



## MAC TOOL E3067

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### ■ **Description & Applications:**

Extruded flux coated MMA electrode manufactured on a high purity nickel core wire with a complex alloyed chemically neutral flux coating. Metal recovery is some 150% with respect to the core wire. The alloy be described as a nickel based Cr Co Mo Al and Ti alloyed material that exhibits excellent (precipitation) hardening characteristics. Mac Tool E3067 deposits weld metal with excellent high temperature strength and toughness stability while retaining excellent resistance to oxidation and creep. The alloy is exceptionally valuable on hot working tools, in the drop forging industry, notably the repair of GFM hammers. As with all complex nickel based alloys, welding procedures and post weld cooling rates within the 200°C min and 400°C max interpass temperatures, should be adhered to. The weld procedure should be designed to favour a maximum fineness of dendritic structure to reduce micro fissuring and liquidation cracking. The use of minimum amperages consistent with good weldability is one criteria that greatly assists this objective.

Flat and HV positions recommended

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

| C    | Mn  | Si  | Cr   | Mo  | W   | Co  | Fe  | Ti + Al |
|------|-----|-----|------|-----|-----|-----|-----|---------|
| 0.04 | 0.2 | 1.2 | 18.0 | 7.2 | 1.4 | 8.4 | 6.5 | 3.5     |

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

In the aged condition 240HV

### ■ **Current:**

AC/DC (+)

### ■ **Sizes Available and Recommended Amperages:**

|        |        |         |         |
|--------|--------|---------|---------|
| 2.50mm | 3.25mm | 4.00mm  | 5.00mm  |
| 50-80  | 80-110 | 140-180 | 160-220 |

### ■ **Storage:**

If allowed to become damp the electrodes should be re-dried for one hour at 300°C before use.