

# EXECUTIVE 309/309L

## STAINLESS STEEL

### FLUX CORED WIRE TECHNICAL DATA SHEET

#### DESCRIPTION

Executive 309/309L provides superior weldability, low spatter and smooth beads with easy slag removal. Used to join similar 309L alloy or join 300 series stainless steel to carbon or low alloy steels. Recommended for use as the first layer in a single or multilayer surfacing of non-alloy and low-alloy steels to give 304L deposit.

This wire is designed to be used in the flat/horizontal position. Low carbon in this filler metal reduces the possibility of intergranular carbide precipitation. This increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. Strength of this low-carbon alloy, however, is less than that of the niobium-stabilized alloys or Type 309 at elevated temperatures.

#### APPLICATIONS & FEATURES

Used for welding similar alloys in wrought or cast form; occasionally, to weld type 304 base metals when severe corrosion conditions exist; and welding dissimilar steels.

This is also available in a thin gauge (TG) **Executive 309/309LTG** in .045" diameter for thin plate welding. It offers wider current ranges (as low as 85 Amps) typically only achieved with costly .035" wire, thus offering a substantial savings.

#### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.02	22.72	12.36	0.09	1.35	0.95	0.03	0.01	0.07

**Tensile Strength:** 82,700 PSI min  
**Yield Strength:** 70,000 PSI min

**Elongation:** 38%

#### TYPICAL WELDING PARAMETERS

Diameter	Voltage	Amperage	WFS (in/min)	Shielding Gas*
.045" TG	18-21	85	140	100% CO <sub>2</sub> or Ar + 20-25% CO <sub>2</sub>
.045" TG	26-29	165	300	
.045" TG	28-34	215	500	
.045"	24	130	225	100% CO <sub>2</sub> or Ar + 20-25% CO <sub>2</sub>
.045"	27	175	320	
.045"	30	240	530	
.062"	27	195	152	100% CO <sub>2</sub> or Ar + 20-25% CO <sub>2</sub>
.062"	31	260	260	
.062"	34	320	360	

\*Shielding gas flow rate 35 to 50 CFH. For 100% CO<sub>2</sub> use two volts higher than shown

#### STANDARD PACKAGING

**FCAW** 33-lb plastic spools 1,980-lb pallet

#### CLASSIFICATION

AWS/SFA 5.22, Class **E309/309LT0-1/4**  
Certified by CWB to CSA W48, Class E309/309LT0-1/4

