Solid Wire Electrode for MIG/MAG Welding



Classification: EN ISO 18274: S Ni 6276 (NiCr15Mo16Fe6W4)

SFA-5.14: **ERNiCrMo-4**

Main Application:

BA-MIG 276 is a Nickel base solid wire electrode for GMAW. 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 electrode	Ni	Si	С	Cr	Mn	W	Fe	Со	V	Мо	S	Р	Cu total	Others
Typical analysis BA-MIG 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 TreatmentAs WeldedYield Strength Re, N/mm² (ksi)≥ 400 (58)Tensile Strength Rm, N/mm² (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 / I3

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:

Spools BS300/15 kg, and drums as standard package forms for GMAW wire electrodes.

Diameter:

1.0 - 1.2 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.14.

Wire Electrode Surface:

Smooth finish free from surface defects and foreign matter.