



MAC TRODE E6412

■ **Description & Applications:**

Manufactured using a low carbon, high purity ferritic core wire with a rutile metal powder flux containing chromium as the main alloying element. Both weldability and weld metal appearance are excellent, allowing contact welding with low spatter levels and readily detachable slag. A specially designed electrode for welding wrought alloys such as ASTM A176, A276 and A446, which contain a nominal 25% Cr and possesses similar resistance to oxidation in sulphurous reducing conditions up to 1100°C. The electrode may be used to weld similar alloyed cast materials and applications including, furnace parts, oil burners and flue stack liners.

■ **Related Specification:**

No national specification

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

C	Mn	Si	S	P	Cr	Ni	Fe
0.05	0.4	0.6	0.01	0.012	28	0.1	BAL

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

As Welded

Ultimate Tensile Strength	560 N/mm ²
Elongation on 4d	17%
0.2% Proof Stress	400 N/mm ²
Reduction of Area	42%

■ **Current:**

AC/DC (+)

■ **Sizes Available and Recommended Amperages:**

2.50mm	3.25mm	4.00mm	5.00mm
70-110	110-140	150-200	200-250

■ **Storage:**

If allowed to become damp the electrodes should be re-dried for one hour at 180°C before use.

■ **Other Data:**

Wrought Alloys	Preheat = 200°C
Cast Alloys	Preheat = 200°C - 450°C
PWHT	830°C, followed by rapid air cool