

#### MAC STAIN E100

#### **Description & Applications:**

High quality rutile type niobium stabilised stainless steel electrode for welding 19/12/3 chrome, nickel, molybdenum stainless steels, subject to heat and to resist certain acids and corrosive liquids. Suitable for applications where good resistance to general corrosion and pitting is required. Due to niobium stabilisation the weld deposit has good resistance to intergranular corrosion, and is suitable for applications involving high temperatures up to 600°C. Extensive applications are found in chemical and drug processing, plants, food, petroleum and allied industries.

## Related Specification:

AWS E318-16

# Typical All Weld Metal Chemical Analysis %:

С	Mn	Si	Cr	Ni	Mo	Nb
0.06	1.1	0.65	18.5	12.5	3.1	0.7

## Weld Metal Micro-Structure:

Austenite with 3-10% ferrite

# Typical All Weld Metal Mechanical Properties:

## **As Welded**

Yield Stress  $370 \text{ N/mm}_2$  Ultimate Tensile Strength  $680 \text{ N/mm}_2$  Elongation on 4d 30-35 %

# Current:

AC/DC(+)

### Sizes Available and Recommended Amperages:

1.50mm 2.50mm 3.25mm 4.00mm 5.00mm 25-35 30-45 45-70 70-110 140-180

### Storage:

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