DURAMAX STAINLESS ELECTRODE DM310-16

Classification: **E310-16** **AWS A5.4 / ASME SFA 5.4**

Description, Characteristics & Applications:

DURAMAX E310-16 has a nominal composition (wt.-%) of 26.5 Cr and 21 Ni. This electrode is used to weld stainless steel of similar composition in cast and wrought form. It may also be used for surfacing low alloy steels where 310 deposit is required.
DM310- 16's exceptional resistance to oxidation and high temperature toughness make this electrode well suited for welding in chemical processing plants.

Typical Chemical Composition (%)

AWS Spec.	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	
A5.4	0.08-0.20	25.0-28.0	20.0-22.5	0.75 max	1.0 - 2.5	0.75 max	0.03 max	0.03 max	0.75 max	
Typical	0.12	26.0	21.0	0.11	2.00	0.44	0.02	0.01	0.10	

Typical Mechanical Properties as Welded

Tensile Strength (n/mm²)	Yield Strength (n/mm²)	Elongation (%)	Hardness	Ferrite WRC (FN)	CVN Impacts (J) @ +20 °C
550 Min	300 Min	30% Min	-------	------	60 - 90 J

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