



PRODUCT

DATA SHEET

Nickel Alloy Wire

Weld Process: GMAW & GTAW

Alloy: ERNiCrFe-5 (Alloy 62) Class: ERNiCrFe-5
 Conforms to Certification: AWS A5.14 / ASME SFA 5.14

Alloy: DMNA062

AWS Chemical Composition Requirements

C = 0.08 max Cu = 0.50 max
 Mn = 1.0 max Ni = 70.0 min
 Fe = 6.0 – 10.0 Co = 0.12 max
 P = 0.03 max Cr = 14.0 – 17.0
 S = 0.015 max Nb+Ta = 1.5 – 3.0
 Si = 0.35 max Other = 0.50 max

Ni = 73.0 Cr = 15.5 Nb = 2.2
 Fe = 8.0

Deposited All Weld Metal Properties % (AW)

Tensile Strength 80,000psi
 Yield Strength 40,000psi
 Elongation 30%

Deposited Chemical Composition % (Typical)

Deposited Charpy-V-Notch Impact Properties %

Not applicable

Application

ERNiCrFe-5 is used primarily for gas tungsten arc and gas metal arc matching composition base metals. It is also used for welding Inconel 601 and Incoloy 800. It can be used to weld dissimilar metal combinations such as steel, stainless steel, Inconel and Incoloy alloys.

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



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