



# Laser Marking and Machining Services



Located in the ceramic centre of the UK, Dynamic-Ceramic has been providing precision engineering ceramic solutions to its worldwide customer base since 1987 to combat wear and corrosion problems.

Substantial investment in training and equipment has enabled Dynamic-Ceramic to provide additional services such as laser marking, diamond grinding, lapping, honing, and measurement and inspection services.

## Laser Marking

**All Materials** – using an almost infinite range of laser parameters, virtually any material can be marked including metals, ceramics (fully dense and porous), plastics, leather, rubber, wood and cork. The laser marking process is non-contact and is therefore suitable for marking both fragile and tough materials.

**Shallow or Deep Engraving** – the laser mark can be made to a chosen depth to suit your application ranging from very shallow marking which is undetectable to the touch, to deep 3D laser marks which will still retain excellent definition after years of wear or corrosion. It is also possible to provide markings which are normally invisible but can be seen under special lighting conditions. The depth of the engraving can also be varied within the same mark. Deep laser marking can produce 2D features in moulds or forming tools which are then transferred to mass produced parts.

**Logos, Graphics and Photographs** – images can be captured from a variety of sources and processed using specialist graphics software. Once converted to a suitable format for laser marking, the image, logo or photograph can be reproduced at whatever intensity is required.

**Barcodes – Linear and 2D Data Matrix** – for automated or semi automated part identification processes, linear barcodes and 2D data matrix symbologies can be marked with or without man-readable text.

**Sequential Serial Numbers** – if unique part numbers are required for traceability, the laser marking system can be programmed to mark sequential serial numbers.

**Circular Text and Fonts** – if the marking area is restricted text can be applied in a circular or radial format which can be applied clockwise or anti-clockwise. Font styles can be amended to match your branding requirements.

**Rotary Marking** – cylinders and shafts can be laser marked around their external surfaces using the rotary axis.

**Flat and Curved Services** – programmable Z-axis control enables highly focused marking of multi-level flat surfaces in addition to curved surfaces.

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## Dynamic-Ceramic Ltd

Crewe Hall Enterprise Park, Weston Road, Crewe, Cheshire CW1 6UA, United Kingdom

Tel: +44 (0)1270 501000 Fax: +44 (0)1270 501423 Email: laser@dynacer.com Web: www.dynacer.com



## Laser Marking and Machining Services continued...



**Repeatability and Accuracy** – Software controlled laser beam positioning and programmable Z-axis control ensures part to part repeatability and accuracy.

**Express Service** – service levels can be tailored to match your requirements. Parts can be collected, laser marked and returned within 24-48 hours or can be scheduled to match your production requirements.

**Typical Applications** – part marking for identification, authentication, batch traceability in engineering, electronics and medical technology, graduated scales, deep engraving for high temperature applications, business cards in special materials, contemporary jewellery, personalised gifts and promotional materials.

Contact one of our applications engineers to discuss your requirement. We will assess your material free of charge to confirm marking parameters.

## Diamond Grinding, Machining and Measurement Services



Located in the ceramic centre of the UK, Dynamic-Ceramic has been providing precision engineering ceramic solutions to its worldwide customer base since 1987 to combat wear and corrosion problems.

Substantial investment in training and equipment has enabled Dynamic-Ceramic to provide additional services such as diamond grinding, lapping, honing, machining, laser marking and measurement services.

With combined experience of over 200 years in diamond grinding and machining of hard materials our skilled engineers have at their disposal state-of-the-art CNC Grinding machinery enabling them to achieve very fine tolerances and surfaces finishes on a wide variety of materials. Coupling this with our CAD/CAM system and Inspection equipment enables us to provide a full range of services from CAD design optimisation, CNC and NC grinding of one off or complete batches, and confirmation of compliance via inspection reports and Certificates of Conformity.

Dynamic-Ceramic's Quality Management System is accredited to ISO 9001 and if you require a specific Quality Plan we can tailor our services accordingly.

### Machining Services include;

- Diamond Grinding
  - CNC Profile
  - CNC Cylindrical
  - CNC Surface
  - Core Drilling
- Diamond Honing
- Diamond Lapping
- CNC Turning
- CNC Milling
- CAD/CAM

### Measuring and Inspection Services include;

- Profile Tracing
- Programmable CMM Measurement
- Surface Finish
- Non-Contact Measurement



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