

Fabshield® 309L-O



AWS A5.22: E309LT0-3

WELDING POSITIONS:



FEATURES:

- No shielding gas needed
- Optimized for flat and horizontal positions
- Austenitic stainless steel deposit
- Low carbon content helps prevent intergranular corrosion

BENEFITS:

- Performs well in field fabrication or drafty shop conditions
- Good performance with both single and multipass welding

APPLICATIONS:

- In-the-field stainless steel welding
- Overlaying carbon and low alloy steels
- Joining stainless to carbon steel
- Joining common austenitic stainless steels

SLAG SYSTEM OR WIRE TYPE: Rutile-type, flux-cored wire

SHIELDING GAS: None

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

STANDARD DIAMETERS: 3/32" (2.4 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 (%)	Fabshield 309L-O	AWS Spec
Carbon (C)	0.025	0.04
Manganese (Mn)	1.73	0.5 to 2.5
Silicon (Si)	0.58	1.0
Chromium (Cr)	23.10	23.0 to 25.5
Nickel (Ni)	12.90	12.0 to 14.0
Molybdenum (Mo)	0.24	0.75
Phosphorus (P)	0.008	0.04
Sulphur (S)	0.009	0.03
Copper (Cu)	0.034	0.75
Iron (Fe)	Bal.	Bal.

Note: AWS specification single values are maximums.

TYPICAL WELD METAL PROPERTIES* (As Welded):

Mechanical Tests	Fabshield 309L-O	AWS Spec
Tensile Strength	91,000 psi (827 MPa)	75,000 ksi (520 MPa)
Yield Strength	70,000 psi (724 MPa)	
Elongation % in 2" (50 mm)	40%	30%
DeLong Ferrite Number	11	

*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 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 LLC.

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Diameter Inches (mm)		Weld Position	Amps	Volts	Deposition Rate lbs/hr (kg/hr)	Contact Tip to Work Distance Inches (mm)
3/32	(2.4)	Flat and Horizontal	225-350	26-30	13-17 (5.9-7.7)	1 - 1-1/2 (25-38)

- **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)	60-lb. (27kg) Coil
3/32 (2.4)	S670929-002

CONFORMANCES AND APPROVALS:

- AWS A5.22, E309LT0-3
- ASME SFA 5.22

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 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.

In-Flux is a registered trademark of Hobart Brothers LLC, Troy, Ohio.

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