

**Graticules Optics is unique in offering photolithographic products on glass, film and in metal foil, with the added bonus of coatings, cementing, mounting and small optical assembly.**

With a pedigree going back over 70 years, Graticules Optics is a proven world-class designer and manufacturer of precision micropattern products. We specialise in providing standard and custom solutions, working closely with our customers to achieve an optimum conclusion. We export globally to a diverse range of industries including light microscopy, electron microscopy, metrology, defence, aerospace and instrumentation.



## CALIBRATION

### Stage Micrometers, Long Scales and Calibration Grids

High Resolution products used for calibrating microscopes, imaging systems, co-ordinate measuring equipment and metrology instruments. Available with calibration certificates traceable to international standards.



## APERTURES

### Slits and Pinholes

High precision electroformed-foil and chrome on glass pinholes and slits. Single and multiple apertures with option of mounting in standard or custom mounts.

### Targets and Reticles

For applications ranging from microscopy to military. Metallic coated or etch and fill images with options of cover glassing, lens cementing and mounting if required.



## RETICLES

## COUNTING CHAMBERS

Sedgewick Rafter,  
Howard,  
Haemocytometers

Wide variety of products  
for biological applications.

### Electron Microscopy Support Grids

Standard range of square mesh, hexagonal, holes, slots, finders, index grids and specialist patterns in numerous materials. Custom and FIB grids made to individual requirements.



## TEM GRIDS



## RESOLUTION CHARTS

### USAF, Star, Ronchi and more

To test optical characteristics such as resolution contrast, distortion, modulation transfer function (MTF) of lenses, cameras and optical systems.

# Manufacturing Services

Graticules Optics offers flexible tailored solutions to deliver bespoke micropattern designs for one-off product as well as large production volumes. Precision images are available on glass, ceramic and film or in metal foils to suit the exact application needs.

## PHOTOLITHOGRAPHY

Process to transfer very high definition positive or negative images from a master onto a substrate.

## ANTI-REFLECTIVE COATINGS

From single layer to multi-layer coatings ranging from the visible to the infra red.

## PHOTOMASK CREATION

Wide range of photomasking and artwork processes available to suit all application needs.

## ELECTRO-FORMING & ETCHING

Facilities to manufacture precision metal foil products (high definition edge and shape, double plating, various materials such as copper, nickel, gold, aluminium, etc.).

## DEPOSITION COATING

Coating capabilities for deposition of chrome, gold, silver, copper, aluminium, etc.

## OPTICAL ASSEMBLY AND CEMENTING

Optical manufacturing facilities providing services such as mounting of apertures into housings, cementing of lens doublets and alignment of reticles into optical assemblies, etc.

# Application



### METROLOGY

Linear Gratings • Positional Calibration Plates • Calibration Scales • Grids • Screens • Encoder Disks



### RESEARCH

Resolution Charts • Targets • Precision Apertures • Bacterial Examination • Culture Growing



### QUALITY CONTROL

Calibration Standards • Scales • Grids • Precision Apertures • Asbestos Analysis



### LIGHT MICROSCOPY

Eyepiece Reticles • Stage Micrometers • Calibration Standards



### ANALYTICAL INSTRUMENTATION

Calibration Targets • Precision Slits • Pinholes • Spectrometer Entrance Slits



### DEFENCE & AEROSPACE

Binocular Reticles • Gunsight Reticles (Day and Night) • Boresights Targets • Resolution Charts • Prism Reticles



### ELECTRON MICROSCOPY

TEM Grids • Aperture Plates Type • FIB Lift-Out Grids



**GRATICULES  
OPTICS**

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