

# Solid Wire Rod for TIG Welding

# BA-TIG 276

**Classification:** EN ISO 18274: **S Ni 6276 (NiCr15Mo16Fe6W4)**  
SFA-5.14: **ERNiCrMo-4**

## Main Application:

BA-TIG 276 is a Nickel base solid wire rod for GTAW. Suitable for welding INCONEL alloy C-276 and other nickel-chromium molybdenum alloys, cladding steel, welding carbon steel to nickel base alloys and stainless steels to nickel alloys. The weld metal is high corrosion resistant and exhibits excellent resistance against pitting and crevice corrosion as well as high strength and toughness. Excellent properties down to -196°C.

**Typical analysis and chemical composition acc. to EN ISO 18274 and AWS A5.14:** (Weight Percent)

Wire rod	Ni	Si	C	Cr	Mn	W	Fe	Co	V	Mo	S	P	Cu total	Others
Typical analysis BA-TIG 276	> 58.0	0.04	0.005	15.7	0.5	3.7	5.8	0.05	0.05	16.0	0.004	0.005	0.05	-
S Ni 6276 acc. to ISO 18274	> 50.0	0.08	0.02	14.5-16.5	1.0	3.0-4.5	4.0-7.0	2.5	0.3	15.0-17.0	0.015	0.02	0.5	0.5
ERNiCrMo-4 acc. to AWS A5.14	Rem	0.08	0.02	14.5-16.5	1.0	3.0-4.5	4.0-7.0	2.5	0.35	15.0-17.0	0.03	0.04	0.5	0.5

## All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm <sup>2</sup> (ksi)	≥ 400 (58)
Tensile Strength Rm, N/mm <sup>2</sup> (ksi)	≥ 690 (100)
Elongation A5 [%]	>28
Impact Energy ISO-V, J (ft lbs)	+20°C: ≥ 100 (74)      -196°C: ≥ 47 (34)
Current/polarity	DC -
Shielding Gas	ISO 14175: I1

## Base Materials:

INCONEL alloy C-276, ASTM B 574, B 575, B 619, B 622 and B 628 having UNS number N10276.  
5 to 9 % Ni steels for cryogenic service.

## Package Forms:

5 kg carton boxes as standard package form for GTAW wire rods.

## Diameter:

1,6 – 2,4 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.14.

## Wire Rod Surface:

Smooth finish free from surface defects and foreign matter.