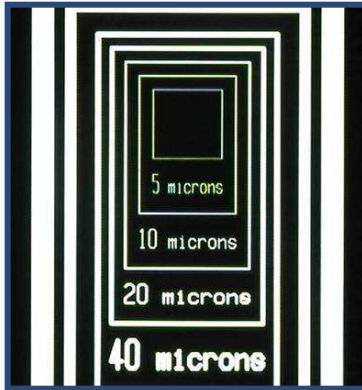


## High Resolution Emulsion Glass Plates and Polyester Films

MicroStencil produces high resolution emulsion glass plates and polyester films in a variety of sizes. Feature sizes as small as 6 microns can be generated on plate sizes as large as 610mm x 508mm (24" x 20").

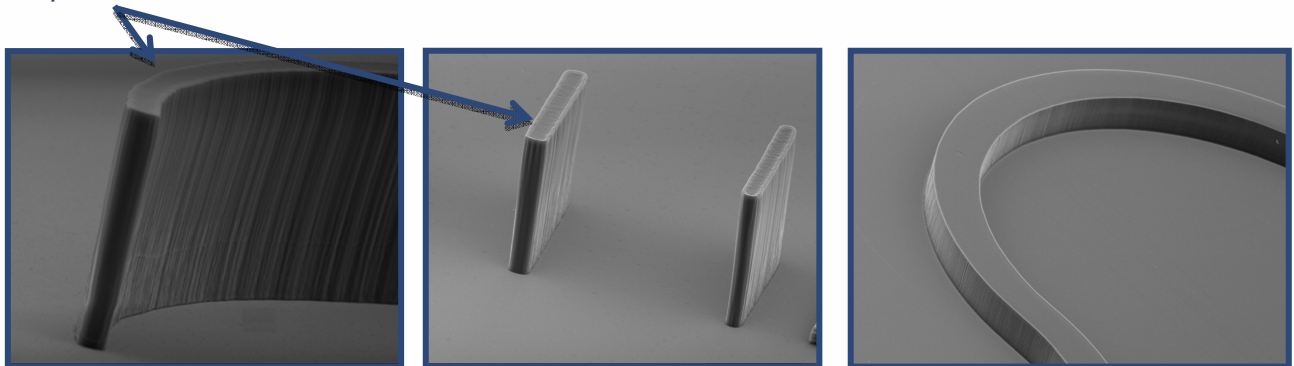


Calibration plate showing feature sizes down to 5  $\mu\text{m}$

Emulsion glass masks are an attractive alternative to Chrome on glass plates which are typically several times more expensive. Our mask manufacturing system use a high resolution plotter with an overlay function which enables the production of smooth arcs and circles.

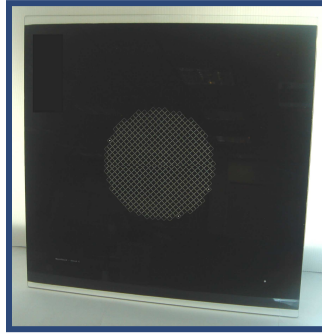
The example electron microscope images below show what lithography results are possible using emulsion on glass photomasks with high resolution high aspect ratio photoresists. Silicon Wafers were coated with a photoresist layer 70 micron in thickness and then exposed using a mask aligner with a 300mj exposure dose.

10 $\mu\text{m}$  line



High aspect ratio photoresist lines patterned using MicroStencil emulsion glass plate

## High Resolution Emulsion Glass Plates and Polyester Films



355mm x 355mm emulsion on glass photomask

### Capabilities

- Smallest feature size on emulsion glass plate : 6  $\mu\text{m}$  with 6  $\mu\text{m}$  spacing
- Smallest features on film mask : 10  $\mu\text{m}$  with 10  $\mu\text{m}$  spacing
- Glass plate sizes : 5" x 5", 7" x 7", 9" x 9", 14" x 14", 20" x 24" (other sizes may be available upon request)
- Film sizes 610mm x 812mm (films can be cut down to size upon request)
- We accept files with extension .gbr, gbx, .gds, .dxf, .dwg and .cif

### Quality

- We produce our masks in a class 1000 cleanroom to ensure all masks are produced to the highest quality.
- Masks are packaged in a cleanroom environment
- All masks receive a thorough inspection
- We offer a speedy turnaround time and competitive price on all masks making our product ideal for a number of applications ranging from rapid prototyping, research and production

### Delivery and enquiries

- All masks can be dispatched from our premises within 2 working days. Delivery method is flexible depending on turnaround time requirement. Masks can be expedited faster upon special request.
- For all mask enquires please e-mail: [sales@microstencil.com](mailto:sales@microstencil.com)