

Inweld Nickel 60

UNS N04060

AWS A5.14 Class ERNiCu-7

ASME SFA5.14 ERNiCu-7



Description and Applications:

Inweld Nickel 60 is used for welding nickel-copper alloys (ASTM B127, B163, B164 and B165, UNS number N04400) with the gas tungsten arc (GTAW), gas metal arc (GMAW), submerged arc (SAW), and plasma arc welding processes. The filler metal contains sufficient titanium to control porosity with these processes.

Inweld Nickel 60 is also used for welding Monel ® 400 to itself, for overlaying nickel-copper on steel and welding dissimilar nickel-copper alloys to steel.

Chemical Composition of Nickel 60 ERNiCu-7

Ni ^a	C	Mn	Fe	S	Si	Cu	P	Al	Ti	Total Other(s)
62.0-69.0	0.15	4.0	2.5	0.015	1.25	rem	0.02	1.25	1.5-3.0	0.50

Single values are maximum unless otherwise specified.

^a May contain incidental Co (Cobalt)

Minimum Mechanical Properties (as welded)

Tensile Strength (psi):	70,000 (480 MPA)
Elongation (%)	30



Recommended Welding Parameters:

	Wire Diameter	Voltage*	Amperage*
GMAW Spray Transfer mode (DCRP-Electrode+) 100% Ar inp = inches per minute	0.035"	26-32	175-240
	0.045"	26-32	225-300
	1/16"	27-33	250-330
GTAW (DCSP – Electrode -) ACHF using 100% Argon 2% Thoriated, 2% Ceriated or 2% Lanthanum Tungsten Electrode	1/16"	70-120	70-150
	3/32"	120-160	140-230
	1/8"	170-230	225-320
	5/32"	220-280	175-300