Solutions in Laser Micro-machining

Laser Micro-machining subcontract from Oxford Lasers
Laser Micro-machining

Micro Drilling
- Angle holes in Steel
- 500um blind hole in Diamond
- 90um holes in Polyimide
- 50um square holes in SiN
- Gasoline angle hole
- 200um holes in Glass

Micro Milling
- 100um blind hole in Kapton
- 150um width cuts in Sapphire
- 900um square in Steel
- Alumina Spanner
- Diamond meander device
- Tungsten micro milling

Micro Cutting
- 70um width slots in Ceramic
- 100um curved channels in Polymer
- Silicon ring
- Cut in Nickel
- Micro cutting in Steel
- 1mm squares in Glass

Micro Scribing and Patterning
- 2D Matrix Barcode
- 10um tracks on ITO in Glass
- 130um groove in Tungsten
- 100um tracks in Glass
- Direct write of electronic circuits
- 60um channels in Polymer

Materials
- Metals
- Ceramics
- Polymers
- Glass
- Sapphire
- Diamond
- Silicon
- Silicon Nitride

Sub-contract and R&D Services

Laser Consultancy
- R&D contracts
- Process development consultancy

Laser Sub-contract Services
- Sub-micron accuracy
- High aspect depth/diameter ratio
- Experts in micro-machining with micron dimensions
- Typical size from 1 μm to 1 mm
We solve micro-machining problems for you.

Applications Expertise
Oxford Lasers has been providing laser micro-machining services and systems for over 10 years. Our customers include major blue chip companies from automotive, semiconductor, photonics, biomedical, nuclear and electronics industries, research institutes and universities. Our range of services include:
- Feasibility Studies
- Process Development
- Subcontract micro-machining services

Call us to discuss your detailed requirements with one of our Applications Engineers. Non-disclosure agreements can be put in place when appropriate.

Quality
All subcontract work is issued with a batch report. A comprehensive report, with SEM images when appropriate, is included with development work. For customers who require a specific level of quality assurance we work to an agreed Quality Plan.

Facilities
- Short pulse UV and visible wavelength lasers
- Precision 5 axis CNC
- Proprietary trepanning systems
- High speed galvo scanners
- Generic and custom workpiece handling
- CADCAM software
- Scanning Electron Microscope

Process Development Consultancy
Our team of Application Specialists and Design Engineers have many years of experience of advanced laser processing and system design. Contact us to find out how we can help with:
- New product development
- Design for increased flexibility, higher quality and lower cost
- Custom solutions to demanding applications
- Novel processes and systems
- Advanced laser processing
- Micro-fabrication

Talk to our laser process experts now to see what is possible.