



## MAC STAIN E122B

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### ■ **Description & Applications:**

Designed on a highly alloyed core wire with a high purity chemically basic flux to facilitate all positional welding including on site welding. The weld metal as deposited has a duplex microstructure of the deposited weld contains 30 to 50 % delta ferrite – balance austenite which provides excellent resistance to corrosion and erosion. Mac Stain E122B is designed to weld the following alloys when no subsequent solution heat treatment is applied to the weldment, ASTM A182 Grade F51, UNS 53 1803, DIN 1.4462, BSC Hysist 22/5, Sandvik SAF 2205, Avesta 2205, Valourec VS22

### ■ **Related Specification:**

AWS E2209-15

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

C	Mn	Si	S	P	Cr	Ni	Mo	N <sub>2</sub>
0.02	1.0	0.4	0.01	0.011	22.5	9.0	3.5	0.18

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

#### **As Welded**

		<b><u>Min</u></b>	<b><u>Typical</u></b>
Ultimate Tensile Strength	N/mm <sup>2</sup>	690	760
0.2% Proof stress	N/mm <sup>2</sup>		630
Elongation on 4d	%	20	24
Reduction of area	%		44
Impact energy-50 <sup>0</sup> C	Joules		85

### ■ **Current:**

AC/DC (AC OCV 70 amps)

### ■ **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 the electrodes should be re-dried for one hour at 250°C before use.

### ■ **Additional Data:**

$PRE_N = \%Cr + 3.3 \times \%Mo + 16 \times \%N_2 = 38$