



MAC STAIN E102S

■ **Description & Applications:**

Manual metal arc electrode manufactured on a pure nickel core wire with a chemically semi basic flux which contains both alloying elements and deoxidants. Metal recovery is 160% with respect to the core wire and is ideal for surface work. Designed to weld 25/20 Chromium Nickel heat resisting steels. Specifically designed for welding austenitic stainless heat resistant steels such as AISI Type 310 and Firth Vickers immaculate 5. The weld deposit provides good heat resistance up to 1400°C in air, and up to approximately 650°C in oxidising sulphurous atmospheres. The electrodes are also suitable for welding stainless to carbon or low alloy steels. Recommended for welding foundry heat treatment trays and bins, foundry thermocouple units and many furnace elements.

■ **Related Specification:**

AWS E310-16

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

| C | Mn | Si | Cr | Ni |
|------|------|------|------|-------|
| 0.08 | 2.39 | 0.68 | 26.5 | 20.64 |

■ **Weld Metal Micro Structure:**

Fully austenitic.

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

As Welded

| | |
|---------------------------|-----------------------|
| Ultimate Tensile Strength | 695 N/mm ² |
| Elongation on 4d | 35-40 % |
| Hardness | 210 BHN |

■ **Current:**

AC/DC (+).

■ **Sizes Available and Recommended Amperages:**

| | | | |
|--------|--------|---------|---------|
| 2.50mm | 3.25mm | 4.00mm | 5.00mm |
| 50-60 | 70-100 | 110-140 | 160-180 |

■ **Storage:**

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