EXECUTIVE 316/316L

STAINLESS STEEL

FLUX CORED WIRE TECHNICAL DATA SHEET

DESCRIPTION

Executive 316/316L provides superior weldability, low spatter and smooth beads with easy slag removal. The typical molybdenum gives improved resistance to pitting and crevice corrosion over grades 308L and 309L, particularly in the presence of chlorides.

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 316H at elevated temperatures.

APPLICATIONS & FEATURES

Used for welding similar alloys (containing 2% molybdenum) such as AISI316, 316L, 316Ti and 318; also for high temperature service applications. The presence of molybdenum which resists pitting corrosion caused by sulphuric acid, chlorides and cellulose solutions also provides increased creep residence at elevated temperatures.
This is also available in a thin gauge (**TG**) **Executive 316/316LTG** 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	17.92	11.32	2.27	1.13	0.94	0.03	0.01	0.23

Tensile Strength: 81,800 PSI min
Yield Strength: 57,500 PSI min
Elongation: 37%

TYPICAL WELDING PARAMETERS

Diameter	Voltage	Amperage	WFS (in/min)	Shielding Gas*
.045" TG	18-21	85	140	
.045" TG	26-29	165	300	100% CO_2 or Ar + 20-25% CO_2
.045" TG	28-34	215	500	
.045"	24	130	225	
.045"	27	175	320	100% CO_2 or Ar + 20-25% CO_2
.045"	30	240	530	
.062"	27	195	152	
.062"	31	260	260	100% CO_2 or Ar + 20-25% CO_2
.062"	34	320	360	

*Shielding gas flow rate 35 to 50 CFH. For 100% CO_2 use two volts higher than shown

STANDARD PACKAGING

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

CLASSIFICATION

AWS/SFA 5.22, Class **E316/316LT0-1/4**