

Stainless Steel Electrodes

Alloy: WW410-16 Class: E410-16

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

Alloy: E410-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.12 max	Si = 0.90 max
Cr = 11.0 – 13.5	P = 0.04 max
Ni = 0.70 max	S = 0.03 max
Mo = 0.75 max	Cu = 0.75 max
Mn = 1.0 max	

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

Yield Strength	79,000psi
Tensile Strength	63,500psi
Elongation	24%

Deposited Chemical Composition % (Typical)

C = 0.10	Si = 0.52
Cr = 12.20	P = 0.021
Ni = 0.65	S = 0.021
Mn = 0.68	

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

E410-16 electrodes are recommended for welding type 410 straight chromium steel. This alloy is used extensively for corrosion and oxidation resistance at elevated temperatures up to 1500°F. Unlike the chromium-nickel stainless steels, this type is not subject to loss of corrosion resistance due to carbide precipitation.

