ERNiCrMo-14 Filler Metal

For Welding Duplex, Super-Duplex, Super-Austenitic Stainless Steels and Nickel Alloys

ERNiCrMo-14 filler metal is designed for gas-tungsten-arc (GTAW) and gas-metal-arc (GMAW) welding of duplex, super-duplex, and super-austenitic stainless steels, as well as nickel alloys such as UNS N06059, N06022, Alloy C-276, and Alloys 22, 625, and 686. It can also deposit overlays with excellent corrosion resistance on a wide range of steels.

The high alloy content (Cr + Mo + W) provides superior resistance to pitting, crevice, and general corrosion. ERNiCrMo-14 is particularly valuable in environments requiring corrosion resistance in HCl or sulfuric acid, protection against crevice corrosion in hot, concentrated acid chloride solutions, and resistance to intergranular attack in oxidizing conditions. Submerged-arc welding is performed with NT100 flux for groove or surfacing applications.

Specification

AWS A5.14 ERNiCrMo-14 (UNS N06686)

ASME II, Part C, SFA-5.14, ERNiCrMo-14 (UNS N06686)

ASME IX, F-No.43

*(EN) ISO 18274 – SNi6686 (NiCr21Mo16W4)

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	P	S	Al
Content(%)	Remainder	0.01 max	1.0 max	5.0 max	0.02 max	0.02 max	0.50 max
Element	Cu	Si	Ti	Cr	Mo	W	Others
Content(%)	0.5 max	0.08 max	0.25 max	19.0-23.0	15.0-17.0	3.0-4.4	0.50 max

Typical Mechanical Properties

Property	Value
Tensile Strength, psi	110,000
MPa	758
Elongation, (4d) %	35

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

Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)