

Stainless Steel Electrodes

Alloy: WW317-16 Class: E317-16

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

Alloy: E317-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.08 max	Si = 1.0 max
Cr = 18.0 – 21.0	P = 0.04 max
Ni = 12.0 – 14.0	S = 0.03 max
Mo = 3.0 – 4.0	Cu = 0.75 max
Mn = 0.5 – 2.5	

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

Yield Strength	86,500psi
Tensile Strength	58,500psi
Elongation	34%

Deposited Chemical Composition % (Typical)

C = 0.06	Si = 0.52
Cr = 18.90	P = 0.018
Ni = 12.95	S = 0.022
Mn = 1.55	Mo = 3.35

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

E317-16 used for welding of dissimilar steels to carbon steel, or stainless steel to carbon steel. Stringer bead technique should be used for flat, horizontal and overhead welding, weaving technique for vertical position.

