



MAC TRODE E61018-D2

■ **Description & Applications:**

Basic flux coated – low hydrogen – high strength ferritic low alloy electrode giving a metal recovery of some 120% with respect to the weight core wire. Easy to use, easy strike electrode, which deposits a porosity free weld. Designed for all positional welding of high strength steels. Specifically those with a minimum UTS of 100 ksi. e.g.: AISI 4130, 4140, 8630, BS970 grade 709M40 the old EN19. ASTM A487 grade 4B, 4D and 6A (cast).

■ **Related Specification:**

AWS E10018-D2

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

C	Mn	Si	S	P	Ni	Mo
0.12	1.75	0.50	0.009	0.018	0.70	0.35

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

As Welded

		Min	620°C PWHT	645°C PWHT
Tensile Strength	N/mm ²	690	750	680
0.2% Proof Stress	N/mm ²	620	690	590
Elongation on 4d	%	18	26	28
Charpy 'V' -40°C	Joules	27	60	75
HRC (less than)		22	22	

PWHT applied to alloy 4130 (645°C for 3-5 hours) to meet < 22HRC in Haz for oilfield 500R service (NACE MR017S).

CAUTION. Pre-heat may be required depending on thickness of material being welded. Pre-heat and interpass temperature should be in range of 100°C to 250°C. The electrode coating is non-hygroscopic and ensures low hydrogen levels but as a cautionary measure against physical moisture electrodes should be dried at 150°C before use.

■ **Current:**

AC/DC

■ **Sizes Available and Recommended Amperages:**

2.50mm	3.25mm	4.00mm	5.00mm	6.00mm
60-100	85-140	140-190	200-250	260-340

■ **Storage:**

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