



MAC TRODE E61018-G

■ **Description & Applications:**

Low hydrogen manual metal arc welding electrode using a silicon free, low nitrogen, high purity C:Mn core wire with a concentrically extruded, moisture resistant chemically basic flux with a controlled iron powder addition. For welding ferrite high strength low alloy (HSLA) steels e.g. quenched and tempered AISI 4130, 4140, BS970 709M40 (En19) and DIN Cr42 Mo4. For the fabrication of higher strength steels involving a requirement to meet a minimum all weld metal UTS of 690N/mm² (100 ksi) with butt weld in stress relieved condition. For offshore oil well-head process pipework and fittings, these nickel-free electrodes satisfy NACE MR-01-75 requirements intended to ensure resistance to sulphide-induced stress corrosion cracking combined with good sub-zero notch toughness.

■ **Related Specification:**

AWS E10018-G

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

C	Mn	Si	S	P	Mo
0.060	1.53	0.45	0.010	0.010	0.26

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

As Welded

Tensile Strength	N/mm ²	750
0.2% Proof Stress	N/mm ²	660
Elongation on 4d	%	30
Impact Energy-50°C	Joules	35
Reduction of Area	%	65

■ **Current:**

AC/DC

■ **Sizes Available and Recommended Amperages:**

2.50mm	3.25mm	4.00mm	5.00mm	6.00mm
70-100	90-130	130-180	160-220	250-300

■ **Storage:**

If allowed to become damp the electrodes should be re-dried for one hour at 150°C before use.