



MAC TOOL E3066

■ **Description & Applications:**

A low hydrogen electrode manufactured on a high purity mild steel core wire with an extruded chemically basic coating which ensures low S-P-O₂ and N₂ levels and also alloys the weld with the appropriate levels of alloying elements. Weld alloying is by means of appropriate levels of C-Mn-Cr-Ni and Mo, which harden by matrix reinforcing, so combining hardness with toughness. Mac Tool E306 is specifically designed for the repair of low alloy steel die blocks in the forging industry. The weld metal combines hardness with exceptional toughness and resistance to oxidation, plus resistance to thermal cycling. Specifically the nickel ensures toughness, the chrome resistance to oxidation, the molybdenum towards retaining hardness at high temperatures.

■ **Related Specification:**

No national or international specifications applicable.

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

C	Mn	Si	S	P	Cr	Ni	Mo
0.15	1.2	0.4	0.008	0.010	2.2	3.9	1.1

■ **Typical All Weld Metal Deposit Hardness:**

Weld Metal Hardness (As welded) HV 420-430 (43 Rockwell hardness)
(SR 570°C) HV320-400 (30 Rockwell hardness)
(Depending on time temperature)

■ **Current:**

DC (+) or AC (min OCV 70 amps)

■ **Sizes Available and Recommended Amperages:**

3.25mm	4.00mm	5.00mm	6.00mm
100-120	140-180	200-260	250-370

■ **Storage:**

Electrodes should be kept in a dry store. If allowed to become damp the electrodes should be re-dried for two hours at 300°C before use.