



MAC STAIN E120

■ **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. After water quenching from 1100°C the microstructure is 30-40% delta ferrite – balance austenite. Mac Stain E120 is designed to weld alloys in cast condition which are then solution heat treated at 1100°C and then air or water quenched. These alloys include AISI 329, DIN 1.4460 and 1.4582 and proprietary alloys such as Firth Vickers FMN, Weir Materials Zeron 25, Sandvik 10RE51 and 3RE60

■ **Related Specification:**

Type 25.6.2.LR.

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

C	Mn	Si	S	P	Cr	Ni	Mo	N ₂
0.02	1.1	0.4	0.02	0.019	25.0	7.0	3.5	0.18

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

As Welded

		<u>Min</u>	<u>Typical</u>	<u>Solution H/T 1100°C</u>
Ultimate Tensile Strength	N/mm ²	720	800	740
0.2% Proof stress	N/mm ²			530
Elongation on 4d %	%	15	38	
Reduction of area	%		45	
Impact energy -50°C	Joules		35	

■ **Current:**

AC/DC (AC OCV 70 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.