

Metal Marking

Traceability & Identification

Permanent & Stress Free

# Electrochemical Marking Solutions

FROM UNIVERSAL MARKING SYSTEMS





# A solution for a wide range of components

Electrochemical marking offers real versatility as the units are small and portable and deliver extremely high quality marks at a very affordable price. Whether you need to mark the smallest character on the most awkward shaped component or a large logo on a piece of sheet metal, the ME3000 series can do it all. We also have in-house manufacturing capability for bespoke workholding for ease of use and provide consistent repeatability of marks.



- Permanent, minimal stress marking on most metals
- Extremely fast marking from 0.25secs to 4secs for most sized marks
- High contrast black marks or below surface etch
- Hand applied and semi-automatic systems
- Ideal for serial/part numbers, data matrix, logos, text on an arc, date/batch and decorative marking
- Marks thin walled tubing and fully hardened metals
- Light, portable, small footprint kits with everything supplied to get started (except stencils)
- Approved for Aerospace, Nuclear and Medical applications
- Automated systems
- UK Manufactured





## ME3000 Marking Kit Range

#### ME3000T Advanced Marking Kit

The most advanced and versatile marking machine available capable of marking a wide range of metals with alphanumeric data, 2d barcodes and logos. Kit supplied with everything you need to get started (except stencils)

- 15 user definable programs to store settings for different metal types
- Clear twin lined angled LCD display
- Timer function in .25 sec increments to allow very fine marking control
- Meets latest Aerospace standards
- Easy to program
- Oxide marking, below surface etch or combined marking option (performs a light etch followed by an oxide mark all in one operation)
- Optional PC software to create stencil layouts
- Audible buzzer on completion of mark
- 6 output voltage settings allows more precise settings
- 10 and 20Amp models

### ME3000S Standard Marking Kit

The ME3000S is ideal where programs do not need to be stored, where combined marking is not needed and the finer level of control offered by the ME3000T is not required  $\frac{1}{2}$ 

- Oxide or below surface etch mark can be performed
- Quick and easy to set up marking parameters
- Timer function in 1 second increments from 1-10 seconds
- 3 output voltage settings with LED indicator
- Electronic overload/reset button
- Optional PC software to create stencil layouts

#### ME3000P Semi-Automatic System

The ME3000P is a compact semi-automatic air jig for marking batches of small to medium sized components and can be used with the ME3000T and ME3000S.

- Guided air cylinder with 50mm stroke allows fast setup changes
- Electronically controlled pump delivers the exact amount of electrolyte needed
- Stainless steel base plate for direct earthing and with "T" slot for easy mounting of fixtures
- Can mark flat and concave parts









## Stencil Options

The stencil carries the image to be marked onto the metal surface of the component. We supply four stencil types to ensure there is a stencil to suit your needs exactly.

#### **POD Stencils**

- Produce your own high quality stencils
- · For marking variable information both oxide and etch
- Create alphanumeric data, 2d barcodes, logos, sequential no's, text on an arc
- Easy to use fully featured PC stencil software
- Print using a 300dpi thermal stencil printer
- Stencil widths of 55mm or 105mm wide
- Database connectivity

#### **BRSK Stencils**

- For marking variable information with an oxide mark
- Create alphanumeric text
- Keyboard enter data directly to printer or using PC software
- Print using a 180dpi or a 360dpi thermal BRSK stencil printer
- Stencil cartridge tape widths of 18mm, 24mm and 36mm

#### Long Life Photographic Stencils

- Ideal for non-changing information, eg logos, part numbers
- High quality resolution to 1250dpi
- Multiple marks from each stencil
- Multiple formats including frames for accurate placement, caps for production marking and sheets with multiple impressions of the data
- Hand applied or for semi-automatic applications

#### Die Impression Stencils

- Ideal for deep etching variable information
- Easy to use fully featured software
- Produced using a 24pin dot matrix printer
- Suited to variable alphanumeric data primarily but also datamtrix and loaos
- Available in sheets or tractor feed formats















# Electrolytes and Marking Heads

#### **Electrolyte Solutions**

UMS have manufactured their own high quality electrolytes for over 55 years. Used in most industries and approved for use in Aerospace, Nuclear and Medical applications.

- ME Range of electrolytes suited to general engineering applications.
- The MA Range of high purity electrolytes batch tested by an independent lab ensuring they meet the most stringent Aerospace standards.
- A wide range of electrolytes to suit most metals for both oxide and below surface etch marking
- · Available in 1 litre and 125ml bottles
- No cytotoxicity in electrolyte ME6 for stainless steel in accordance with BSEDISO10993: safe for marking surgical implants and instruments.
- Our experienced engineers can offer advice for specific applications.





#### Marking Heads

UMS manufacture a wide range of marking heads in various sizes to suit different types of marking applications. This will be determined by the size of mark, marking location and component shape and type of mark being applied.

- 1. Carbon Marking Heads utilise a carbon electrode and can be used with a screw in reservoir assembly for easy application of electrolyte. Carbon heads can be machined to suit flat, concave or convex surfaces.
- 2. HM Marking Heads are lightweight and easy to use and suited to both oxide and deep etch marking, using a stainless steel electrode. The electrolyte is applied directly to the felt pad.
- 3. The Saddle Marking Head is designed for marking onto curved surfaces.
- 4. The Remote Start Handle (RSH) is used in conjunction with a carbon electrode and integrates the timer enabling the complete marking operation to be carried out with one simple press of the marking head on the component to be marked.











# ME3000 Range Technical Specification

### Feature Comparison

Technical Features	ME3000T	ME3000S
Programmable	✓	
Oxide Mark	✓	✓
Etch Mark	✓	✓
Combined etch + oxide	✓	
10 Amp model	✓	✓
20 Amp model	✓	
/oltage output settings	6	3
limer	0.25 sec increments	1 sec increments
.CD display	✓	
Resetable usage counter	✓	
Audible buzzer on mark completion	✓	
Rear accessory socket	✓	✓
JSB interface	✓	
110-230V mains input voltage	✓	✓
Ouput delay function for curved surfaces	✓	
Jse with ME3000P air jig	✓	✓
Electronic overload/reset function	✓	✓
Continuous output option	✓	1
Complete Kit Weight	12kg	11kg
Marking Unit Weight	5.5kg	4.7kg
(it Dimensions	45cm x 26cm x 35cm	45cm x 26cm x 35cm



## Service and Support

#### **UMS** Customer Service

With over 55 years' experience designing, manufacturing and supplying industrial marking systems across the globe, UMS have extensive knowledge of traceability requirements across a huge range of applications and industries. We have the experience to ensure you get the right system to meet your exact requirements.

#### On-Site Evaluation

We can carry out a full on-site marking evaluation and provide detailed proposals where required. We have a thorough knowledge of the latest industry marking standards so can advise to ensure your system not only meets those requirements but is also configured accordingly.

### Installation & Training

Most customers choose onsite training, however, we can also offer training at our offices in Hampshire.

### Warranty

12 month back to base guarantee on all machines. Loan units available to warranty customers (subject to availability) to prevent any loss of production. Rental units available for non-warranty equipment. Extended warranty option to cover parts and labour.

#### Maintenance Contracts

Regular maintenance is recommended to ensure your equipment continues to run as smoothly as possible throughout it's life. It is a proven way of keeping your costs down. Our contracts are designed to be flexible to meet your needs.

#### Finance Options

Some of our customers' choose from one of our financing options to enable the payment for new equipment to be spread over a longer period.



Discover our full range of marking equipment at www.ums.co.uk



### UNIVERSAL MARKING SYSTEMS

Dukes Mill, Station Approach, Medstead, Hampshire, GU34 5EN
T: +44(0)1420 565800 Fax: +44(0)1420 560135 E: info@ums.co.uk