

Stainless Steel Electrodes

Alloy: WW320-16 Class: E320-16

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

Alloy: E320-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.07 max Si = 0.60 max
 Cr = 19.0 – 21.0 P = 0.04 max
 Ni = 32.0 – 36.0 S = 0.03 max
 Mo = 2.0 – 3.0 Cu = 3.0 – 4.0
 Nb (Cb) + Ta = 8 x C min – 1.00 max
 Mn = 0.5 – 2.5

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

Yield Strength	86,000psi
Tensile Strength	59,000psi
Elongation	33%

Deposited Chemical Composition % (Typical)

C = 0.04 Si = 0.52
 Cr = 20.10 P = 0.022
 Ni = 33.75 S = 0.019
 Mn = 1.95 Mo = 2.55
 Nb = 0.45 Cu = 3.55

Deposited Charpy-V-Notch Impact Properties %

Not Applicable

Recommended Welding Parameters

<u>Diameter</u>	<u>Voltage</u>	<u>Amperage Flat Position</u>	<u>Amperage Vertical & Overhead</u>
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

E320-16 electrodes are used to weld matching composition Nb(Cb) / Mo base material. It is resistant to corrosion, especially of sulfuric acids.

