

Stainless Steel Electrodes

Alloy: WW502-16

Conforms to Certification: AWS A5.4

Class: E502-16

ASME SFA A5.4

Alloy: E502-16

Weld Process: Shielded Manual Metal Arc

AWS Chemical Composition Requirements

C = 0.10 max	Si = 0.90 max
Cr = 4.0 – 6.0	P = 0.04 max
Ni = 0.40 max	S = 0.03 max
Mn = 1.0 max	Mo = 0.45 – 0.65
Cu = 0.75 max	

Recommended Welding Parameters

Diameter	Voltage	Amperage	
		Flat	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

Deposited Chemical Composition % (Typical)

C = 0.08	Cr = 5.25	Si = 0.51
Mn = 0.72	P = 0.022	S = 0.023
Mo = 0.52		

Application

E502-16 is for welding matching composition base metals, usually pipe. Preheat and interpass of more than 300°F is required. Post-weld heat treatment is recommended.

Deposited All Weld Metal Properties %

(Typical) As-Welded

Yield Strength	77,800psi
Tensile Strength	59,000psi
Elongation	22%

Deposited Charpy-V-Notch Impact Properties %

Not Applicable