

Inweld Nickel 62

UNS N06062

AWS A5.14 Class ERNiCrFe-5

ASME SFA5.14 ERNiCrFe-5

AMS 5679

MIL-E-21562 Types MIL-RN62, MIL-EN62

MIL-R-5031 Class 8A



Description and Applications:

Inweld Nickel 62 is a nickel-chromium-iron filler metal used for MIG, TIG, Plasma Arc and Submerged Arc welding on Inconel 600 base metal that has a maximum thickness of 2". (For sections thicker than 2" use Nickel 82). The columbium (Cb) content of Nickel 62 is intended to minimize cracking where high welding stresses are encountered which generally occur when welding thicker sections under 2". The weld metal will exhibit the same high temperature strength and oxidation resistance as the base metal. Nearest coated electrode equivalent is Inweld 132 ENiCrFe-1.

Chemical Composition of Nickel 62 ERNiCrFe-5

Ni	C	Mn	Fe	S	Si	Cu	Cr	Cb+Ta	P	Co	Total Other(s)
70.0 min.	0.08	1.0	6.0-10.0	0.015	0.35	0.50	14.0-17.0	1.5-3.0	0.03	0.12	0.50 max.

Single values are maximum unless otherwise specified.

Minimum Mechanical Properties (as welded)

Tensile Strength (psi):	80,000
Yield Strength (0.2% offset) (psi)	40,000
Elongation (%)	30



Recommended Welding Parameters:

	Wire Diameter	Feed Speed	Voltage*	Amperage*
GMAW Spray Transfer mode (DCRP-Electrode+) 100% Ar inp = inches per minute	0.035"	425-520 inp	26-32	175-240
	0.045"	250-310 inp	26-32	225-300
	1/16"	175-220 inp	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