


Technical data sheet <small>011121MBA</small>	Nickel base filler metal – Solid wire WA TNI/MNI 617	
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CLASSIFICATION

ASME IIC SFA 5.14 / AWS A 5.14:	ERNiCrCoMo-1
EN ISO 14343-A:	S Ni 6617 (NiCr22Co12Mo9)
Equivalent material number:	2.4663
ASME IX Qualification	QW432 F-N° 43

DESCRIPTION

- GTAW rod / GMAW nickel base solid wire
- Nickel - 24% chromium - 12% cobalt - 9% molybdenum composition
- For high temperature applications up to 1100°C
- Good microstructural stability, high creep strength, excellent resistance to oxidation and carburisation.

APPLICATIONS

WA TNI/MNI 617 are suitable for welding and cladding nickel-based alloys such as alloy 617 or other heat resistant nickel base materials operating above 950°C.

Examples:

Alloy	UNS	EN Symbol	Material number
617	N06617	NiCr23Co12Mo	2.4663
601	N06600	NiCr15Fe	2.4816
800	N08800	X10 NiCrAlTi 32-21	1.4876
800H	N08810	X10 NiCrAlTi 32-21	1.4876
800HT	N08811	X8 NiCrAlTi 32-21	1.4959

TYPICAL WIRE ANALYSIS [%]

C	Mn	Si	Cr	Mo	Co	Al	Ti	Fe	Ni
0.08	0.1	0.1	22.0	9.0	12.0	1.0	0.3	0.5	Bal.


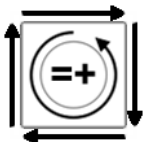
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A ₅ %	CVN [J]
620	400	22	RT: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A ₅ %	CVN [J]
750	500	40	+20°C :150

SHIELDING GAS – OPERATING CONDITIONS – WELDING POSITIONS

GTAW		GMAW	
Shielding gas according to EN ISO 14175	Welding positions Current type	Shielding gas according to EN ISO 14175	Welding positions Current type
I1 (100 % argon)		M12 mixed gas (Ar + 10-30% He +0.5% CO ₂) I1 (100 % argon)	

PACKAGING

Spools	Ø mm	0.8	1.0	1.2	1.6
Rods	Ø x1000 mm	1.6	2.0	2.4	3.2

Other diameters are available on request

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.