



MAC STAIN E124

■ **Description & Applications:**

Designed on a highly alloyed core wire with a high purity lime/rutile flux coating that deposits high chromium duplex weld metal with excellent resistance to corrosion and erosion. The microstructure of the as deposited weld contains 30 to 50 % delta ferrite – balance austenite.

Mac Stain E124 is designed to weld the following alloys when no subsequent solution heat treatment is applied to the weldment. UNS S32760 (wrought) and UNS J99380 (cast) and Weir Materials Zeron 100 (proprietary brand). Weir metals main areas of application for these materials is when a good combination of high strength and resistance to seawater corrosion is needed.

■ **Related Specification:**

E25 9 4 NLR 32

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

C	Mn	Si	S	P	Cr	Ni	Mo	W	Cu	N ₂
0.02	0.6	0.4	0.015	0.020	25.0	9.5	3.5	0.70	0.8	0.22

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

<u>As Welded</u>		<u>Min</u>	<u>Typical</u>
Ultimate Tensile Strength	N/mm ²	750	910
0.2% Proof stress	N/mm ²	550	690
Elongation on 4d	%	20	25
Reduction of area	%	45	
Impact energy -50°C	Joules	46	

■ **Current:**

AC/DC (OCV 80 min)

■ **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:**

$PRE_N = \%Cr + 3.3 \times \%Mo + 16 \times \%N_2 = 40$