

DURAMAX STAINLESS ELECTRODE DM308L-16

Classification: E308L-16 AWS A5.4 / ASME SFA 5.4

Description, Characteristics & Applications:

DURAMAX E308L-16 has a nominal composition (wt.-%) of 19.5 Cr and 10 Ni. With a maximum 0.04% carbon content, this electrode reduces the possibility of intergranular carbide precipitation and increases the resistance to intergranular corrosion. It's low carbon, however, is not as strong at elevated temperatures such as E308H or E347. But this electrode very good for welding similar materials such as AISI grades 301, 302, 304, and 305.

DM308L-16's characteristics make this electrode the smart choice for general structural welding, as well as for food, pharmaceutical, and brewery equipment applications..

Typical Chemical Composition (%)

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.04 max	18.0-21.0	9.0-11.0	0.75 max	0.5 - 2.5	1.00 max	0.04 max	0.03 max	0.75 max

Deposited Chemical Composition (%) (Typical)

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.025	19.5	9.37	0.08	0.97	0.84	0.022	0.007	0.09

Typical Mechanical Properties as Welded

Tensile Strength (n/mm ²)	Yield Strength (n/mm ²)	Elongation (%)	Hardness	Ferrite WRC (FN)	CVN Impacts (J)	
					@	°C
520 Min	300 Min	30% Min	-----	Typically 5	-----	

Typical Welding Parameters DCEP or AC

Diameter	Type of Current	Amperage Range		Voltage Range
		Flat	Out of Position	
3/32"	DCEP or AC	70 - 80	65 - 80	20 - 23
1/8"	DCEP or AC	80 - 110	75 - 95	21 - 24
5/32"	DCEP or AC	120 - 160	100 - 120	22 - 25
3/16"	DCEP or AC	170 - 190	Not recommended	23 - 25

NOTE: Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

POLARITY: DCEP or AC

DCEP = DC, Electrode Positive (reverse polarity) has the most weld penetration.

AC: medium weld penetration (can have more spatter)

WELDING POSITIONS: All Positions

USE LESS AMPS ON THIN METAL; MORE AMPS ON THICK METAL