Welding Filler

ERNiCrMo-4

Description

ERNiCrMo-4 is a nickel-based filler metal with high molybdenum and tungsten additions. It is the matching consumable for Hastelloy C276, formulated so weld metal can replicate C276's exceptional corrosion resistance.

Standard nickel welding consumables could not withstand combined mixed oxidizing-reducing acids and wet chlorine media when joining or overlaying C276 components. It maintains outstanding resistance to severe localized corrosion without post-weld heat treatment, making it ideal for waste incinerator scrubber overlay, FGD desulfurization equipment, chemical reactor lining and heavy-corrosion process valve cladding.

Grade: UNS N10276, Hastelloy C276

Chemical Composition (wt%)

Ni	Cr	W	Fe	C	Si	Mn	P	S	Cu	Co	Mo	V	Rest
Remainder	14.5–16.5	3.0–4.5	4.0–7.0	≤0.02	≤0.08	≤1.0	≤0.04	≤0.03	≤0.50	≤2.50	15.0-17.0	≤0.35	≤0.50

Disclaimer: Data is typical for reference only.

Sales@ecalloys.com

Technical standards

Technical Standards
AWS A5.14 / A5.14M
AWS A5.11 / A5.11M
ASME SFA-5.14
ASME SFA-5.11
ISO 18274
ISO 14172

Mechanical Properties

Property	As-Welded (Typical)	Solution Annealed (Typical)	AWS A5.14 (As-Welded)
Ultimate Tensile Strength	760 MPa	720 MPa	⩾690 MPa
0.2% Offset Yield Strength	410 MPa	340 MPa	Not specified
Elongation (4×d)	42%	48%	Not specified
Hardness	210–240 HV	180–210 HV	Not specified