

ER NiCrMo-10 (Alloy C22)

Nickel Alloy TIG/GTAW

Standards

EN/ISO-Standard - 18274

AWS-Standard - A5.14

EN/ISO-Classification - Ni 6022 - NiCr21Mo13Fe4W3

AWS-Classification - ER NiCrMo-10

Features and Applications

- Nickel-chromium-molybdenum alloy designed for joining C22, 625, 825 or combinations of these alloys.
- Provides a tough Nb-free weld metal for dissimilar welds in super austenitic and super duplex stainless steels.
- Offers excellent resistance against stress & corrosion cracking, pitting and crevice corrosion.
- Extensively used for overlays and cladding of lower alloy steels.
- Typically used in the welding of aggressively corrosive media in chemical processing plants, corrosion resistant overlays and in severe offshore and petrochemical environments etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

Alloy 22, Alloy 625, Alloy 825, Alloy 926*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

Polarity

TIG DC (-)

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)
≥690	-	-	-

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition of Weld Metal %

C %	Mn %	Fe %	P %	S %	Si %	Cu %	Ni %	Co %	Cr %	Mo %	V %	W %
max	max	2.00	max	max	max	max	49.00	max	20.00	12.50	max	2.50
0.010	0.50	6.00	0.020	0.010	0.08	0.50	min	2.50	22.50	14.50	0.30	3.50

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6011100599	1.60	1000	5	Cardboard Tube
6011100600	2.40	1000	5	Cardboard Tube
6011100601	3.20	1000	5	Cardboard Tube

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