



PRODUCT

DATA SHEET

Nickel Alloy Wire

Weld Process: GMAW & GTAW

Alloy: ERNiCrMo-4 (Hastelloy C276) Class: ERNiCrMo-4

Conforms to Certification: AWS A5.14 / ASME SFA 5.14

Alloy: DMHASC276

AWS Chemical Composition Requirements

C = 0.02 max Cu = 0.50 max
Mn = 1.0 max Ni = Remainder
Fe = 4.0 to 7.0 Co = 2.5 max
P = 0.04 max Cr = 14.5 – 16.5
S = 0.03 max Mo = 15.0 – 17.0
Si = 0.08 max W = 3.0 – 4.5
Other = 0.50 max V = 0.35 max

C = 0.01 Cr = 15.55 Ni = Balance
Mn = 0.55 Mo = 16.1 Si = 0.04
Fe = 5.5 W = 3.65

Deposited All Weld Metal Properties % (AW)

Tensile Strength 105,000psi
Yield Strength 81,000psi
Elongation 40%

Deposited Chemical Composition % (Typical)

Deposited Charpy-V-Notch Impact Properties %

Not applicable

Application

ERNiCrMo-4 is used for welding nickel-chromium-molybdenum base materials to itself, steel and other nickel base alloys and for cladding steel.

Recommended Welding Parameters for TIG and MIG Welding of Nickel Alloys

<u>Process</u>	<u>Diameter of Wire</u>	<u>Voltage (V)</u>	<u>Amperage (A)</u>	<u>Gas</u>
Tig	.035 inches x 36	12 -15	60 -90	100% Argon
	.045 inches x 36	13 -16	80 - 110	100% Argon
	1/16 inches x 36	14 - 18	90 - 130	100% Argon
	3/32 inches x 36	15 – 20	120 -175	100% Argon
	1/8 inches x 36	15 – 20	150 - 220	100% Argon
MIG	.035 inches	26 – 29	150 – 190	75% Argon + 25% Helium
	.045 inches	28 – 32	180 – 220	75% Argon + 25% Helium



If additional information is needed Contact Weldwire Company, Inc. 800-523-1266

1/16 inches

29 – 33

200 - 250

75% Argon + 25% Helium

Note: Other shielding Gases may be used for Mig and Tig welding. Shielding gases are chosen taking Quality, cost, and Operability into consideration.



If additional information is needed Contact Weldwire Company, Inc. 800-523-1266