OVERHEAD: Not recommended

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)	0.06	0.15
Manganese (Mn)	0.77	1.25
Phosphorus (P)	0.008	0.035
Sulphur (S)	0.019	0.035
Silicon (Si)	0.37	0.90
Nickel (Ni)	0.07	0.30
Chromium (Cr)	0.05	0.20
Molybdenum (Mo)	0.01	0.30
Vanadium (V)	0.03	0.08

Note: AWS specification single values are maximums.

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests		AWS Spec (min)
Tensile Strength	79,000 psi (545 MPa)	70,000 psi (483 MPa)
Yield Strength	71,000 psi (487 MPa)	58,000 psi (400 MPa)
Elongation % in 2" (50 mm)	26%	22%
Reduction of Area	20% to 40%	Not required

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

		AWS Spec (min)
Avg. @0°F (-18°C)	50 ft•lbs (68 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 LLC 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 LLC.

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Diameter		Type of Current	Minimum Amps	Optimum Amps	Maximum Amps
Inches	(mm)				
1/8	(3.2)	AC or DCEN	130	140	150
5/32	(4.0)	AC or DCEN	180	200	225
3/16	(4.8)	AC or DCEN	200	240	280
7/32	(5.6)	AC or DCEN	250	280	320
1/4	(6.4)	AC or DCEN	300	330	360

Diameter		Type of Current	Amps	Volts	Deposition Rate		Deposition Efficiency %
Inches	(mm)				lbs/hr	(kg/hr)	
1/8	(3.2)	AC or DCEN	140	26-27	3.42	(1.6)	65.8
5/32	(4.0)	AC or DCEN	200	26-28	4.94	(2.2)	68.2
3/16	(4.8)	AC or DCEN	240	26-28	6.06	(2.8)	69.3
7/32	(5.6)	AC or DCEN	280		7.35	(3.3)	69.0
1/4	(6.4)	AC or DCEN	330		8.83	(4.0)	69.1

- **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		50-lb. (22.7kg) Carton
Inches	(mm)	
Net Pallet Weight		3000-lb. (1361kg)
1/8	(3.2)	S114844-031
5/32	(4.0)	S114851-031
3/16	(4.8)	S114859-031
7/32	(5.6)	S114870-031
1/4	(6.4)	S114881-031

CONFORMANCES AND APPROVALS:

- **AWS A5.1**, E7024, E7024-1
- **ASME SFA 5.1**, F-1, A1
- **ABS**, Grade 3
- **CWB** E4924-1

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; OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Safety Data Sheets on any Hobart Brothers LLC product may be obtained from Hobart Customer Service or at www.hobartbrothers.com.

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

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