

Stainless Steel Electrodes

Alloy: WW320LR-16      Class: E320LR-16

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

Alloy: E320LR-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.03 max      Si = 0.30 max  
 Cr = 19.0 – 21.0    P = 0.02 max  
 Ni = 32.0 – 36.0    S = 0.015 max  
 Mo = 2.0 – 3.0      Cu = 3.0 – 4.0  
 Nb (Cb) + Ta = 8 x C min – 0.40 max  
 Mn = 1.5 – 2.5

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

Yield Strength      85,000psi  
 Tensile Strength    57,000psi  
 Elongation            34%

Deposited Chemical Composition % (Typical)

C = 0.02              Si = 0.24  
 Cr = 19.80            P = 0.011  
 Ni = 33.90            S = 0.014  
 Mn = 2.05            Mo = 2.40  
 Nb = 0.19            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 &amp; 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

E320LR-16 is similar in composition to type 320, with carbon, silicon, phosphorus, and sulfur controlled to lower limits. Columbium and manganese kept to a narrow range. Low heat input is recommended for welding.

