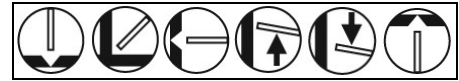


ChromaWeld™ 309LT1



ASME/AWS A5.22: E309LT1-1/4

WELDING POSITIONS:



FEATURES:

- All position
- Self-detaching slag
- Spray-like arc transfer
- High moisture resistance

BENEFITS:

- Welds extremely well in vertical (up) position, as well as flat, horizontal & overhead
- Excellent welder appeal
- Low spatter and less clean-up
- Good weld soundness and extended shelf-life

APPLICATIONS:

- Used for joining common austenitic stainless steel such as Types 304, 304L, 309, 309L. It is often used for steels, as well as for overlaying carbon steel and low alloy steel.

SLAG SYSTEM OR WIRE TYPE: Fast freezing, flux-cored wire

SHIELDING GAS: 100% Carbon Dioxide (CO₂), 75% Argon (Ar)/25% Carbon Dioxide (CO₂), 35-50 cfh (14-24 l/min)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

STANDARD DIAMETERS: 0.045" (1.2 mm)

RE-DRYING: Not recommended

STORAGE: Product should be stored in a dry, enclosed environment, and in its original intact packaging

TYPICAL WELD METAL CHEMISTRY* (Chem Pad):

Weld Metal Analysis	100% CO ₂	AWS Spec
Carbon (C)	0.027	0.04 Maximum
Manganese (Mn)	1.23	0.5-2.5
Silicon (Si)	0.53	1.0 Maximum
Chromium (Cr)	23.95	22.0-25.0
Nickel (Ni)	12.65	12.0-14.0
Iron (Fe)	Bal.	Bal.

Note: AWS specification single values are maximums.

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests	100% CO ₂	AWS Spec
Tensile Strength	81,000 psi (558 MPa)	75,000 psi (517 MPa) Minimum
Yield Strength	61,000 psi (421 MPa)	Not required
Elongation % in 2" (50 mm)	42%	30% Minimum
DeLong Ferrite Number	17	Not required

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

CVN Temperatures	100% CO ₂	AWS Spec
Avg. @ 32°F (0°C)	34 ft•lbs (46 Joules)	Not required

*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 AWS A5.22 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.

ChromaWeld™ 309LT1

Diameter Inches (mm)	Weld Position	Amps	Volts	Approx. Wire Feed Speed		Deposition Rate		Contact Tip to Work Distance	
				(in/min)	(m/min)	(lbs/hr)	(kg/hr)	Inches	(mm)
0.045 (1.2)	All Position	140	24	210	(5.3)	5.0	(2.3)	5/8"	(16)
0.045 (1.2)	All Position	160	25	275	(7.0)	6.0	(2.7)	5/8"	(16)
0.045 (1.2)	All Position	200	29	380	(9.7)	8.0	(3.6)	5/8"	(16)
0.045 (1.2)	Flat & Horizontal	300	33	680	(17.3)	15.0	(6.8)	5/8"	(16)
1/16 (1.6)	All Position	200	28	155	(3.9)	6.5	(2.9)	3/4"	(19)
1/16 (1.6)	All Position	240	29	230	(5.8)	8.5	(3.9)	3/4"	(19)
1/16 (1.6)	Flat & Horizontal	280	33	290	(7.4)	11.0	(5.0)	3/4"	(19)
1/16 (1.6)	Flat & Horizontal	350	35	420	(8.9)	16.0	(7.3)	3/4"	(19)

- **Maintaining a proper welding procedure-including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.**
- The above information was determined by welding with 100% CO₂ shielding gas with a flow rate between 35-50 cfh (14-24 l/min). For 75% Argon (Ar)/25% Carbon Dioxide (CO₂) shielding gas, decrease voltage by 1-2 volts.
- All positions include: Flat, Horizontal, Vertical Up, Overhead & Vertical Down.

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)	28-lb. (12.7 kg) Spool
0.045 (1.2)	S688512-Z78
1/16 (1.6)	S688519-Z78

CONFORMANCES AND APPROVALS:

- ASME/AWS A5.22, E309LT1-1/4

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

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: 160916 (Replaces 160825)
190-N, INDEX

