



exocor™

STAINLESS STEEL BARE WIRE DATA SHEET

executive 316LSi

DESCRIPTION

Executive 316LSi is similar to Executive 316L, with higher silicon content for optimum ease in welding and smooth bead appearance. This improves the usability of the filler metal in the gas metal arc process (GMAW). If the dilution by the base metal produces a low ferrite or fully austenitic weld, the crack sensitivity of the weld is somewhat higher than that of a lower silicon content weld metal.

CHEMISTRY RANGE

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.03	18.0-20.0	11.0-14.0	2.0-3.0	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	100% Ar

MECHANICAL PROPERTIES

Tensile Strength: 70,000 PSI minimum 490 MPA
Yield Strength: 58,000 PSI 400 MPA
Elongation: 30%

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to AWS/SFA 5.9, Class **ER316LSi**, and is certified by the Canadian Welding Bureau to AWS A5.9.