Technical data sheet 011121MBA	Nickel base filler metal – Solid wire # WA TNI/MNI 617	Welding Alloys

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.

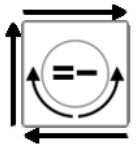
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

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