



MAC NICRO E231

■ **Description & Applications:**

Manual Metal Arc electrode with a modified low siliceous – medium lime rutile flux coating manufactured on a low carbon fully austenitic core wire which is slightly over alloyed with respect to chrome and nickel. Molybdenum, copper, nitrogen and niobium are added via the flux coating. The E 20.18.6.Cu LR (high recovery) variant is made in 4.00mm only with a modified coating factor to achieve increased deposition rates, close to that achievable with a 5.00mm electrode. The electrode is designed for welding those materials which display resistance to corrosion against sulphuric, phosphoric and other inorganic and organic acids, such fully austenitic stainless steels normally contain molybdenum and copper additions. In particular the electrode is intended for welding Avesta Polarit 254 SLX material but may also be used to weld leaner and copper free variants of this material such as 317 – 317LN and similar.

■ **Related Specification:**

No national specification exists for this electrode. The nearest specification would be AWS E385L-16. However the electrode may be compositionally coded to BS2926 as E 20.18.6.Cu.LR.

Cross Related Specification :

Alloy 718 W No. 2.4668 UNS 07718 AFNOR NC19FeNb

■ **Typical All Weld Metal Chemical Analysis %:**

C	Mn	P	S	Si	Ni	Cr	Nb	Mo	Cu	N ₂
0.02	0.9	0.020	0.020	0.40	20	23	0.30	6.20	0.60	0.10

■ **Typical All Weld Metal Mechanical Properties:**

<u>As Welded</u>	<u>Min</u>	<u>Typical</u>
Ultimate Tensile Strength	580 N/mm ²	630 N/mm ²
0.2% Proof Stress	330 N/mm ²	450 N/mm ²
Elongation on 4d		37 %
Reduction of Area	25%	35%
Impact Energy -196°C		50 J
H.V. 10 kilo		210 V

■ **Current:**

AC/DC (+) AC mon OCV 80

■ **Sizes Available and Recommended Amperages:**

2.50mm 3.25mm 4.00mm
75-120 100-155 120-170

■ **Storage:**

If allowed to become damp the electrodes should be re-dried for one hour at 250° C before use.