

MEASURING WITH THE MICROSCOPE

With the aid of stage and eyepiece scales, sizes and quantities of whole specimens and/or sections may be measured over a wide range of magnifications.

The following pages describe eyepiece and stage graticules commonly used in microscopy. Divided scales, grids, concentric circles, crosslines, plus specialised patterns for particle sizing analysis and comparison are all available. Where standard designs are not suitable, special custom types can be made, please contact our Edenbridge Sales Office to discuss your requirements.

If you need a graticule for your microscope we can supply it.

Type of Measurement Covered

FROM THE EYEPIECE:-

- SIZE and POSITION
- AREA
- STEREOLOGY
- METALLURGY
- ANGULAR
- PARTICLE SIZING
- PARTICLE DISTRIBUTION/COUNTING

FROM THE STAGE:-

- SCALES AND MICROMETERS
- REFERENCE
- CALIBRATION
- VOLUME
- VIBRATION
- FINDER GRATICULES

We manufacture products with imperial and metric units: Thus from millimetres to microns and from inches to thousandths we can provide a solution.

We manufacture components (encoder discs, graticules, metal foil, resolution standards) to custom design, if it is not in the catalogue please contact us for pricing information.

MEASURING WITH THE MICROSCOPE

EYEPIECE GRATICULES (RETICLES)

Size and Position

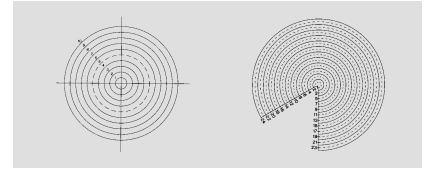
Datum Lines

Simple lines and crosses used in conjunction with a graduated mechanical stage and for sighting and alignment. See page 10



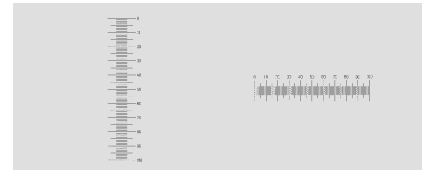
Gauges

For quick, approximate sizing between lines or circles of known separation or radius. See page 17



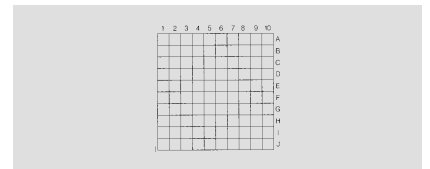
Scales

For precise linear measurement. See page 13



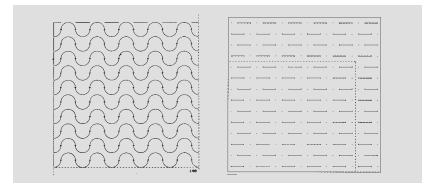
Circles and Squares

Patterns for rapid approximation of area by overlapping subject image with graticule. See page 14



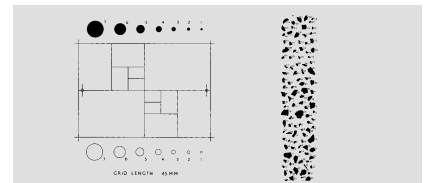
Stereology

Enables three-dimensional information to be obtained from two-dimensional sections. Used either in an eyepiece or overlaid on a micrograph of the image. See page 27



Particle Sizing

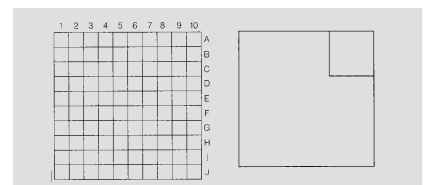
For sizing of dust, aerosol droplets, abrasives, etc. See page 19
Also irregular shapes for instruction in sizing.



Particle Distribution

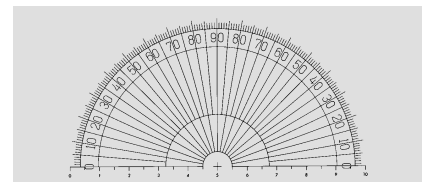
Grids for detailed counts over a known area. See page 14

Proportional squares for rapid approximate counts over a known area.



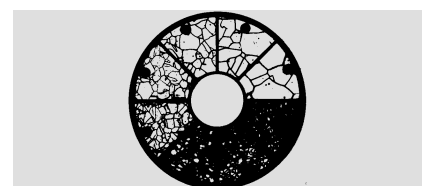
Angular

Eyepiece protractors. See page 18



Metallurgy

ASTM and VDEH grain sizing. See page 29

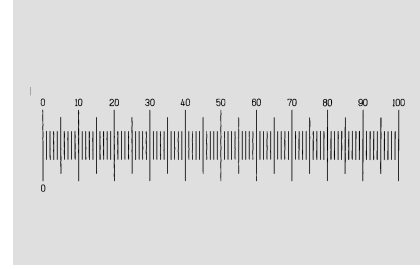


MEASURING WITH THE MICROSCOPE

STAGE GRATICULES

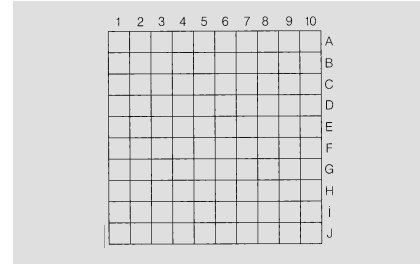
Scales and Micrometers

Graduated scales of precisely known length and division on glass discs.
See page 31



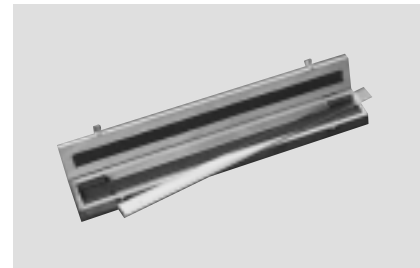
Reference

Identifiable grids, precisely interchangeable with all others of the same type. Grid references enable specific field(s) to be recorded.
See page 32



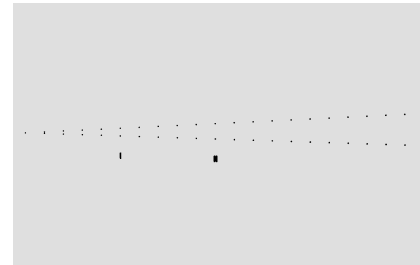
Calibration Standards

For the precise calibration and confirmation of accuracy of optical measuring instruments. See page 33 and 48



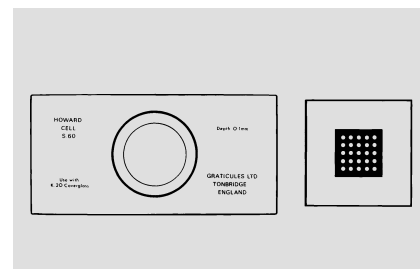
Vibration Analysis

FOE PPL dots for the determination of the amount of vibration.
See page 35



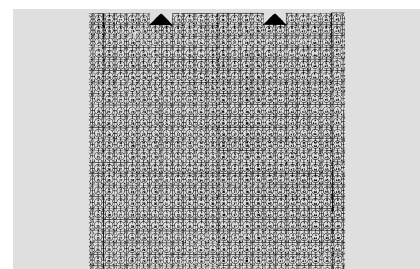
Volume

The number of sample particles is counted in wells of precisely known volumes, e.g. Counting Cells. See page 36



Finder Graticules

Used for swift and accurate location of an area of interest on a specimen, e.g. England Finder. See page 37



We manufacture components (encoder discs, graticules, metal foils, resolution standards) to custom design, if it is not in the catalogue please contact us for pricing information.