

#### DESCRIPTION

Executive 316/316L provides superior weldability, low spatter and smooth beads with easy slag removal. This electrode can be used in all positions when welding as root runs in butt welds and thin plates in general.

The 0.04 percent maximum carbon content of weld metal deposited by these electrodes reduces the possibility of intergranular carbide precipitation and thereby increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. Tests have shown that 0.04 percent carbon limit in the weld metal gives adequate protection against intergranular corrosion in most cases.

This low-carbon alloy, however, is not as strong at elevated temperatures as Type E316H. E316L with maximum ferrite content of 2 FN has traditionally been the choice for welding Types 304 and 316 stainless steels for cryogenic service at temperatures down to -452°F (-269°C).

#### APPLICATIONS & FEATURES

Executive 316/316L-16 electrodes are used principally for welding low-carbon, molybdenum-bearing austenitic alloys.

Provides good strength at high temperature and post weld heat treatment is not required. Suitable for welding critical chemical vessels that require low temperature impact property, such as liquid natural gas tank. Extra low carbon content prevents intergranular corrosion.

#### TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N	
0.032	0.71	0.99	0.032	0.013	18.52	11.96	2.27	0.17	0.061	
Tensile Strength:		81,200 PSI min		Yield Strength:		58,000 PSI min		Elongation:		41%

#### TYPICAL WELDING PARAMETERS

Process	Diameter	Length	Amperage
SMAW AC/DC	3/32"	12"	40-70
	1/8"	14"	60-100
	5/32"	14"	90-140
	3/16"	14"	120-185

#### STANDARD PACKAGING & HANDLING

<b>SMAW</b>	40-lb master box
	10-lb plastic tube

#### CLASSIFICATION

AWS/SFA 5.4, Class **E316/316L-16**

