

<b>Technical data sheet</b>  <small>011121MBA</small>	<b>Nickel base filler metal – Solid wire</b>  <b>WA TNI/MNI 276</b>	
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### CLASSIFICATION

ASME IIC SFA 5.14 / AWS A 5.14:	ERNiCrMo-4
EN ISO 18274:	S Ni 6276 (NiCr15Mo16Fe6W4)
Equivalent material number:	2.4819
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 - 15% Cr - 16% Mo - 4% W - 5% Fe alloy which commonly known as alloy C276
- Excellent resistance against pitting, stress and crevice corrosion in oxidizing atmosphere.
- Excellent properties to below -196°C

### APPLICATIONS

WA TNI/MNI 276 are suitable for welding and cladding nickel-based alloys such as alloy 276 or similar materials. They are also used for dissimilar welding of nickel-based alloys to each other, to alloyed steels or to stainless steels and for welding 5% or 9% nickel steel as well as for joining superaustenitic stainless steels

#### Examples:

Alloy	UNS	EN Designation	Material Number
276	N10276	NiMo16Cr15W	2.4819
5% Ni steel		X12Ni5 / 12Ni19	1.5680
9% Ni steel	K81340	X8Ni9	1.5662

Cast materials: A494CW-12MW, A743 / A744CW-12M, Material Number 2.4883 / G-NiMo16Cr

### TYPICAL WIRE ANALYSIS [%]

C	Mn	Si	Cr	Mo	W	V	Fe	Ni
0.01	0.5	0.04	16.0	16.0	3.6	0.2	6.0	Bal.

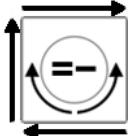
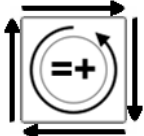
### MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A <sub>5</sub> [%]	CVN [J]
700	400	30	+20°C: 70

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A <sub>5</sub> [%]	CVN [J]
740	500	40	+20°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 <sub>2</sub> ) 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.