Technical data sheet 011121MBA	Nickel base filler metal – Solid wire # WA TNI/MNI 22	Welding Alloys

CLASSIFICATION

ASME IIC SFA 5.14 / AWS A 5.14:	ERNiCrMo-10
EN ISO 18274:	S Ni 6022 (NiCr21Mo13Fe4W3)
Equivalent Material number:	2.4602
ASME IX Qualification	QW432 F-N° 43

DESCRIPTION

- GTAW rod / GMAW nickel base solid wire
- Suitable for welding of matching nickel base alloys and dissimilar joints
- Ni - 22% Cr - 13% Mo - 3% W alloy which commonly known as alloy C22
- Excellent resistance against pitting, stress and crevice corrosion in oxidizing atmosphere

APPLICATIONS

WA TNI/MNI 22 are suitable for welding and cladding nickel-based alloys such as alloy 22 or similar materials.
They are also used for dissimilar welding of nickel-based alloys to each other, to alloyed steels or to stainless steels.

Examples:

Alloy	UNS	EN Designation	Material Number
59	N06059	NiCr23Mo16Al	2.4605
C-22	N06022	NiCr21Mo14W	2.4602
C-276	N10276	NiMo16Cr15W	2.4819
C-4	N06455	NiMo16Cr16Ti	2.4610
625	N0625	NiCr22Mo9Nb	2.4856
24	S34565	X2CrNiMnMoNbN25-18-5-4	1.4565
904hMo		X1NiCrMoCuN25-20-7	

TYPICAL WIRE ANALYSIS [%]

C	Mn	Si	Cr	Mo	W	V	Fe	Co	Cu	Ni
0.005	0.2	0.03	21.5	13.5	3.0	0.1	4.0	1.5	0.1	Bal.

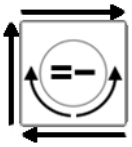
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
700	450	25	+-196°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
740	500	40	-196°C: 100

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