

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). 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 304-clad 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.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
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 Strength:		59,500 PSI min		Elongation:	45%

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

SMAW	40-lb master box
	10-lb plastic tube

CLASSIFICATION

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

