WELDWIRE COMPANY, INC. **Technical Information**

Stainless Steel Electrodes

Alloy: WW310NB-16 Class: E310NB-16

Conforms to Certification: AWS A5.4 ASME SFA A5.4

Alloy: E310NB-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.12 max	Si = 0.75 max
Cr = 25.0 – 28.0	P = 0.03 max
Ni = 20.0 – 22.0	S = 0.03 max
Mo = 0.75 max	Cu = 0.75 max
Mn = 1.0 – 2.5	Nb (Cb) + Ta = 0.07- 1.00

Deposited All Weld Metal Properties %
(Typical) As-Welded

Yield Strength	90,000psi
Tensile Strength	60,500psi
Elongation	31%

Deposited Chemical Composition % (Typical)

C = 0.09	Si = 0.52
Cr = 26.40	P = 0.02
Ni = 21.40	S = 0.022
Mn = 2.00	Mo = 0.62
Nb = 0.79	

Deposited Charpy-V-Notch Impact Properties %

Not Applicable

Recommended Welding Parameters

Diameter	Voltage	Amperage Flat Position	Amperage Vertical & Overhead
3/32	24-28	70-85	65-75
1/8	26-30	85-110	80-90
5/32	28-32	110-140	100-120
3/16	28-32	120-160	110-130

Application

Type E310NB-16 electrodes deposit weld metal that is similar in composition to that of type 310, with an addition of columbium and a reduction in carbon content. Electrodes are primarily used for welding steels clad with type 347.

If additional information is needed Contact Weldwire Company, Inc. 800-523-1266