



MAC STAIN E100 ELC HR

■ **Description & Applications:**

High quality acid rutile low carbon high recovery stainless steel electrode depositing weld metal of the 19% Cr, 12% Ni, 3% Mo type for corrosion resistance. Metal recovery is 155% with respect to the core wire. Very quiet arc, low spatter, good slag detachability and porosity free smooth welds. Suitable for use in all positions except vertical down, high acid resistance. Extra low carbon. Recommended applications are on cladding, surfacing, dissimilar welds, but best used for thick section of stainless in the flat or H.V. position. Wide usage in textile, pulp and paper, rayon and chemical industries. May be used for overlaying carbon and low alloy steels to provide corrosion and acid resistance. Suitable for general service at temperatures up to 500°C and for acid resistance up to 350°C. The electrode is suitable for welding steels of AISI 316L, 316 and 317 types.

■ **Related Specification:**

AWS E316L-16

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

C	Mn	Si	Cr	Ni	Mo
0.017	1.1	0.64	18.4	12.4	3.1

■ **Weld Metal Micro-Structure:**

Austenite with 5-11% ferrite

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

As Welded

0.2% Proof Stress	370 MPa
Ultimate Tensile Strength	620 MPa
Elongation on 4d	30 – 45 %
Reduction of Area	40 – 45 %
Hardness	150 – 160 Brinell
Charpy Vee Notch +20°C	85 Joules
Charpy Vee Notch -196°C	48 Joules

■ **Current:**

AC/DC (+)

■ **Sizes Available and Recommended Amperages:**

2.50mm	3.25mm	4.00mm	5.00mm
45-70	70-110	110-140	140-180

■ **Storage:**

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