



STAINLESS STEEL BARE WIRE DATA SHEET

executive 309LSi

DESCRIPTION

Executive 309LSi is preferred over Executive 309L for cladding over carbon or low alloy steels, as well as for dissimilar joints that undergo heat treatment. Executive 309LSi is of the same chemical composition as Executive 309L, with higher silicon content to improve the bead appearance and increase welding ease. The weld beads are exceptionally smooth due to good wetting. Additionally, the lower carbon content reduces the possibility of intergranular carbide precipitation. This increases the resistance to intergranular corrosion without the use of stabilizers such as columbium (niobium) or titanium. Strength of this low-carbon alloy, however, is less than that of the columbium (niobium)-stabilized alloys at elevated temperatures. Ideal for welding Types 304L, 321, and 347 stainless steels.

CHEMISTRY RANGE

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.03	23.0-25.0	12.0-14.0	0.75	1.0-2.5	0.65-1.00	0.03	0.03	0.75

*single values shown are maximum percentages

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
SAW	.093	29 - 32	300 - 350	20 - 30 IPM (500 to 750mm)/min	Record IN Flux
	.125	29 - 32	400 - 550	20 - 30 IPM (500 to 750mm)/min	Record IN Flux
	.156	29 - 32	500 - 650	20 - 30 IPM (500 to 750mm)/min	Record IN Flux
GMAW	.030	21 - 22	160 - 200	30 to 50 CFH	98/99% Ar + 2/1% O ₂ or
	.035	22 - 33	180 - 210	30 to 50 CFH	90 He+7.5 Ar+2.5 CO ₂ or
	.045	23 - 25	190 - 260	30 to 50 CFH	97% Ar + 3% CO ₂
	.062	25 - 28	250 - 330	30 to 50 CFH	
GTAW	.093	Direct Current; Electrode –		30 to 40 CFH	97% Ar + 3% CO ₂

MECHANICAL PROPERTIES

Tensile Strength: 75,000 PSI minimum 520 MPA
Yield Strength: 60,500 PSI 420 MPA
Elongation: 30%

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to AWS/SFA 5.9, Class **ER309LSi** and is certified by the Canadian Welding Bureau to AWS A5.9.