

ER NiFeCr-1 (Alloy 825)

Nickel Alloy WIRE/GTAW

Standards

EN/ISO-Standard - 18274

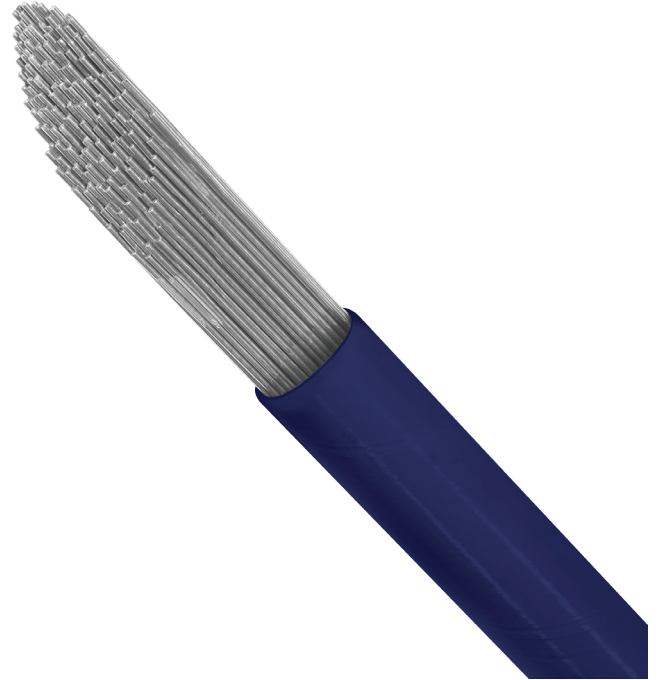
AWS-Standard - A5.14

EN/ISO-Classification - S Ni 8065 - NiFe30Cr21Mo3

AWS-Classification - ER NiFeCr-1

Features and Applications

- Alloy 825 is a nickel-iron-chromium wire making this a suitable choice for a variety of difficult applications.
- This wire provides high levels of corrosion resistance to both moderately oxidising and reducing environments.
- Perfect for overlay cladding where similar chemical composition is required.
- Excellent weldability with fully austenitic weld metal with high resistance against stress corrosion cracking in media containing chloride ions.
- Typically used in the chemical processing industries, petrochemical, paper manufacturing and power generation etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

G-X7NiCrMoCuNb 25 20, X1NiCrMoCuN25 20 6, X1NiCrMoCuN25 20 5, NiCr21Mo, X1NiCrMoCu 31 27 4, N08926, N08904, ALLOY 825, N08028, UNS N08825 W.Nr: 1.4500, 1.4529, 1.4539 (904L), 2.4858, 1.4563, 1.4465, 1.4577 (310Mo), 1.4133, 1.4500, 1.4503, 1.4505, 1.4506, 1.4531, 1.4536, 1.4585, 1.4586*

* 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

DC (-)

Chemical Composition % (Range)

C %	Mn %	Fe %	P %	S %	Si %	Cu %	Ni %	Al %	Ti %	Cr %	Mo %
max	0.70	22.00	max	max	max	2.30	43.00	max	1.00	22.00	3.00
0.05	0.90	min	0.020	0.004	0.50	3.00	46.00	0.20	1.20	23.50	3.50

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6011100608	1.60	1000	5	Cardboard Tube
6011100609	2.40	1000	5	Cardboard Tube
6011100610	3.20	1000	5	Cardboard Tube

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)
≥550	-	-	-

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

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

