

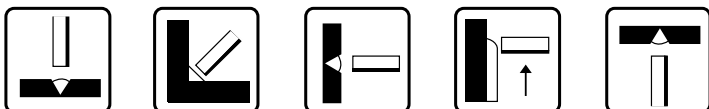


STAINLESS STEEL ELECTRODES

AWS E309L-16

CWB to CSA W48-14
AWS A 5.4-06 E 309L-16

Suitable welding positions



Typical applications

Welding of low carbon 22% Chromium (Cr) – 12% Nickel (Ni) Stainless Steel (AISI 304, 304L, 304LN, 308, 308L, 309, 309L, 321, 347; ACI CF-3, CF-8, CF-8C, CG-12, CH-8, CH-10, and CH-20), heat resisting casting and clad stainless steel. Also commonly used when joining dissimilar metals such as stainless steel to carbon or low alloy steels.

Characteristics on usage

The deposited weld metal has optimal ferrite levels to resist weld metal cracking. Good heat and corrosion resistance. Intergranular corrosion resistance is superior to E309-16 electrodes.

Typical chemical composition of all-weld-metal (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.03	0.84	0.76	0.027	0.013	23.04	12.97	0.08

Typical mechanical properties of all-weld-metal

Yield Strength		Tensile Strength		Elongation
480 MPa	69 ksi	600 MPa	87 ksi	40%

Dimensions and recommended currents

Vanguard Code	Diameter		Length		Amperage	
	inches	mm	inches	mm	F & HF	VU & OH
6012 2009	5/64	2.0	9.8	250	40 - 50	35 - 45
6012 2409	3/32	2.4	11.8	300	50 - 80	45 - 60
6012 3209	1/8	3.2	13.8	350	80 - 100	70 - 90
6012 4009	5/32	4.0	13.8	350	110 - 150	90 - 130
6012 4809	3/16	5.0	9.8	250	140 - 180	---

Standard packaging

Sleeve		Master Carton	
4.5 Kgs	10 Lbs	18 Kgs	40 Lbs