

Nickel Alloys

Alloy: WWNiCrMo-2
 Class: ENiCrMo-2

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

Alloy: ENiCrMo-2

Weld Process: Shielded Metal Arc Weld Process (SMAW)

AWS Chemical Composition Requirements

C = 0.05 – 0.15	Cu = 0.50 max
Mn = 1.0 max	Ni = Remainder
Fe = 17.0 – 20.0	Co = 0.50 – 2.50
P = 0.04 max	Cr = 20.5 – 23.0
S = 0.03 max	Mo = 8.0 – 10.0
Si = 1.0 max	W = 0.20 – 1.0
Other = 0.50 max	

Recommended Weld ParametersAmperage (A)

<u>Diameter of Wire</u>	<u>Voltage (V)</u>	<u>Flat</u>	<u>Vertical and Overhead</u>
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 = 0.10	Mn = 0.57	Fe = 19.0
Si = 0.55	Cu = 0.27	Ni = Remainder
Cr = 21.75	Mo = 9.10	

Application

ENiCrMo-2 electrodes are used for welding nickel-chromium-molybdenum alloys and clad side of joints in steel clad with a nickel-chromium-moly alloy. Also for welding chromium-moly alloys to steel and other nickel base alloys. These electrodes normally are used in the flat position.

Deposited All Weld Metal Properties % (AW)

Tensile Strength	98,500psi
Elongation	25%

Deposited Charpy-V-Notch Impact Properties %

Not applicable

