DURAMAX™
Inspiring the future generations of welders

PRODUCT DATA SHEET

Nickel Alloy Wire

Weld Process: GMAW, GTAW & SAW

Alloy: ERNiCu-7 (Alloy 60) Class: ERNiCu-7
Conforms to Certification: AWS A5.14 / ASME SFA 5.14

Alloy: DMNA060

AWS Chemical Composition Requirements

C = 0.15 max	Cu = Remainder
Mn = 4.0 max	Ni = 62.0 – 69.0
Fe = 2.5 max	Al = 1.25 max
P = 0.02 max	Ti = 1.5 – 3.0
S = 0.015 max	Other = 0.50 max
Si = 1.25 max	

Deposited Chemical Composition % (Typical)

C = 0.05	P = 0.008	Ni = 65.9
Mn = 3.45	S = 0.002	Ti = 2.25
Fe = 0.40	Si = 0.77	Al = 0.10
Cu = Balance		

Deposited All Weld Metal Properties % (AW)

Tensile Strength	76,000psi
Yield Strength	51,000psi
Elongation	34.5%

Deposited Charpy-V-Notch Impact Properties %

Not applicable

Application

ERNiCu-7 (NA60) is a copper-nickel alloy base wire for GMAW and GTAW welding of Monel alloys 400 and 404. Also used for overlaying steel after first applying Layer of 610 nickel.

Recommended Welding Parameters for TIG,MIG, and SAW Welding of Nickel Alloys

Process	Diameter of Wire	Voltage (V)	Amperage (A)	Gas
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

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

SAW	3/32 inches	28 – 30	275 – 350	Suitable Flux may be used
	1/8 inches	29 – 32	350 – 450	Suitable Flux may be used
	5/32 inches	30 – 33	400 – 550	Suitable Flux may be used

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

Note: Both agglomerated and fused fluxes can be used for submerged arc welding.

Note: The chemical composition of the flux mainly affects the chemistry of the weld metal and consequently its corrosion resistance and mechanical properties.