



PRODUCT

DATA SHEET

Nickel Alloy Wire

Weld Process: GMAW & GTAW

Alloy: ERNiCrMo-1 (Hastelloy G) Class: ERNiCrMo-1
 Conforms to Certification: AWS A5.14 / ASME SFA 5.14

Alloy: DMHASG

AWS Chemical Composition Requirements

C = 0.05 max	Cu = 1.5 – 2.5	C = 0.03	Cr = 22.0	Ni = Remainder
Mn = 1.0 – 2.0	Ni = Remainder	Mn = 1.5	Cu = 2.0	Mo = 6.50
Fe = 18.0 – 21.0	Co = 2.5 max	Fe = 20.5	Nb/Ta = 2.1	
P = 0.04 max	Cr = 21.0 – 23.5	<u>Deposited All Weld Metal Properties % (AW)</u>		
S = 0.03 max	Nb+Ta = 1.75 – 2.50	Tensile Strength	97,000psi	
Si = 1.0 max	Mo = 5.5 to 7.5	Elongation	34.5%	
Other = 0.50 max	W = 1.0 max			

Deposited Chemical Composition % (Typical)

Deposited Charpy-V-Notch Impact Properties %

Not applicable

Application

ERNiCrMo-1 is used for welding nickel-chromium-molybdenum base materials. Can use the GTAW, GMAW, welding processes for cladding steel with the ERNiCrMO-1 weld material.

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