TECHNICAL DATA SHEET

Nickel Alloy TIG/GTAW

ER NiCrMo-3 (Alloy 625)

Standards

EN/ISO-Standard - 18274 EN/ISO-Classification - Ni 6625 - NiCr22Mo9Nb AWS-Standard - A5.14 AWS-Classification - ER NiCrMo-3

Features and Applications

- High nickel alloy wire developed for welding and cladding nickelbased alloys such as 625 or similar material.
- Solid drawn in a very special way to obtain cleaner and higher quality welds with a bright seam and excellent ductility.
- The weld metal has very good mechanical properties at high and low temperatures.
- Good resistance to pitting and stress corrosion.
- Recommended working temperature ranges from cryogenic to 540°C.
- Typically used in the chemical process industry, marine engineering, nuclear reactor components, aerospace and within pollution control equipment etc.
- Test Certificates can be found online @wilkinsonstar247.com



Mechanical Properties

Tensile Strength	Yield Strength	Elongation	Impact Strength		
(N/mm²)	(N/mm²)	(%)	(J)		
≥760	≥415	≥35	≥100		

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

Typical Base Materials Inconel 601, Incoloy 800, Alloy 625, Alloy 825, Alloy 926*

* Illustrative, not exhaustive list

Welding Positions

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

Shielding Gases	Polarity			
EN ISO 14175 - TIG: 11 (Argon)	TIG DC (-)			

Chemical Composition of Weld Metal %

C %	Mn %	Fe %	P %	S %	Si %	Cu %	Ni %	Co %	AI %	Ti %	Cr %	Nb + Ta %	Mo %
max	max	max	max	max	max	max	60.00	max	max	max	20.00	3.15	8.00
0.10	0.50	0.50	0.015	0.015	0.50	0.50	min	1.0	0.40	0.40	23.00	4.15	10.00

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6031100101	1.60	1000	5	Cardboard Tube
6031100300	2.40	1000	5	Cardboard Tube
6031100310	3.20	1000	5	Cardboard Tube

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