



GOLDCOR® 309LSi

AWS EC309LSi

Replaces: 000630

210-B, INDEX 060203

DESCRIPTION:

GOLDCOR 309LSi is an austenitic stainless steel, gas shielded metal cored used to join similar 309L alloys or join 300 series stainless steel to carbon or low alloy steels. It produces a concave bead profile and is formulated to run with 98% Argon and 2% Oxygen shielding gas in the spray transfer mode.

GOLDCOR 309LSi was developed to meet the needs of automotive exhaust fabricators that have poor to fair fit up and desire a metal cored wire that can produce a moderately soft arc at good welding speeds. It is also well suited for stainless applications in the chemical/food service industry.

Features	Benefits
<ul style="list-style-type: none"> • Little or no slag • Low spatter • Soft arc • Higher travel speeds & higher deposition rates • Good for vertical down (30-60° incline) welding 	<ul style="list-style-type: none"> • Requires little or no clean-up time • Promotes good bead appearance • Excellent welder appeal • Increases productivity • Increases throughput time

SHIELDING GAS: 98% ARGON/2% OXYGEN

TYPICAL WELD METAL CHEMISTRY* (CHEM PAD):

Weld Metal Analysis		AWS Spec
Carbon (C)	0.025	0.03 max
Manganese (Mn)	1.50	1.0 to 2.5
Phosphorus (P)	0.020	0.03 max
Sulphur (S)	0.010	0.03 max
Silicon (Si)	0.85	0.65 to 1.00
Copper (Cu)	0.20	0.75 max
Chromium (Cr)	23.9	23.0 to 25.0
Nickel (Ni)	13.1	12.0 to 14.0
Molybdenum (Mo)	0.25	0.75 max

TYPICAL WELD METAL PROPERTIES* (AS WELDED):

		AWS A5.9
DeLong Ferrite Number Range	13-20	not required
Schaeffler Number Range	11-17	not required
WRC Number Range (1992)	11-19	not required

Note: Nitrogen (N) assumed to be 0.06% for calculation purposes.

CONFORMANCES AND APPROVALS:

- AWS A5.9 • ASME SFA5.9 • Class EC309LSi

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RECOMMENDED OPERATING PARAMETERS: For Spray Transfer Welding

Diameter Electric Stickout Position	Arc Voltage (Volts)	Current DCEP (+) (Amps)	Approx. Wire Feed Speed (In/Min)	Deposition Rates (lbs/hr)
.045" (1.2 mm)	22	185	300	8.0
1/2" ± 1/8" Flat and Horizontal	25 29	275 340	550 780	14.0 20.22
1/16" (1.6 mm)	25	200	153	7.5
1" ± 1/4" Flat and Horizontal	29 34	300 450	255 600	12.1 27.0

The values above were determined with 98/2 (Ar/O₂), shielding gas. DCEP
BOLD—Optimum parameters for welder appeal.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter		30-lb. Spool
Inches	mm	
.045"	1.2	S690912-026
1/16"	1.6	S690919-026

Material Safety Data Sheets on any McKay product may be obtained from McKay Customer Service.
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