

ERNiCrMo-3 Filler Metal

For Welding Alloys 625 / 825 / 25-6MO and High-Alloy Stainless Steels

ERNiCrMo-3 filler metal is designed for gas-metal-arc (GMAW) and gas-tungsten-arc (GTAW) welding of nickel-chromium-molybdenum alloys such as Alloy 625, INCOLOY 825, 25-6MO, and high-alloy austenitic and super-austenitic stainless steels. It is also suitable for surfacing on steel, welding 9% Ni steels, and other corrosion-resistant alloys, and can be used with NT100 submerged-arc flux for overlaying.

The weld metal provides high strength over a broad temperature range and excellent resistance to localized attack, including pitting and crevice corrosion. ERNiCrMo-3 is suitable for dissimilar welding between nickel alloys, INCOLOY alloys, carbon steels, low-alloy steels, and stainless steels, making it ideal for demanding chemical, petrochemical, and marine applications.

Specification

- AWS A5.14 ERNiCrMo-3 (UNS N06625)
- ASME II, Part C, SFA-5.14, ERNiCrMo-3 (UNS N06625)
- ASME IX, F-No.43
- *BS 2901 NA43
- *DIN 1736 SG-NiCr21Mo9Nb (2.4831)
- *(EN) ISO 18274 – SNi6625 (NiCr22Mo9Nb)
- 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	Cu	Si
Content(%)	58.0 min	0.10 max	0.50 max	1.0 max	0.015 max	0.50 max	0.50 max
Element	Al	Ti	Cr	Nb+Ta	Mo	P	Others
Content(%)	0.40 max	0.40 max	20.0-23.0	3.15-4.15	8.0-10.0	0.02 max	0.50 max

Minimum Mechanical Properties

Property	Value
Tensile Strength, psi	105,000
MPa	724
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.)