

# EXECUTIVE 309/309L-16

# **STAINLESS STEEL**

COATED ELECTRODE TECHNICAL DATA SHEET

#### DESCRIPTION

Executive 309/309L provides superior weldability, low spatter and smooth beads with easy slag removal. The 0.04 percent maximum carbon content of these weld deposits ensures a higher ferrite content than the E309H, usually greater than 8 FN and reduces the possibility of intergranular carbide precipitation.

This thereby increases the resistance to intergranular corrosion without the use of Nb (Cb). Executive 309L deposits are not as strong at elevated temperature as the niobium-stabilized alloy or Executive 309H deposits. If postweld heat treatment of the carbon steel is essential, the total procedure, welding and heat treatment should be proven prior to implementation. Embrittlement or cracking can occur if dissimilar steel welds are subjected to a post weld heat treatment or to service above 700°F (370°C).

#### **APPLICATIONS & FEATURES**

Commonly used for welding dissimilar steels, such as joining Type 304 to mild or low alloy steel, welding the clad side of Type 304clad steels, welding the first layer of E308L weld cladding and applying stainless steel sheet linings to carbon steel.

Provides excellent crack resistance due to low carbon and more ferrite making it suitable for welding low carbon stainless steel and low carbon cladding, AISI 309S, heat resistant steel (12Cr, 18Cr steel) or dissimilar metals.

ТҮРІС	AL WIRE C	HEMIST	RY & MEO	CHANICA	L PROPER	RTIES				
С	Si	Mn	Р	S	Cr	Ni	Мо	Cu	Ν	
0.03	0.53	1.38	0.031	0.008	24.28	13.03	0.06	0.10	0.10	
Tensile	Strength:	79,800	PSI min	Yield Sti	rength:	59,500 F	PSI min	Elongat	ion:	45%

# **TYPICAL WELDING PARAMETERS**

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

## STANDARD PACKAGING & HANDLING

**SMAW** 

40-lb master box 10-lb plastic tube

### CLASSIFICATION

AWS/SFA 5.4, Class E309/309L-16

