

ERNiCu-7 Filler Metal

For Welding MONEL® Alloys 400, R404, and K-500

ERNiCu-7 filler metal is designed for gas-tungsten-arc (GTAW), gas-metal-arc (GMAW), and submerged-arc welding of Monel 400, R404, and K-500. It is also suitable for surfacing on steel using GMAW or submerged-arc processes. For optimal results under certain GMAW conditions, a barrier layer of pure nickel filler metal is recommended.

The weld metal exhibits properties similar to Monel 400, offering good strength and corrosion resistance in a variety of media, including seawater, salts, and reducing acids. The deposited metal is not age-hardenable and may have lower strength than K-500 base metal when used for joining this alloy.

Specification

- AWS A5.11 ENiCrFe-3 (UNS W86182)
 - ASME II, Part C, SFA-5.14, ERNiCu-7 (UNS N04060)
 - ASME IX, F-No.42
 - *BS 2901 (NA33)
 - *DIN 1736 SG-NiCu30MnTi (2.4377)
 - *(EN) ISO 18274 – SNi4060 (NiCu30Mn3Ti)
- Custom specifications available upon request.

For information regarding certifications and industry approvals, please contact our Technical Department.

Limiting Chemical Composition

Element	Ni+Co	C	Mn	Fe	S	Si
Content(%)	62.0-69.0	0.15 max	4.0 max	2.5 max	0.015 max	1.25 max
Element	Cu	Al	Ti	P	Others	
Content(%)	Remainder	1.25 max	1.5-3.0	0.020 max	0.50 max	

Minimum Mechanical Properties

Property	Value
Tensile Strength, psi	70,000
MPa	483
Elongation, (4d) %	30

Available Product Forms

mm in	0.8 0.030	0.9 0.035	1.0 0.040	1.14 0.045	1.2 0.047	1.6 0.062	2.4 0.093	3.2 0.125
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Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)