

Nickel Alloys

Alloy: WwNiMo-7
 Class: ENiMo-7

Conforms to Certification: AWS A5.11
 ASME SFA A5.11

Alloy: ENiMo-7

Weld Process: Shielded Metal Arc Weld Process (SMAW)

AWS Chemical Composition Requirements

C = 0.02 max	Cu = 0.50 max
Mn = 1.75 max	Ni = Remainder
Fe = 2.25 max	Co = 1.0 max
P = 0.04 max	Cr = 1.0 max
S = 0.03 max	Mo = 26.0 – 30.0
Si = 0.20 max	W = 1.0 max
Other = 0.50 max	

Recommended Weld ParametersAmperage (A)

Diameter of Wire	Voltage (V)	Amperage (A)	
		Flat	Vertical and Overhead
3/32 inches (2.4mm)	24 – 28	70 – 85	65 – 75
1/8 inches (3.2mm)	26 – 30	85 – 110	80 – 90
5/32 inches (4.0)	28 – 32	110 – 140	100 – 120
3/16 inches (4.8)	28 – 32	120 – 160	110 – 130

Deposited Chemical Composition % (Typical)

C = 0.01	Mn = 1.20	Fe = 1.50
P = 0.01	S = 0.02	Cu = 0.35
Ni = Remainder	Cr = 0.60	Mo = 28.5

Application

ENiMo-7 electrodes are used for welding nickel-molybdenum alloys and clad side of joints in steel clad with a nickel-moly alloy and to other nickel base alloys. These electrodes normally are used in the flat position.

Deposited All Weld Metal Properties % (AW)

Tensile Strength	117,000psi
Elongation	28%

Deposited Charpy-V-Notch Impact Properties %

Not applicable

