

Anti-Vibration Tables and Platforms for Balances, Microscopes & Microtomes etc.

Balance Platform AMS 30 x 45

British designed and manufactured

A high performance anti-vibration platform for analytical balances with a 30 x 45cm active area. The unique Sorbothane isolator design removes up to 98% of unwanted vibrations. Pharma grade stainless steel meets stringent cleanliness requirements and is resistant to most chemicals. The sound deadening layer construction eliminates surface vibrations.

The custom design and low natural frequency of the built-in isolators ensures that vibrations common in most laboratories are effectively removed maximising instrument performance.

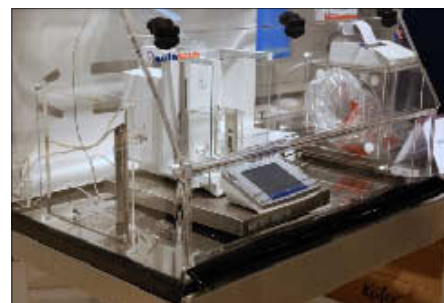
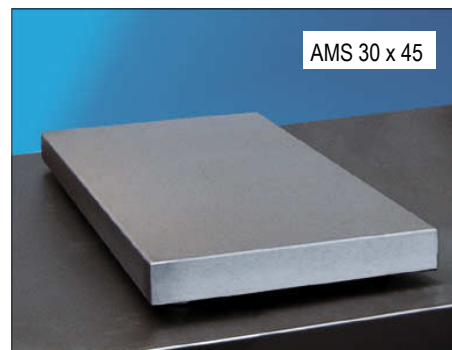
Specifications:

Dimensions LxWxD	450 x 300 x 55mm (18 x 12 x 2in)
Load capacity	25Kg/50lbs
Surfaces	Pharma grade S/S
Isolators	4 x Sorbothane (thermoset polyester based polyurethane)
Weight	12Kg/25lbs

Isolation performance:

50Hz	95%
100Hz	98%
Working temp	-20° to +160°C
Bacterial growth	None
Fungal growth	None
Heat ageing	Stable

T561 Balance platform AMS 30 x 45 each



Microscope Platform AMC-7

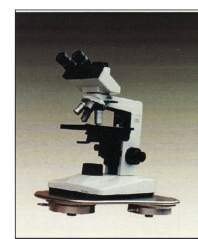
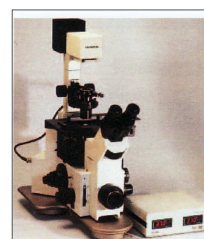
A high performance bench top anti-vibration platform with the following features:

- Contoured T shape ideal for microscope work
- Unique elastomer isolator removes up to 99% of vibrations
- Loads to 50Kg (75Kg option)
- No rocking or wobbling

These platforms are made from high grade steel parts welded together for rigidity and coated with a tough white epoxy powder finish which is resistant to most forms of biological and chemical attack. The isolators can also be easily removed for cleaning.

T568/25 Microscope platform AMC-7 25Kg capacity

T568/50 Microscope platform AMC-7 50Kg capacity



Underside of Platform
showing Isolators



Balance & Microscope Anti-vibration Workstation - Stainless Steel

The 30x45cm isolation area for the instrument removes up to 98 percent of unwanted vibrations and the 240 satin silicon stainless meets stringent cleanliness requirements and is resistant to almost all forms of chemical attack. The Stainless platform sits on four 7Hz Sorbothane isolators and this sound deadened construction outperforms simple steel and granite platforms.

The 75 x 75cm flush working area for support equipment will accept acoustic or laminar flow cabinets and the rigid steel frame with height adjustable levelling feet is easy to install and free from maintenance.

Ideal for 3 to 5 digit balances and research microscopes.

T572 Balance & microscope anti-vibration workstation



Microscope Workstation AMD-MP Passive Air

A microscope/microtome anti-vibration table 123 x 78 x 90cm containing a 120 x 75cm isolation platform. The surface finish is stainless steel and there are 4 air rolling diaphragm supports. These supports are pumped up manually and give long term performance. They can be pumped up at any time easily by hand with the pump supplied.

Performance:

Isolation	97% at 50Hz 99% at 100Hz
Natural frequency	2Hz
Height adjustment	735 to 765mm
Weight	55Kg

Metal side and under shelves, LCD monitor post and arm rest bar are available as extras. Please ask for quotes. The castors shown in the image are for moving the table and are not normally recommended for use in situ.

T563 Anti-vibration table AMD-MP



Active Area Microscope Table AMD-MA

A High Performance active air anti-vibration table for microscopes. A 120 x 75cm isolation table for research microscopes with a unique damped rolling diaphragm sub 2Hz frequency isolator which removes up to 99% of vibrations. The built-in 35 x 55cm isolation area gives excellent stability and maximises work area. The surrounding worktop can be used without disturbing the microscope. The damped rolling diaphragm isolators have a low natural frequency of 2Hz which effectively isolates out vibrations above 6Hz well below which typical building vibrations occur. Requires a compact oil-free silent air compressor for the active plate which can run up to 5 tables. This and other options are available such as monitor arms, castors and Stainless Steel surface.

Specifications:

Dimensions LxWxD	1230 x 780 x 900mm
Load capacity	100Kg
Level adjustment	± 30mm
Surfaces	White epoxy or Stainless Steel
Isolators	4x damped rolling diaphragm active air isolators

Isolation performance:

50Hz	97%
100Hz	99%
Natural frequency	2Hz
Air supply	5 - 10 bar max via 6mm air line push fitting
Working temp	-20°C to +160°C
Weight	90Kg

T562 Microscope table AMD-MA
C407 Silent air compressor

Full size metal shelf, computer shelf, side table, LCD monitor post, arm rest bar, articulated arm rests, gel arm rests and castors available as extras. Please ask for prices.

Silent oil-free compressor



We can offer anti-vibration solutions for most applications—please ask

TAAB Stereo Microscopes

Meiji EMZ-5 Stereo Zoom

A Japanese made high quality stereo with LED illumination. Excellent value for money.

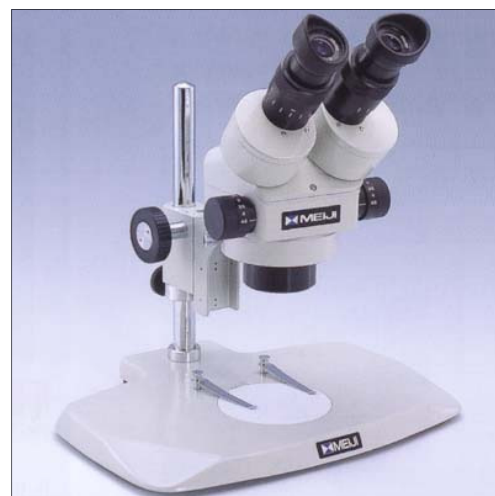
- Binocular zoom body with precision optics giving high resolution and an excellent image
- Rugged all metal body designed for a lifetime of performance
- Zoom range 0.7x to 4.5x = 7x to 45x with standard 10x eyepieces
- Zoom ration 6.5:1
- Ergonomically positioned bilateral zoom controls
- Binocular eyetubes inclined at 45° for fatigue-free viewing
- Dual dioptic adjustment (± 5 dioptres) allows specimen to remain in focus throughout zoom range
- Interpupillary adjustment from 54mm to 75mm
- Binocular body can be rotated 360° and locked in any position
- Standard working distance 93mm
- PKL LED stand as shown opposite with incident and transmitted light giving bright long life illumination. Incorporates voltage sensing power supply

M095 Meiji EMZ-5 Stereo Zoom with LED illumination on pole stand
M096 Meiji EMZ-5TR Stereo Zoom with *Trinocular Head*

Necessary accessories for M096

MA150/50 Camera attachment to fit 25mm \varnothing trinoc tube of M096. Consists of camera tube and detachable clamp. Needs T2 adapter ring (available for Canon, Contax/Yashica, Konica, Minolta, Nikon, Olympus, Pentax, Praktika (bayonet))

MA512 2.5x photoeyepiece - matches field of 10x eyepiece
MA541 Camera field framing graticule for focusing SWF 10x eyepiece
MA151/N CCTV adapter to fit phototube of M096. Consists of a shortened phototube to replace standard item and an adjustable 'C' mount
 Digital cameras are available for this microscope



Phase Contrast Asbestos Test Slide

HSE/NPL Test Slide for Phase Contrast Calibration in Asbestos Analysis. This test slide is made in the UK under license from the National Physical Laboratory. The purpose of the slide is to provide a standard means to check the performance of phase microscopes prior to the analysis of asbestos. The pattern consists of seven bands of twenty lines with widths ranging from 0.25 microns to 1.1 microns. This slide is the band 5 version where microscopes need to be able to fully view band 5 and partially view band 6.

Each slide is fully tested and approved by the Health & Safety Laboratory, and issued with a certificate. HSE recommend the slide is recalibrated every 3 years.

S470 Asbestos Test Slide



Stage Micrometer

See also page 11/10

The most common microscope calibration scale used to calibrate eyepiece graticules. TAAB offer a scale length of 1mm divided into 0.01mm divisions. To obtain maximum accuracy the image of the stage micrometer is protected by a micro cover glass to exactly correspond with the specimen it replaces as the majority of microscopes are corrected for examining specimens through a cover glass by transmitted light. For incident light specimens the 1mm stage micrometer is available without cover glass.

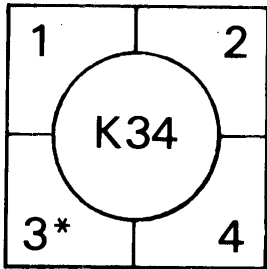
M144 Stage micrometer 1mm x 0.01mm for transmitted light

M145 Stage micrometer 1mm x 0.01mm for incident light



11 Optical Microscopy

The England Finder



The above example shows the point of interest in sector K34/3

The England finder is a glass slide marked over the top surface in such a way that a reference position can be deduced by direct reading. The relationship between the reference pattern and the locating edges is the same in all finders. The object of the finder is to give the microscopist an easy method of recording the position of a particular field of interest in a specimen mounted on a slide so that the same position can be re-located using any other England finder on any microscope.

The finder consists of a glass slide 75 x 26mm marked with a square grid at 1mm intervals. Each square contains a centre ring bearing a reference letter and number, the remainder of the square being divided into four segments numbered 1-4. Reference numbers run horizontally 1 to 75 and letters A to Z

G110 England finder

Eyepiece Graticules

These are the surface type where the pattern is formed in a layer bonded to the surface of the glass disc and the pattern reads correctly when viewed *through* the glass. Must be viewed using a focusing eyepiece.

Please note that any dimensions described in this section refer to the absolute dimensions of the graticule itself and not the dimensions of any specimen being observed.

M146 Horizontal line 10mm/0.1mm div, 21mm Ø

M147 Vertical line 10mm/0.1mm div, 19mm Ø

M148 As above 21mm Ø

M149 Crossed lines 10mm/0.1mm div, 21mm Ø

M150 Horiz. line 10mm/0.1mm div with single cross line, 21mm Ø

M151 Crossed single 10mm lines 19mm Ø

M152 As above 21mm Ø

M153 Protractor graticule 19mm Ø

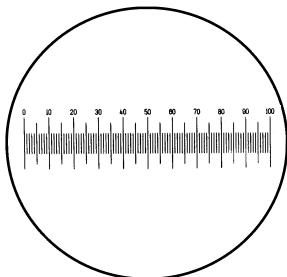
M154 As above 21mm Ø

M155 British Standard circles & squares, 19mm Ø

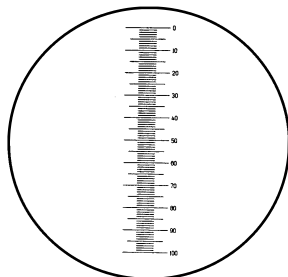
M156 As above 21mm

M157 10mm indexed squares 1mm div, 19mm Ø

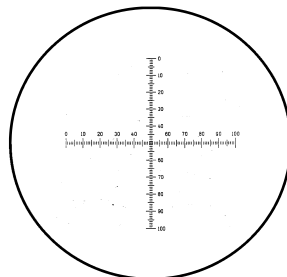
M158 As above 21mm div



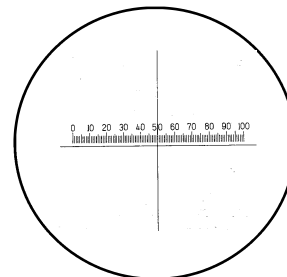
M146



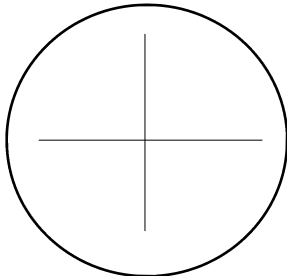
M147/8



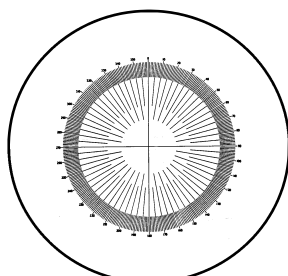
M149



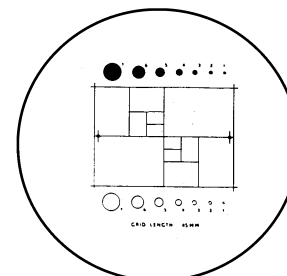
M150



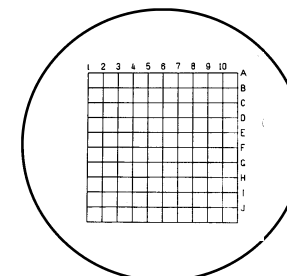
M151/2



M153/4



M155/6



M157/8

Microscope Calibration

In addition to the graticules displayed above we can offer others for stereology, particle sizing, particle distribution, metallurgical grain sizing, asbestos fibre analysis (Walton & Beckett graticule), spray droplet distribution, etc.

If the standard eyepiece graticules and stage micrometers are insufficient traceability for your applications we can supply a range of certified linear, long scales and grids for more accurate calibration. These can have a certificate of conformity or NPL (NAMAS) certificate of accuracy.

Microscope Slides

Chance Glass

Chance Glass is the company that has replaced the now defunct Chance Proper. The glass used in the manufacture of all Chance Glass microscope slides is subject to rigid quality control procedures that ensures flatness with no impurities or defects. Durable non-fogging characteristics allow guaranteed storage without deterioration for at least one year. All Chance Glass microscope slides are subject to a customised washing procedure that ensures a clean slide surface with optimum wetting characteristics. All slides are manufactured to BS 7011.

See next page for microscope slide selection tables

Economy Range

A range of microscope slides at a competitive price, making them most attractive for educational purposes. All four edges are grit blasted to give safety of handling during use. Our Economy Range slides are general purpose microscope slides suitable for most sample mounting techniques in pathology laboratories or working with liquid samples. Unique to this range is the facility to supply sizes other than the standard 76 x 26mm dimensions with plain, single frosted or twin frosted working surfaces.

Superior Slides

A good quality budget range of microscope slides available in boxes of 50 for the occasional user not needing to maintain high stocks of slides.

Surgipath Leica Xtra™ Slides

A special process produces a microscope slide that has a permanent positively (+) charged surface that helps to bond tissue sections either embedded or frozen, and also improves cytology preparations without the use of additional adhesives. Background staining is virtually eliminated in standard H & E stains. Tissue adherence is also improved for microwave staining and as the slides are RNase-free, they are ideal for hybridization work. Excellent value when compared with other surface reactive slides.

Fully Frosted Slides



M235 Microscope Slides completely frosted on one side for body fluid investigations and other uses box of 72

Oversize Slides

M236 Microscope slides 76 x 51mm 1.0/1.2 mm thick box of 100
Other sizes available to special order but subject to minimum quantity purchase



Microscope Slide Dispenser

M064 Dispenses slides one-by-one from dust-free storage

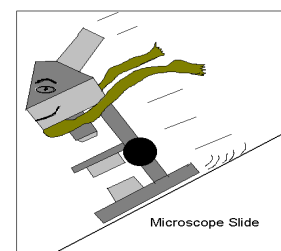


Large Microscope Slides

See M236 "Oversize Microscope Slides" above box of 100

PTFE Coated Microscope Slides

Re-usable slides enabling many samples to be processed on one slide without any running together. Many hole options in size, number and black or white coating. In packs of 100. Please ask for details



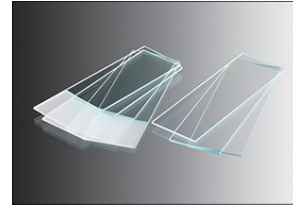
11 Optical Microscopy

Microscope Slide Selection Tables

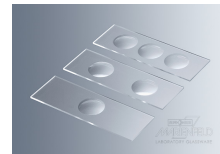
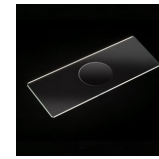
Quantity 100/Box			
Slide detail	Plain	Single frosted	Double frosted
Routine slides			
0.8/1.0mm	M350/P/1.0	n/a	n/a

Single frosted means that the slide is frosted at one end on one side only

Double frosted means that the slide is frosted at one end on both sides of glass



Quantity 50/Box			
Superior slides			
Ground edges			
0.8/1.0mm	M353/P/1.0	M353/SF/1.0	M353/DF/1.0
1.0/1.2mm	M353/P/1.2	n/a	M353/DF/1.2
Superior slides	Cavity		
	One	Two	Three
cavity diameter 15/16mm			
1.2/1.5mm	M123/1C/50	M123/2C/50	M123/3C/50



Surgipath Micro Slides 50/Box					
Colour frosting	White	Blue	Orange	Yellow	Pink
1.0mm	M349/W	M349/B	M349/O	M349/Y	M349/P

Surgipath Xtra™ Slides 72/Box					
Colour frosting	White	Blue	Green	Yellow	Pink
1.0mm	M221/W	M221/B	M221/G	M221/Y	M221/P

Quartz Slides

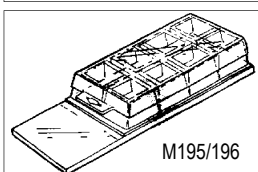
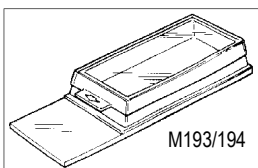
M212 Quartz microscope slides 76 x 26 x 1.0mm pack of 5

Plastic Slides

M207 Permanox™ slides for anchorage dependent cells. Can be embedded and sectioned, box 100

M400 Polystyrene slides 3" x 1" pack of 25 **M400/100** Polystyrene slides 3" x 1" pack of 100

Nunc™ Lab-Tek Chamber Slides for Tissue Culture



The tissue culture chamber culture slides are sterile microscope slides with detachable chambered upper structures. The chambers are bonded to a 75 x 25mm microscope slide by means of a removable gasket. The cells are grown directly on the slide in 4-5ml of medium and after culturing the upper structure is simply removed and the slide placed under the microscope. This saves time, media and reagents. There are options of glass or Permanox (PX) plastic slides.

M193 One chamber, glass 16 pieces

M195 Eight chamber, glass 16 pieces

M194 One chamber, (PX) 16 pieces

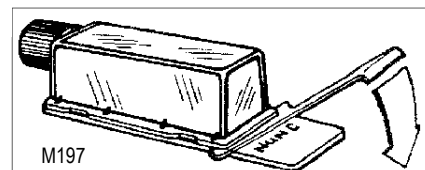
M196 Eight chamber, (PX) 16 pieces

Also available with 2 or 4 chambers on request

Nunc™ Slide Flask

Single slide culture chambers designed specifically for prenatal cytogenetic diagnosis but suitable for other applications in tissue culture, they are sterile and use only 3ml of medium. Microscope slide is polystyrene and there is a special opening tool for removing the slide from the chamber.

M197 Slide flask sterile 50 pieces



Cover Slips

Our cover slips are manufactured from borosilicate glass which is subjected to the same high quality control procedures as microscope slide glass. The glass is formulated specifically to obtain high resistance to surface deterioration, resistance to fogging and microscopic mould, even under extreme environmental conditions.

The optical qualities are exceptional with rigorous production inspection to ensure flatness and freedom from impurities. They are plain, homogeneous, distortion free with maximum flexibility but free from warp. Packed in sturdy clear plastic dispenser boxes of 100 pieces.

Available in circles, squares and rectangles in standard sizes. Non standard sizes available to special order.

Thickness ranges:

No.0.... 0.085 - 0.13mm

No. 1.5....0.16 - 0.19mm

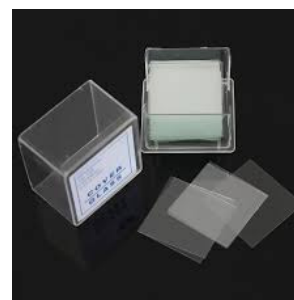
No.3.... 0.25 - 0.35mm

No.1.... 0.13 - 0.17mm

No.2.... 0.19 - 0.25mm

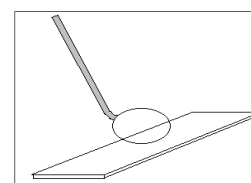
Coverslip Selection Tables

Pack sizes as indicated					
Thickness Code	No. 0	No.1	No.1.5	No.2	No.3
Circles	Box of 100	Box of 100	Box of 100	Box of 100	Box of 100
10mm dia	M231/0	M231/1			
13mm diam.	M160/0	M160/1	M160/1.5	M160/2	M160/3
16mm diam.	M127/0	M127/1	M127/1.5	M127/2	M127/3
19mm diam.	M128/0	M128/1	M128/1.5		
22mm diam.	M070/0	M070/1	M070/1.5		
Squares	Box of 200	Box of 200	Box of 200	Box of 100	
18 x 18mm	M125/0	M125/1	M125/1.5	M125/2	
20 x 20mm	M126/0	M126/1	M126/1.5	M126/2	
22 x 22mm	M069/0	M069/1	M069/1.5	M069/2	
24 x 24mm	M224/0	M224/1	M224/1.5	M224/2	
Rectangles	Box of 100	Box of 100	Box of 100	Box of 50	
21 x 26mm (200)	M225/0	M225/1	M225/1.5		
22 x 32mm	M226/0	M226/1	M226/1.5		
22 x 40mm	M198/0	M198/1	M198/1.5		
22 x 50mm	M227/0	M227/1	M227/1.5		
22 x 60mm	M099/0	M099/1	M099/1.5		
24 x 32mm	M228/0	M228/1	M228/1.5		
24 x 40mm	M229/0	M229/1	M229/1.5	M229/2	
24 x 50mm	M230/0	M230/1	M230/1.5	M230/2	

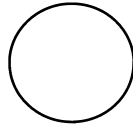
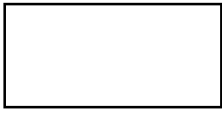


Coverslip Mountants - See Page 22.34

Canada Balsam, Citifluor, DPX, Eukitt, Euparal, Gum Arabic, Hystomount, Meltmounts, Paraseal, Permout, Pertex, UV Free Mountant, Watermount. Also coverslip sealing solution S343.



Plastic Coverslips



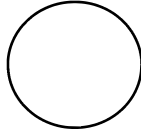
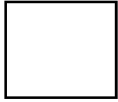
Thermanox™ sterile coverslips for embedding cell cultures. Resistant to most solvents and can be sectioned with the embedded cells.

M179 22 x 60mm pack of 500

M181 Circular 13mm Ø pack of 500

M180 10.5 x 22mm pack of 500

M182 Circular 25mm Ø pack of 500



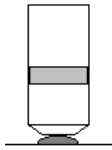
Cellulose acetate coverslips, unbreakable, flexible.

M200 22 x 22mm, 0.007" thick, box of 100

Quartz Coverslips

M213 Circular quartz coverslips 10mm Ø pack of 5

M214 Circular quartz coverslips 22mm Ø pack of 5



Immersion Oils - See Chemical Section

Cedarwood oil, Fractoil (non fluorescent), Panscan, Panscan Xtra

Coverslip Forceps

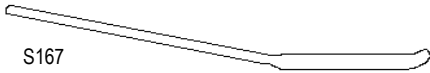
T179 Steel nickel plated forceps with angled flat blade, ideal for handling coverslips



T179

Section Lifter

S167 Stainless steel with blade length of 55mm



S167



Pens and Pencils

Pencils-Chinagraph for writing on polished surfaces including glass

P198 Pencil, chinagraph - black

P201 Pencil, chinagraph - yellow

P199 Pencil, chinagraph - blue

P202 Pencil, chinagraph - green

P200 Pencil, chinagraph - red



Pens

P203 Glass marking pen suitable for writing on most surfaces, removable with detergent wash.

Slide Mailing Boxes

Single and **double** slide mailers made from strong durable cardboard with flap cover and thumb groove for easy slide removal



S371

S371 Single cardboard slide holder pack of 10

S371/1 Single cardboard slide holder pack of 100

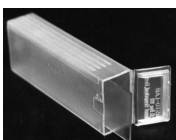
S371/D Double cardboard slide holder pack of 10

S371/D/1 Double cardboard slide holder pack of 100



S371/D

We also offer a choice of microscope slide boxes manufactured in tough polypropylene for safe storage or transportation of up to 5 slides 3" x 1". The slides are easily inserted and are always protected with a snap-on positive lock lid.



S124



S523

S124 Slide mailing box for 5 slides with end lid, pack of 50

S124/1 As above pack of 10

S523 As above but with lid on long side, pack of 10

2 Slide Mailing Box

A Polythene mailing vessel for transportation of 2 slides 3" x 1". Lid and body have tabs with holes to allow lid to be firmly secured to body.

S136 Slide mailing box for 2 slides pack of 25



Flat 2 Slide Mailers Plastic & Chipboard

These mailers hold two 3" x 1" slides. The flat design is more economical with space for mailing. The plastic version has a snap lock feature, the chipboard type requires tape.

S526 Plastic 2 slide mailer pack of 10

S527 Chipboard 2 slide mailer pack of 10

S526/1 Plastic 2 slide mailer pack of 100 **S527/1** Chipboard 2 slide mailer pack of 100

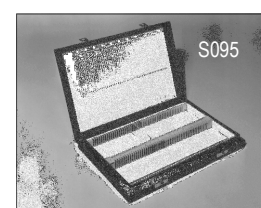


Slide Storage Boxes

Wooden slide storage box, indexed, compact and strong provide very good value for money for storage of up to **100** slides 3" x 1". Hinged lid, leatherette covered and fitted with slotted wooden racks.

S095 Wooden slide storage box each

S096 As above pack of 10



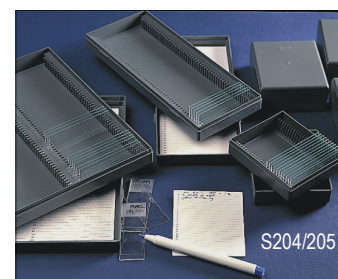
Plastic slide storage box in moulded grey polystyrene with numbered slots for 3" x 1" (76mm x 25mm) slides. Removable, close fitting lid and comes with index card.

S204 Slide storage box - plastic for **25** slides

each

S205 As above for **100** slides

each



Coloured plastic slide boxes for **100** or **25** 3" x 1" slides. The 100 slide box is made from rigid high impact polystyrene, they are secured with rust resistant, nickel-plated clips and hinge pins and the bottoms have cork liners. To ensure proper slide identification each slot is numbered to correspond to the index on the inside cover.

Boxes for **100** slides

S524 Red

S524/B Blue

S524/Y Yellow

S524/G Green

S524/W White

25 Slide Box grooved and numbered with a tight fitting lid to ensure complete protection of contents. Each slide projects above the sides for easy removal. There is a slot on the outside of the box to accept an identification tag.

S525 Slide box for **25** slides



S525

S524

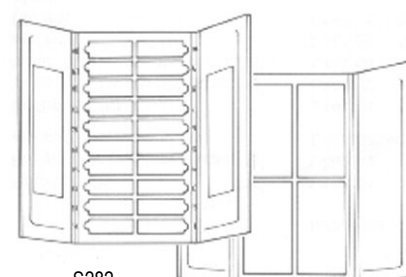
Microscope Slide Trays

Rigid cardboard slide holder to contain **24** slides in 4 compartments with two hinged flaps with index.

S281 Microscope slide tray for **24** slides pack of 10

Rigid cardboard slide holder for **20** slides in individual compartments with two hinged flaps with index.

S282 Microscope slide tray for **20** slides pack of 10



S282

S281

Micropipette Puller



The model 773 is ideal for producing short shank submicron pipettes for intracellular recording and microinjection, for large diameter pipettes for patch electrodes and holding pipettes. The unit can store up to 15 user settings as 'programmes' with easy recall. This feature greatly enhances the production rate of pipettes and reduces the need to produce samples on a trial and error basis.

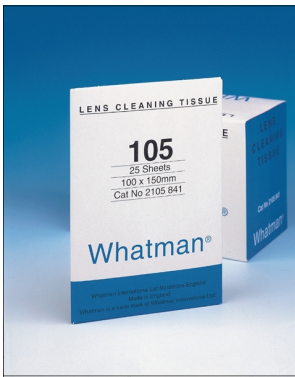
Each program can have up to 10 independent stages, including cooling which can be used to produce short shank pipettes. Programs are entered by a menu driven keypad with program information displayed on a LCD. The display also shows status information during the pull cycle. Example programs for different pipettes are include.

Specifications

Weight	15Kg
Size	51 x 27 x 21cm
Power supply	230v 50Hz or 115v 60Hz
Power consumption	20W
Mode of operation	Horizontally operated solenoid
Heater	Plug-in platinum coil
Temperature control	IR detector with feedback

P497/230 Micropipette puller 230v 50Hz

P497/115 Micropipette puller 115v 60Hz



Lens Cleaning Tissue

A low-lint, light fibre tissue specifically designed for the cleaning of delicate optical surfaces safely without scratching or smearing.

T067 Microscope lens tissue 10 x 15cm 10 wallets 25 sheets/wallet

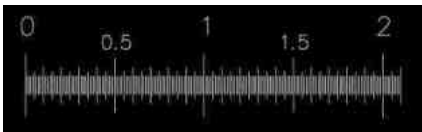
T498 Microscope lens tissue 20 x 30cm pack 100

Micrometer Calibration Scales for Incident & Transmitted Light

This **incident light scale** (PS5R) and the transmitted light scale are produced as a vacuum deposited chrome image on a square of glass, with a coverglass cemented on top. This is mounted in a stainless steel slide mount and is supplied in a polished wooden case. Internationally traceable certificates of calibration are available to satisfy the requirements of ISO.



M442



Part image of PS5R reflected light

Features:

20mm scale in 0.01mm divisions (serial numbered, for calibrating reflected/incident light microscopes).

Negative image for reflected (incident) light

Unique engraved serial number for ISO traceability

Stainless steel slide mount and lacquered wooden case

M442 PS5R incident light micrometer scale for reflected light

M442/UKA PS5R with UKAS certificate

M442/NPL PS5R with NPL certificate

Calibrations of compound microscopes at low magnifications, stereo microscopes and measurement of fields of view require a longer scale than those traditionally available. This new PS5 has a high accuracy scale of 20mm length, which is subdivided into 10 micron divisions. This new **transmitted light scale** (PS5) has a high accuracy scale of 20mm length, which is subdivided into 10 micron divisions.



Part image of PS5 transmitted light

M443 PS5 transmitted light micrometer scale

M443/UKA PS5 with UKAS certificate

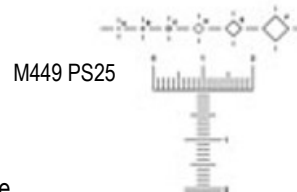
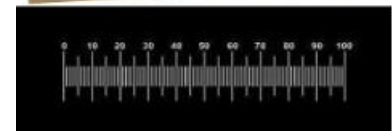
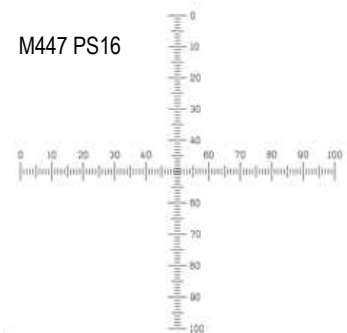
M443/NPL PS5 with NPL certificate

Micrometer Calibration Scales cont...

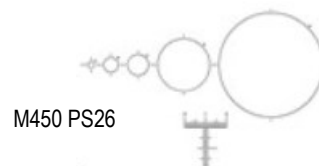
The scale is chrome deposited centrally on a glass disc mounted in a stainless steel slide mount, 76mm x 25mm x 1.5mm thick, with unique serial number engraved in the top surface. These are the products of choice where you need certified scales to have unequivocal traceability for ISO, NIST, DIN or other standards. These products are supplied in a polished wooden case to indicate that they are superior calibration tools.

Available in transmitted and reflected (incident) light versions.
Also available with Grats, UKAS or NPL certificates as appropriate - please ask

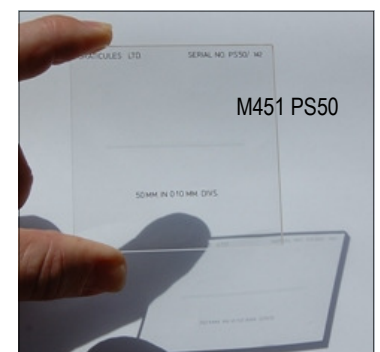
- M444** PS4 Transmitted light calibration slide with 0.1" length scale subdivided into 0.001" divisions, engraved serial number in stainless steel slide mount
- M444/R** PS4 *Reflected light* calibration slide with 0.1" length scale subdivided into 0.001" divisions, engraved serial number in stainless steel slide mount
- M445** PS8 Transmitted light calibration slide with 1mm length scale subdivided into 0.01mm divisions, engraved serial number in stainless steel slide mount
- M445/R** PS8 *Reflected light* calibration slide with 1mm length scale subdivided into 0.01mm divisions, engraved serial number in stainless steel slide mount
- M446** PS12 Transmitted light micrometer scale 0.1mm/0.002mm calibration slide with 0.1mm length scale subdivided into 0.002mm divisions, engraved serial number in stainless steel slide mount
- M446/R** As above but for *Reflected light*
- M447** PS16 Transmitted light calibration slide with crossed scales each 1mm length scale subdivided into 0.01mm divisions, engraved serial number in stainless steel slide mount
- M447/R** As above but for *Reflected light*
- M448** PS78 *Reflected light* calibration slide with 1mm length scale subdivided into 0.01mm divisions, engraved serial number in stainless steel slide mount
- M449** PS25 *Reflected light* calibration slide with diamond shapes and scales for calibrating **Vickers** and **Rockwell** hardness testers



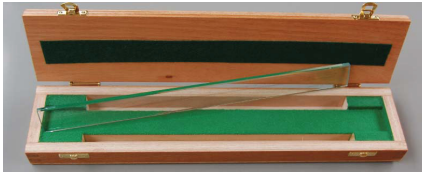
- M450** PS26 *Reflected light* calibration slide with circle shapes and scales for calibrating **Brinell** hardness testers



- M451** PS50 Micrometer Scale 50mm/0.1mm Long calibration scale, subdivided into 0.1mm divisions, supplied on 75mm x 75mm glass plate, unique serial number for traceability.
Overall size: 75mm x 75mm x 3mm
Line width: 0.012mm
Accuracy (overall): 0.002mm



New High Definition Long Scales



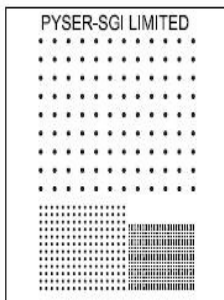
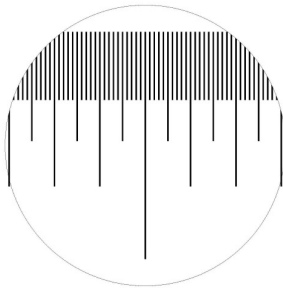
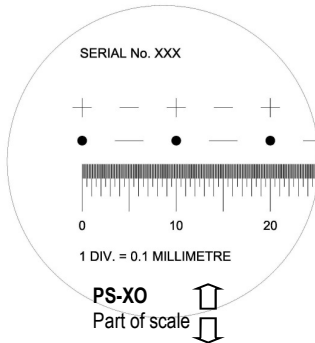
All supplied in wooden cases. Alternative glass types and calibrations available to special order.

Customer demand for long scales with better line definition has led to the introduction of the new PS-XO range. These products use the very highest resolution masters to create images with excellent line edge definition. The incorporation of a dot and cross series gives a single product with 3 different calibration options. Additionally the extension of lines on the scale allows calibrations in 0.1mm, 0.5mm, 1.0mm and 5mm increments.

Many customers need to test imaging systems for field flatness, distortion and size, often at different magnifications. The new R76 dot array satisfies this requirement with 3 image areas of different size and pitch dots.

Combination Scales - Superior PS-XO Versions

- High definition images for accurate calibration - line edge or line centre
- Dots, crosses and scales
- 300mm, 150mm and 100mm lengths all in 0.1mm divisions
- Extended 0.5mm, 1.0mm and 5.0mm lines allow calibrations in those increments also



R76

12 x 9 array of 1mm dots at 5mm pitch

16 x 12 array of 0.5mm dots at 2mm pitch

24 x 18 array of 0.2mm dots at 1mm pitch

Pattern	Description	Size	Cat. No.
PS300XO	300mm combination scale, 300mm ruling in 0.1mm divisions, 1mm dots at 10mm centres, crosses at 10mm centres	330mm x 30mm x 6mm, green float glass, bright chrome image	M455
	As above but with UKAS certificate of calibration, 10 points measured on scale		M455/UKA
PS150XO	150mm combination scale, 150mm ruling in 0.1mm divisions, 1mm dots at 10mm centres, crosses at 10mm centres	180mm x 30mm x 6mm, green float glass, bright chrome image	M456
	As above but with UKAS certificate of calibration, 10 points measured on scale		M456/UKA
PS100XO	100mm combination scale, 100mm ruling in 0.1mm divisions, 1mm dots at 10mm centres, crosses at 10mm centres	130mm x 30mm x 6mm, green float glass, bright chrome image	M457
	As above but with UKAS certificate of calibration, 10 points measured on scale		M457/UKA
R76	Grid dot array, 3 image areas, 12 x 9 array of 1mm dots @ 5mm pitch, 16 x 12 array of 0.5mm dots @ 2mm pitch, 24 x 18 array of 0.2mm dots @ 1mm pitch	80mm x 80mm x 2.5mm, green float glass, bright chrome image	M458

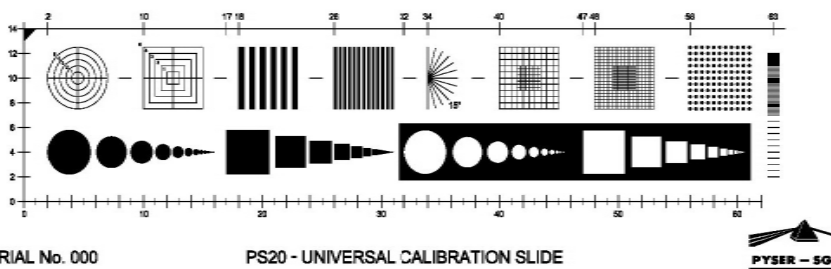
R76

The ideal product for testing image area, distortion, field flatness and other parameters in optical and imaging systems. The three array areas give options for different magnifications or field size.

Universal Calibration Scale

Calibration of **microscopes** and **image analysis systems** is becoming more sophisticated, with the requirement being for a variety of image patterns to satisfy the numerous parameters. This new multi-function calibration standard is specifically for these applications. Multiple images on a single slide provide the most cost-effective solution to calibration and resolution checking of microscopes and image analysis systems.

The combination of scales, dots, circles, squares, rulings, grids and angles can be supplied with an internationally traceable certificate of calibration for those who require ISO conformity. Each glass slide has a unique permanent serial number and can be supplied with full or partial UKAS certificate of accuracy. Starting from a fixed 'Datum point' mark, each individual pattern or array can be located using X, Y coordinates.



General Specifications

General Tolerance (μm)	Feature size	Tolerance
	≤ 10	0.5
	10-50	1
	50-127	1.3
	127-250	1.9
	> 250	2.54
62mm scale overall accuracy	$\pm 0.003\text{mm}$	
Coating	Enduring evaporated chrome image	
Optical density	> 2.5	
Substrate	Soda lime glass	
Size	76 x 25 x 1.5mm	
Package	Polished wooden case	

Pattern name	Description
Concentric circles	1, 2, 3, 4, 5mm Circles with Cross Line and circle identifier. Line width $20\mu\text{m}$
Concentric squares	1, 2, 3, 4, 5mm Squares with Cross Line and circle identifier. Line width $20\mu\text{m}$
Line grating 25 lines/mm	12.5 Line Pairs/mm ($40\mu\text{m}$ line $40\mu\text{m}$ space)
Line grating 100 lines/mm	50 line pairs per mm ($10\mu\text{m}$ line $10\mu\text{m}$ space)
Half protractor	15° Spacing Line width $20\mu\text{m}$
Grid array coarse	5mm square array with 0.5mm divisions and central 2mm square with 0.25mm divisions. Line width $20\mu\text{m}$
Grid array fine	5mm square array with 0.1mm divisions and central 2mm square with 0.05mm Divisions. Line width $8\mu\text{m}$
Dot array	Dot diameter 0.25mm, dot centre to centre spacing 0.5mm — 11×11 grid = 121 dots
Geometric progression of opaque dots, Geometric progression of opaque squares	Geometric progression of opaque squares, Geometric progression of clear dots, Geometric progression of opaque squares
Vertical scale fine variable	Overall scale length 10mm, 5mm in 0.5mm divisions, Line width $20\mu\text{m}$, 4mm in 0.1mm divisions, Line width $10\mu\text{m}$, 1mm in 0.01mm divisions, Line width $3\mu\text{m}$
Horizontal scale coarse	Scale length 62mm long in 2mm divisions, subdivided in 1mm divisions with a $20\mu\text{m}$ line width

M464 Universal calibration scale PS20

Correlative Microscopy Coverslips®

A unique film reticle for use in Correlative Microscopy with applications in LM, SEM, TEM, High Pressure Cryofixation etc. Designed to specifically allow identification and location of a particular area of interest under brightfield or fluorescence microscopy and sectioning for electron microscopy. The reticle film has been thoroughly tested with cell cultures showing good cell growth and strong adhesion to the substrate without the use of poly-L-lysine.

All Correlative Microscopy Coverslips® are produced on a polyester based film, 0.18mm thick, 22mm x 22mm. 25pcs per box.

Physical and Chemical Properties

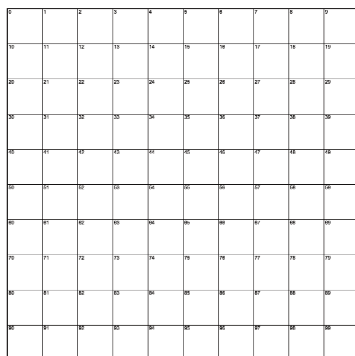
- Resistant to normal chemicals used in electron microscopy
- No oxygen retention, compatible with LR White resin
- Excellent optical quality in brightfield & UV fluorescence
- Temperature range +100°C to -196°C
- Rigid - does not float in middle of culture
- Easy to handle and cut with a knife or micro-punch
- Simple sterilisation using alcohol or UV
- Detaches easily from resin after polymerisation
- Low cost

Using the Correlative Microscopy Coverslip

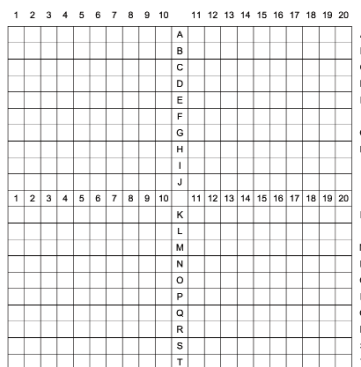
1. Sterilise the coverslip with alcohol then dry and add the culture
2. Ensure the grid is correctly positioned so the text is readable
3. Observe the cell culture using LM and identify area of interest
4. Record the images needed and note the co-ordinates of the relevant squares
5. Fix, dehydrate and embed with resin for TEM
6. After the embedding procedure invert a Polythene capsule filled with resin on the coverslip covering the cells of interest
7. Cure the resin and detach the coverslip. The footprint of the grid allows location of the position. Trim the block in the selected area and section on an ultramicrotome.

How to Choose the Appropriate Coverslip

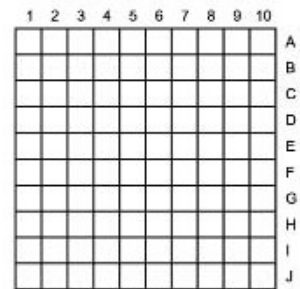
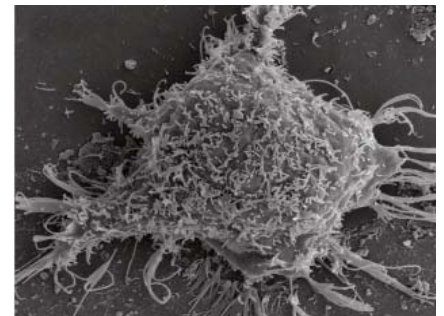
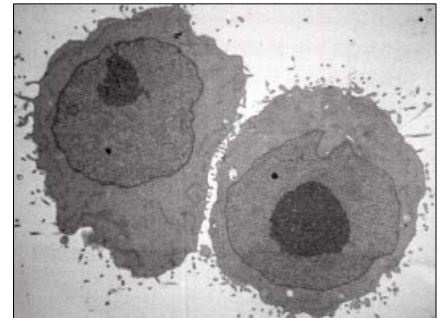
Pattern Code	Number of Squares	Surface Covered	Unit Size of Each Square	Average no. of Cells/Square Unit (e.g. Hela Cell)
CMC34A	100	5 x 1mm ²	0.01mm ²	2-3
CMC71	200	100mm ²	0.5mm ²	20-25
CMC35	100	100mm ²	1mm ²	40-50



CMC35
10x10 grids of 1mm squares.
Each square individually indexed 0-99



CMC71
20x20 grid of 0.5mm squares.
Indexed 1-20 along top, A-T down side and on centre cross



CMC34A
10x10 grids of 0.1mm squares at 5 positions.
Indexed 1-10 along top and A-J down side



A



B



C



D



E

Ordering Information

- M452** CMC34A 22 x 22mm 25pcs
M453 CMC71 22 x 22mm 25pcs
M454 CMC35 22 x 22mm 25pcs