



REICHERT
AUSTRIA

Reichert is making microscopes and microtomes for more than 80 years. Over 95 % of our production are exported all over the world. Our growth rate is above average in our industry. This fact proves our using of gained experience and technical know how not for featherbedding but for continuous further development.

Our research laboratories meet the highest standards and are continuously using most modern physical and optical techniques. Their combination with the demand of the market and the exigencies of application techniques result in products coping with highest performance.

For us, performance means a precondition for long-term success. We provide for high performance not only at the time of delivery but also many years after intense usage. This makes the difference to other products.

Our offer covers the entire range of biological and technical microscopy and microtomy. Ranging from the student's microscope to the research instrument – from the brain sectioning microtome up to the complete chain of instruments in the ultra-microtome laboratory – from the micrometer eyepiece to the image analysing computer, we offer the necessary apparatus for every field.

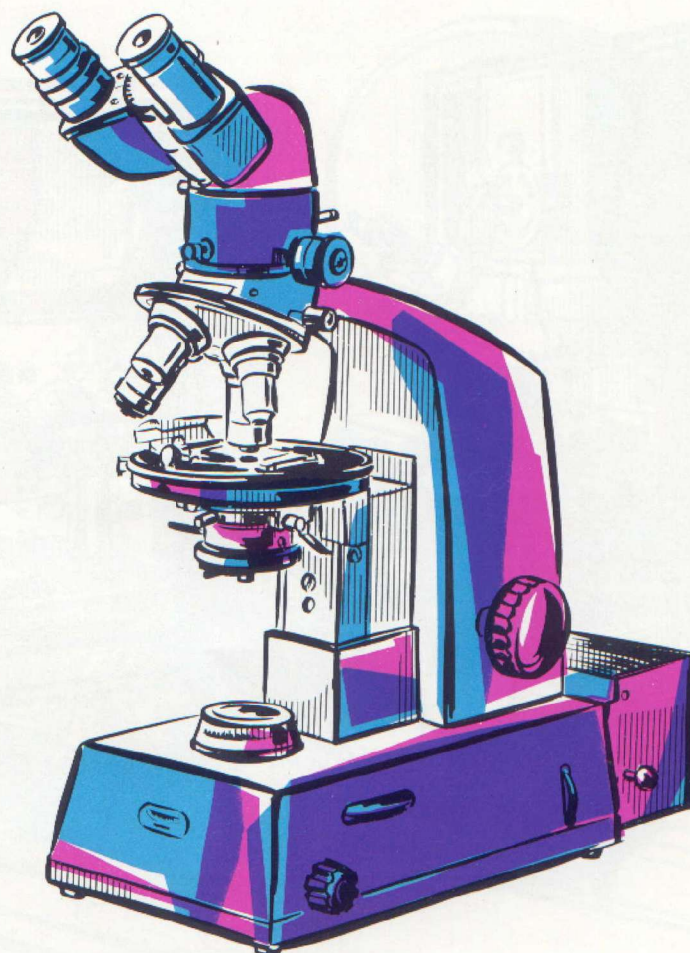
We distribute through a network of more than 100 agencies world-wide. Trained sales engineers advise our customers in selecting the specification of instruments. We take care of our instruments also after installation – initial training of customers, supply of accessories, and correct handling of repairs are part of our after sales service.

In our group of companies more than 10.000 people are engaged in making optical and precise mechanical apparatus. The research and development potentialities and know how of this team will be, also in the future, a safeguard to extend the top level performance of our instruments.

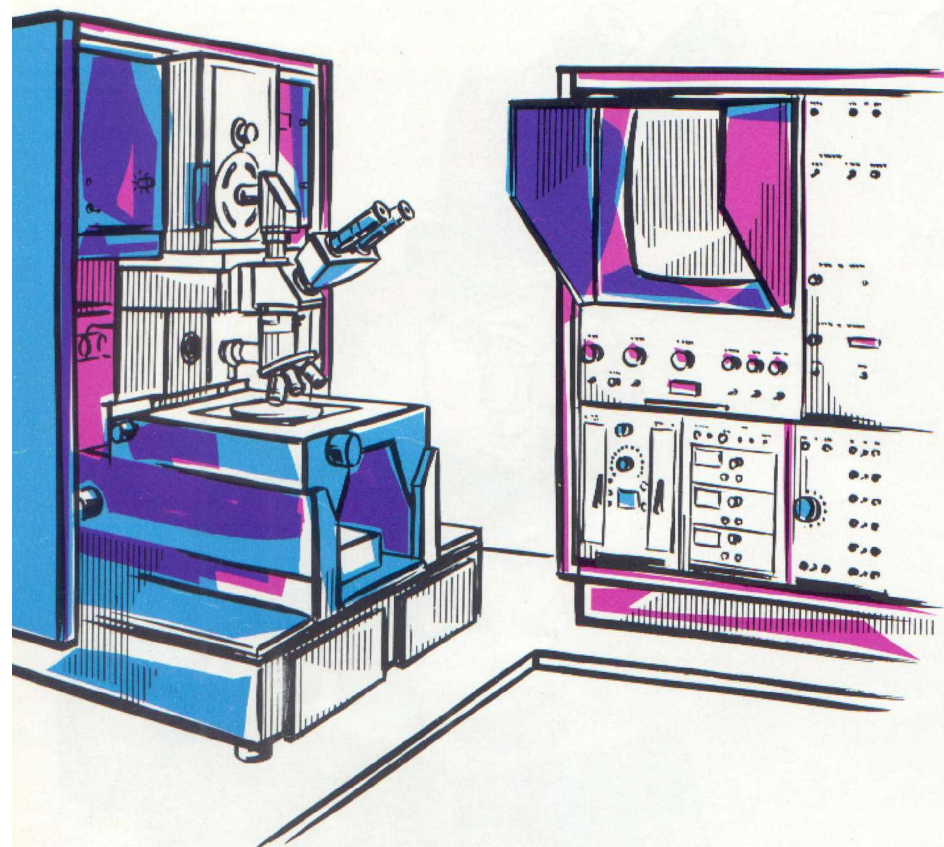
This is an assurance to all who want to place confidence in us.

This booklet gives a cross-section of our manufacturing programme. Detailed catalogues are available for each instrument on request. Our representatives will inform you of any further technical details, prices, and terms of delivery.

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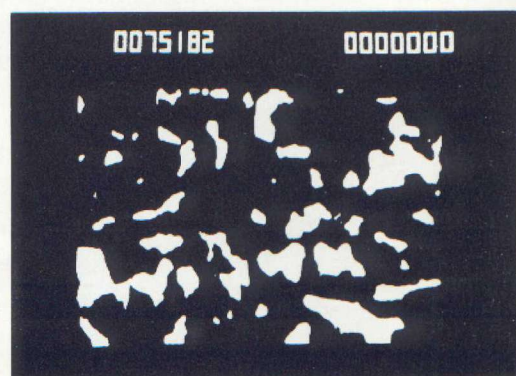


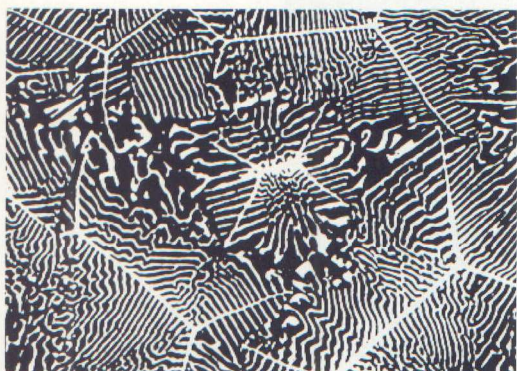
Instruments
for Biology and Medicine



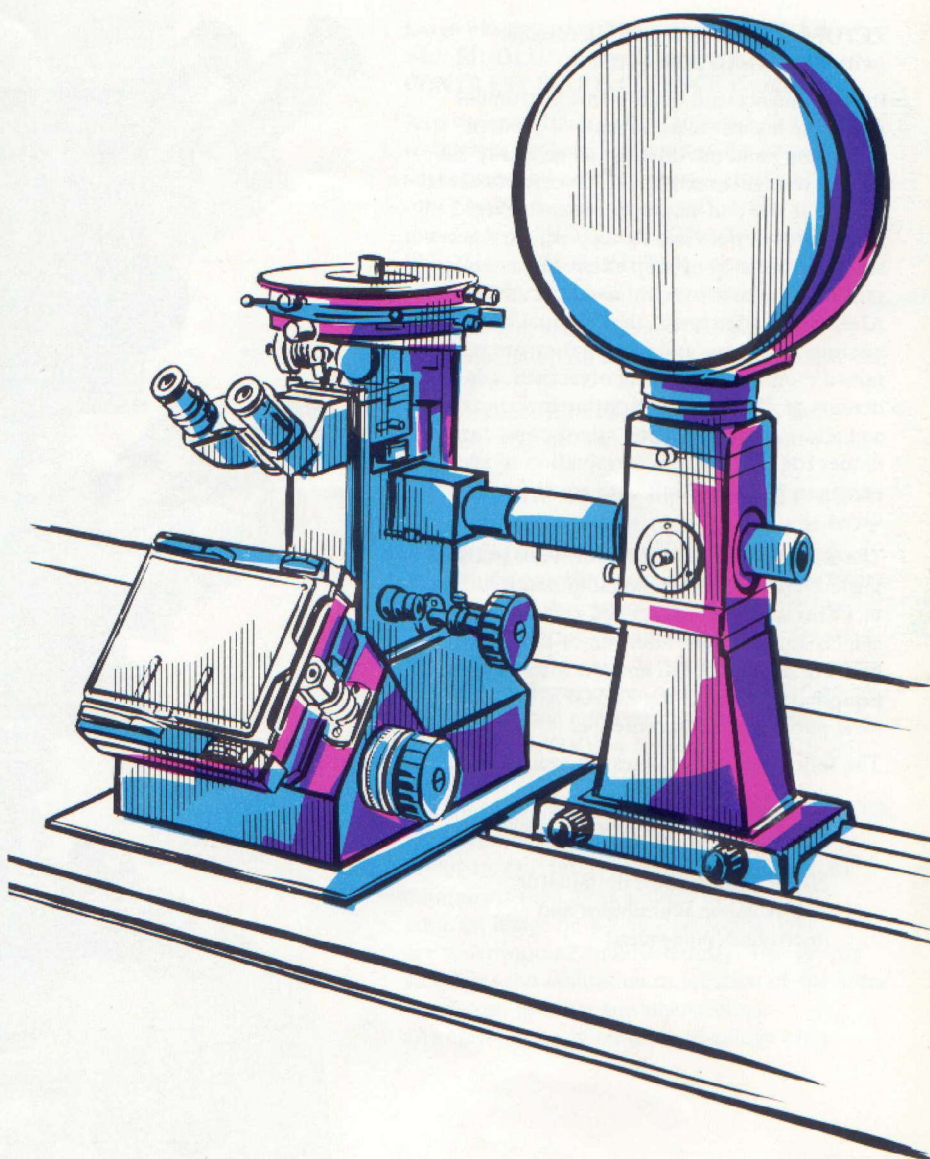
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Instruments
for Documentation, Demonstration,
Measuring and Analysing





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Instruments
for Industry and Technique

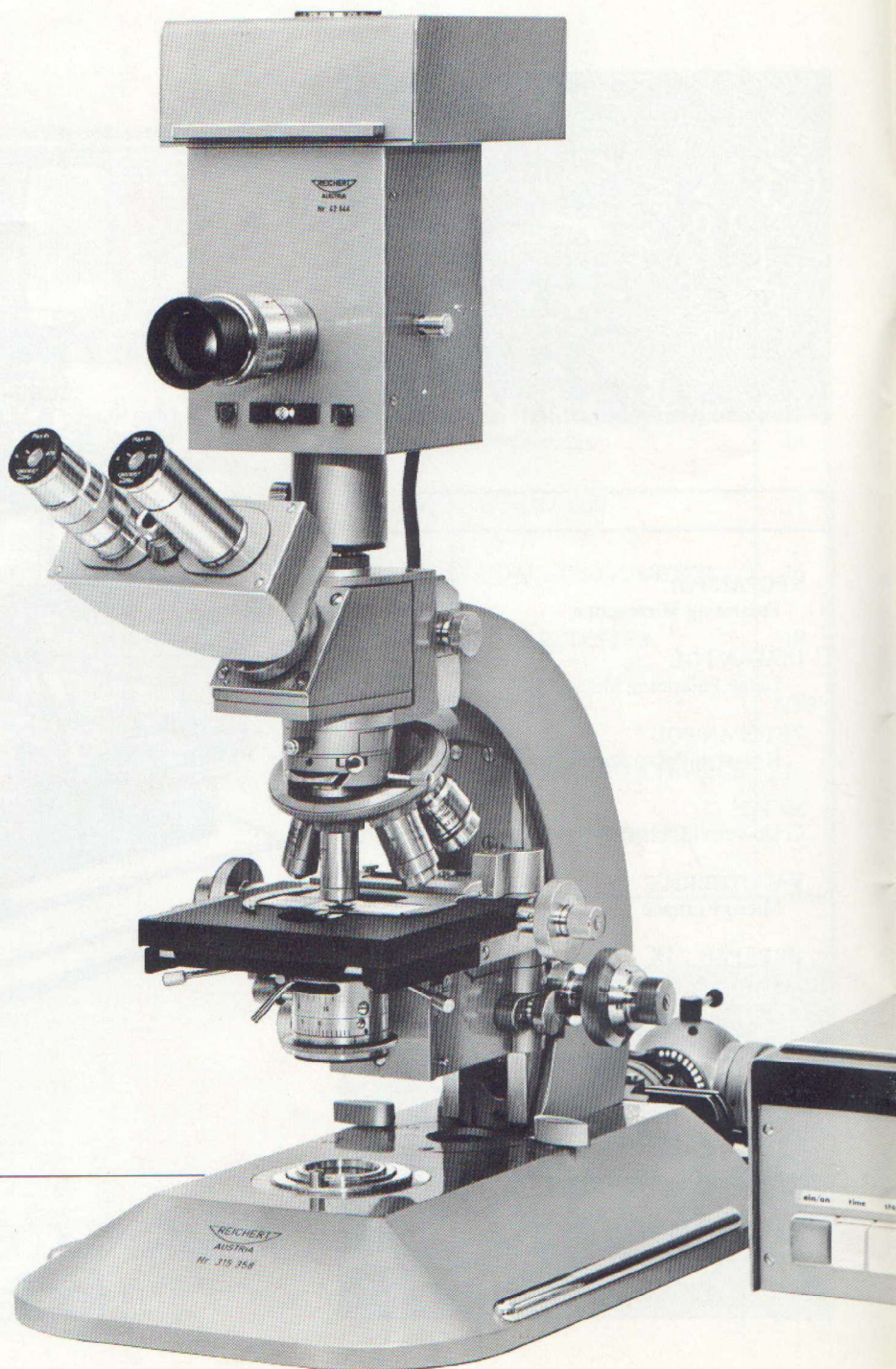
ZETOPAN Large Research Microscope (with PHOTO-AUTOMATIC)

In performance and quality this instrument meets the highest requirements of modern microscopy and provides for all generally employed scientific methods of observation. It is reliable in use and simple to operate. Rapid changeover devices and factory-adjusted accessories permit step-by-step extension and adaptation to the user's requirements at any time. After initial adjustment the full quality of the microscopic image and illumination are maintained even when changing objectives, condensers or illuminators. Routine investigations and alternative specialized microscopic techniques for the systematic evaluation of specimens can be carried out with equal facility and speed.

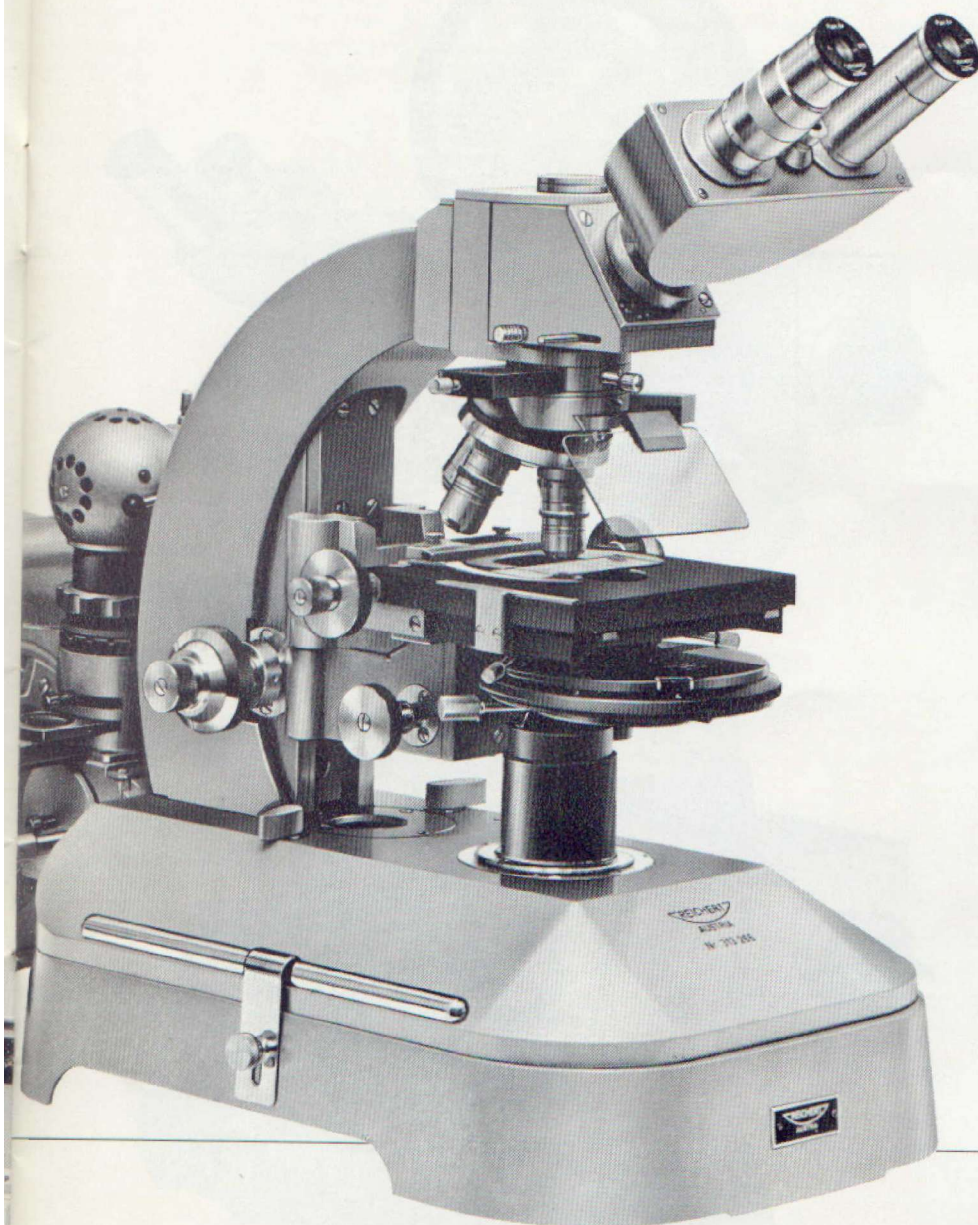
The ZETOPAN is equipped for work in transmitted, incident and mixed illumination. Equipment for micro television and cinemicrography can be supplied. The addition of the new PHOTO-AUTOMATIC and the Micro Flash Equipment converts the ZETOPAN into the ideal photographic microscope.

The following light sources are available:

- 30 W low-voltage illuminator
- 100 W low-voltage quartz iodine illuminator
- 200 W fluorescence illuminator
- 150 W xenon illuminator and micro flash equipment



Zetopan



**Large Fluorescence Equipment ZETOPAN
with BINOLUX Twin-Lamp Unit (and
CONTRAST FLUORESCENCE Equipment)**

As a variant of our well-established ZETOPAN research microscope it provides the same advantages and can, therefore, be used also for other methods in addition to fluorescence microscopy. PHOTO-AUTOMATIC and MICRO SPECTRAL PHOTOMETER complete the equipment for scientific research.

- Protection against stray UV light through enclosed light path in microscope stand and illuminator.
- UV exciter filters and barrier filters interchangeable in slide to achieve optimum fluorescence.
- HBO 200 W mercury-vapour burner and 30 W low-voltage lamp give high light output.
- Lamps easily changed over to visible light, UV light and simultaneous illumination.
- Immersion darkground condenser for alternating or simultaneous dark ground fluorescence.
- Contrast fluorescence condenser with phase and Anoptal contrast objectives for **ALTERNATIVE or SIMULTANEOUS CONTRAST FLUORESCENCE.**

In simultaneous illumination with the BINOLUX the visible and UV light can be matched in intensity. On suitable specimens the contrast equipment then gives a phase or Anoptal contrast image on which fluorescing details are superimposed simultaneously. This greatly simplifies the evaluation or location of the latter in relation to other specimen points. (Antigen-antibody method, histology etc.).

Zetopan with Binolux

FLUORPAN routine fluorescence microscope

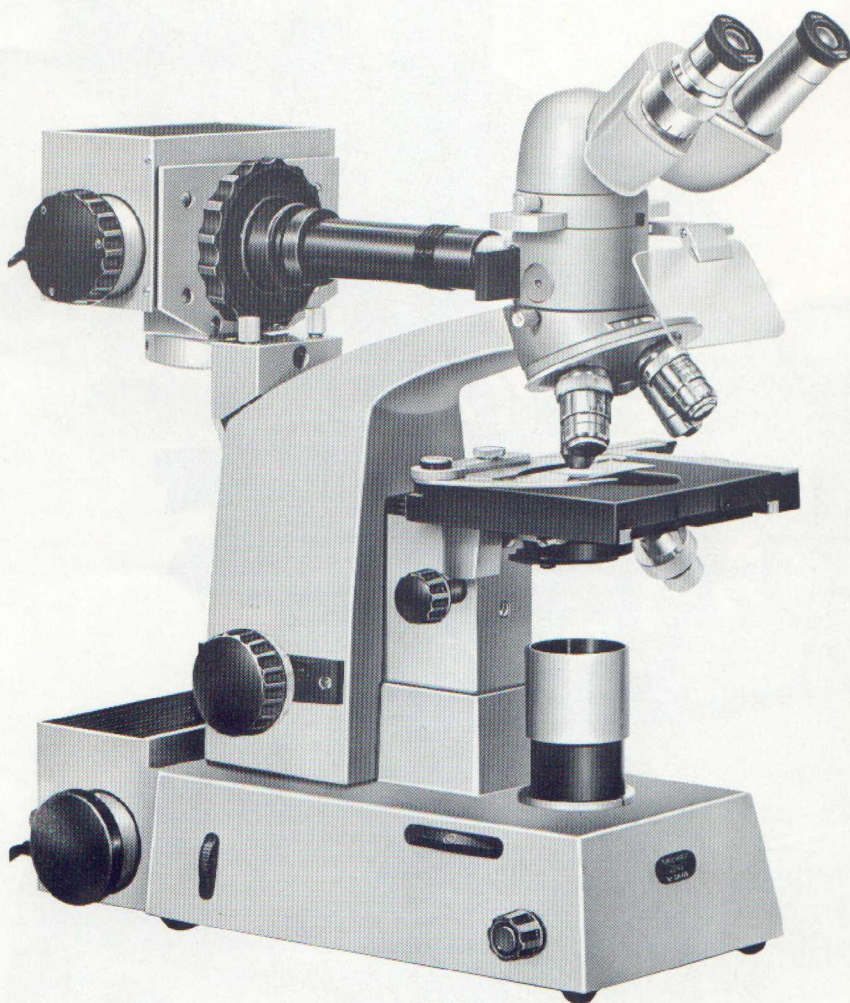
This special microscope is the first compact unit for the practical application of modern fluorescence techniques.

A wide range of accessories permits the use of the following methods:

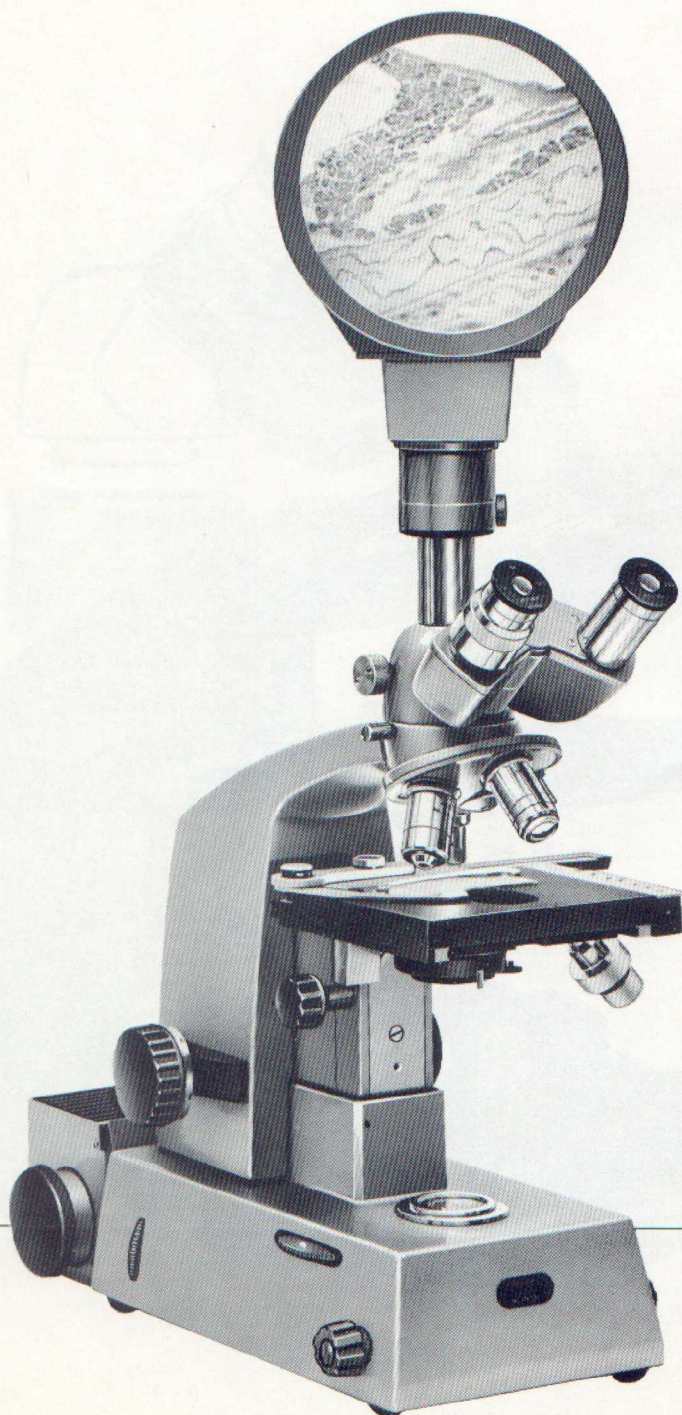
- transmitted-light fluorescence with blue-light or UV excitation in bright or dark ground
- incident-light fluorescence with blue-light or UV excitation
- simultaneous incident and transmitted light fluorescence with blue-light or UV excitation
- contrast fluorescence with incident-light excitation in blue-light or UV and transmitted-light contrast illumination in bright ground, dark ground, phase or Anoptral contrast

The microscope has intentionally been fitted with particularly simple controls so that it can also be used for routine work. It incorporates extremely comprehensive safety features for the microscopist to ensure that any direct contact with dangerous UV radiation is prevented.

Suitably matched filter combinations permit its use for all applications such as virology, immunology, botany, bacteriology.



Fluorpan



DIAPAN – a High-Performance Laboratory Microscope

The design of this instrument is based on the requirements of modern laboratory use – simple and convenient to operate, easy addition of accessories, pleasing form and compact size.

The built-in 100 W low-voltage quartz iodine lamp produces images which are 3 to 4 times as bright as those of usual 30 W low-voltage lamps. The DIAPAN is therefore specially suitable for techniques involving heavy light absorption such as: dark ground, phase and Anoptral contrast, polarization, as well as photomicrography and microprojection.

The base is fitted with the field-iris diaphragm, the centering deviating mirror, the aspherical condenser and a filter turret with four filters. The 2-in-a focusing system well established on the NEOPAN has been fitted with a graduation on the DIAPAN for depth measurements. Revolving nosepiece and condensers are interchangeable on slides.

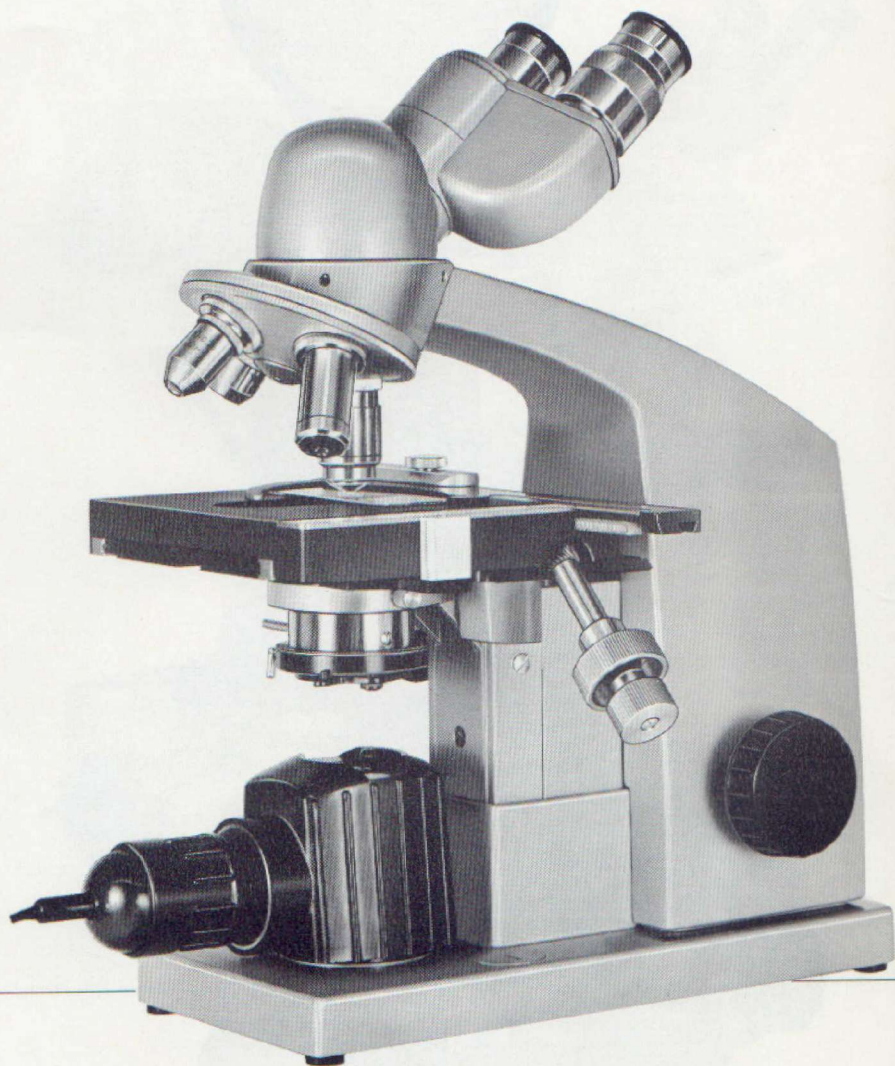
The low-voltage quartz iodine lamp can be replaced by the HBO 50 mercury-vapour burner (for fluorescence microscopy) or the micro flash equipment (for vital photography). Various viewing tubes and photographic equipment are available, including the new PHOTO-AUTOMATIC.

Diapan

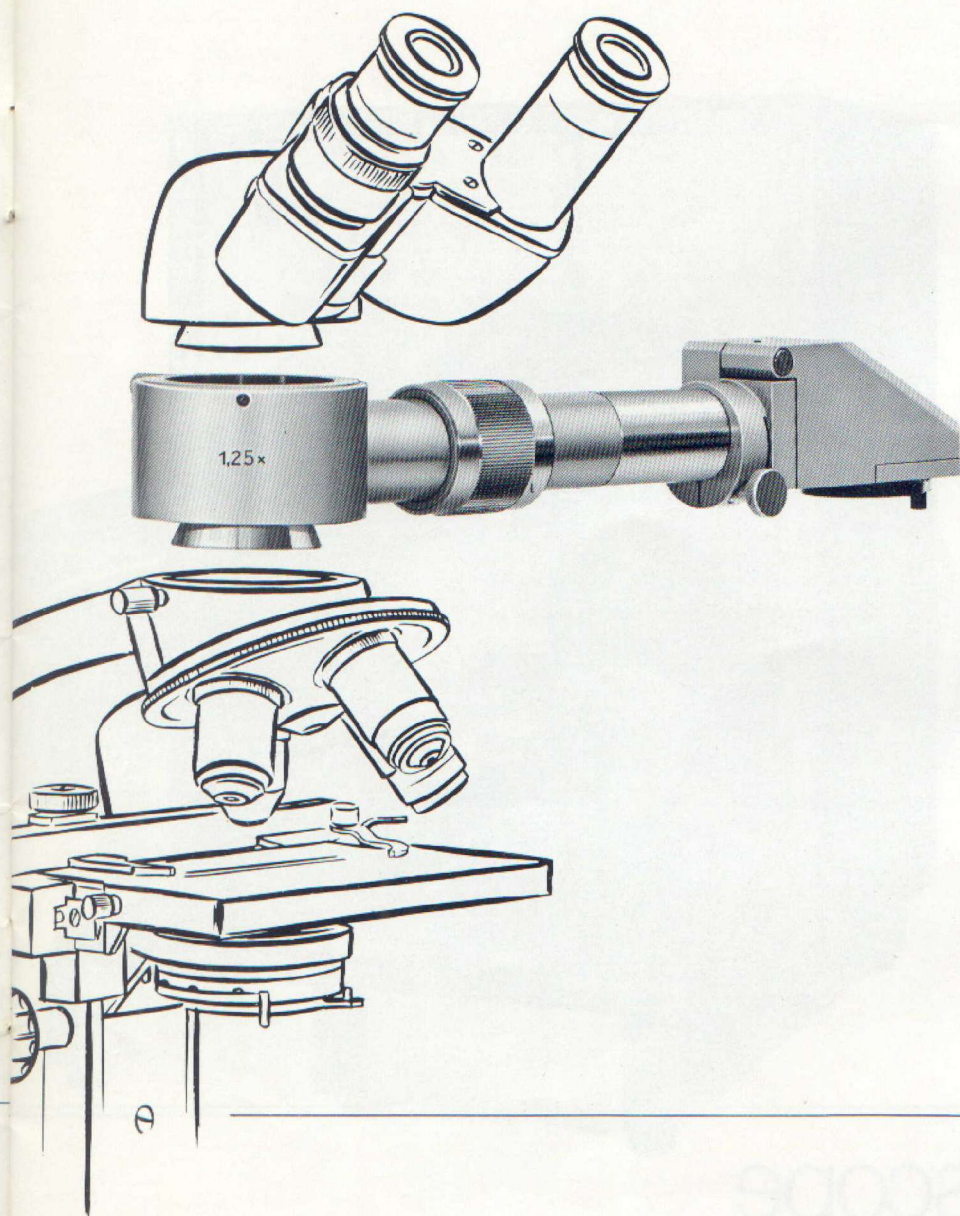
NEOPAN Teaching and Laboratory Microscope

Manufactured by the latest production methods it has a high optical and mechanical performance, is convenient to operate, and particularly low in cost in all its various outfits. With its new form and finish the NEOPAN follows the rules of progressive instrument design.

- Simple image adjustment; illumination condenser and objectives are pre-centred.
- Low-level 2-in-1 coarse and fine focusing drive; only one control for both adjustments but with two different and accurately defined adjusting movements allowing changeover without backlash.
- Maintenance-free mechanism; all moving parts protected against dust and with permanent lubrication; ball-bearing slides.
- Quadruple nosepiece on ball-bearings, with precise click stops.
- Optionally, reversible monocular or binocular body to be used in conventional or reversed position.
- Wide choice of objectives, eyepieces, stages and light sources.
- Accessories for photomicrography and projection.



Neopan



Drawing equipment with Image Projection

Our drawing equipment produces an upright, unreversed image, and can be used on the microscope in frontal or dorsal position by both left or right-handed persons. Separate focusing for microscopic image and drawing plane is provided. Rapid change of illumination from microscopic image to drawing is obtained by an accessory which provides a continuous variation of the light intensity. The drawing equipment offers special advantages for recording 3-dimensional objects, for reproducing details of complex structures and for projecting scales, grids or templates into the image.

Condenser MS 65 for bright ground, dark ground, phase contrast

The simple operation and low cost of this condenser make it possible to employ the above mentioned contrast techniques also in teaching and routine work. Individual magnetically-held diaphragm inserts ensure precise adaptation to each requirement. No centering is necessary since the factory-set adjustment is accurately maintained even with "rough" usage by students.

Drawing Equipment

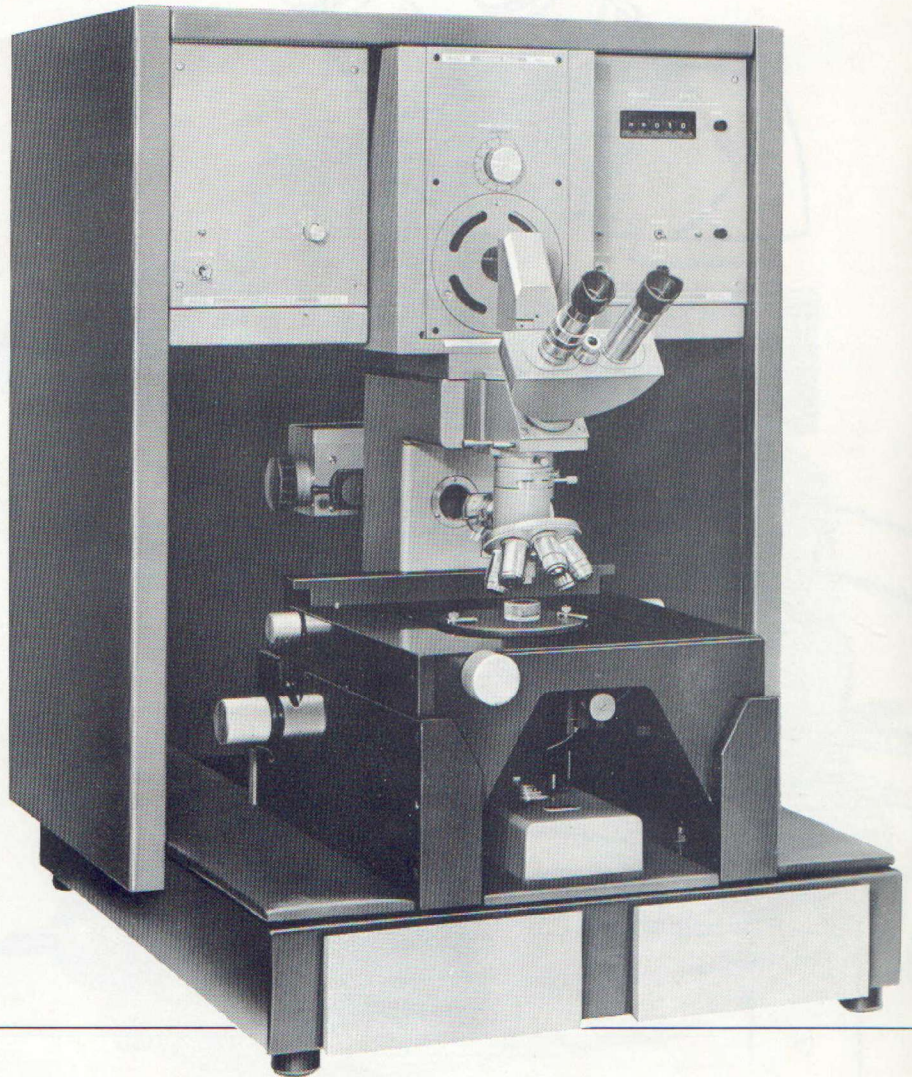
Image Analysing Computers

make automatic assessment of selected features in light microscopes. The features of each particle are recognized, counted, measured and classified. The computers do this much more quickly, accurately and reproducibly than human operators so that nowadays previously impossible tasks in research and quality control are both feasible and economic.

A research microscope derived from the well known ZETOPAN is being used as light microscope as it permits the realization of all so far known methods of microscopic examination. In transmitted or incident light it is possible to work in brightground, darkground, phase contrast, in polarized light or fluorescence.

The QUANTIMET® 720 *) selects and measures features, measures the number, area and length of features and classifies them by length, area and shape. It detects maximum number of grey levels, makes extremely reproducible measurements and an image in less than 1/10 second.

*) The QUANTIMET 720 is a product of the IMANCO-Metals Research Ltd., Cambridge/England.



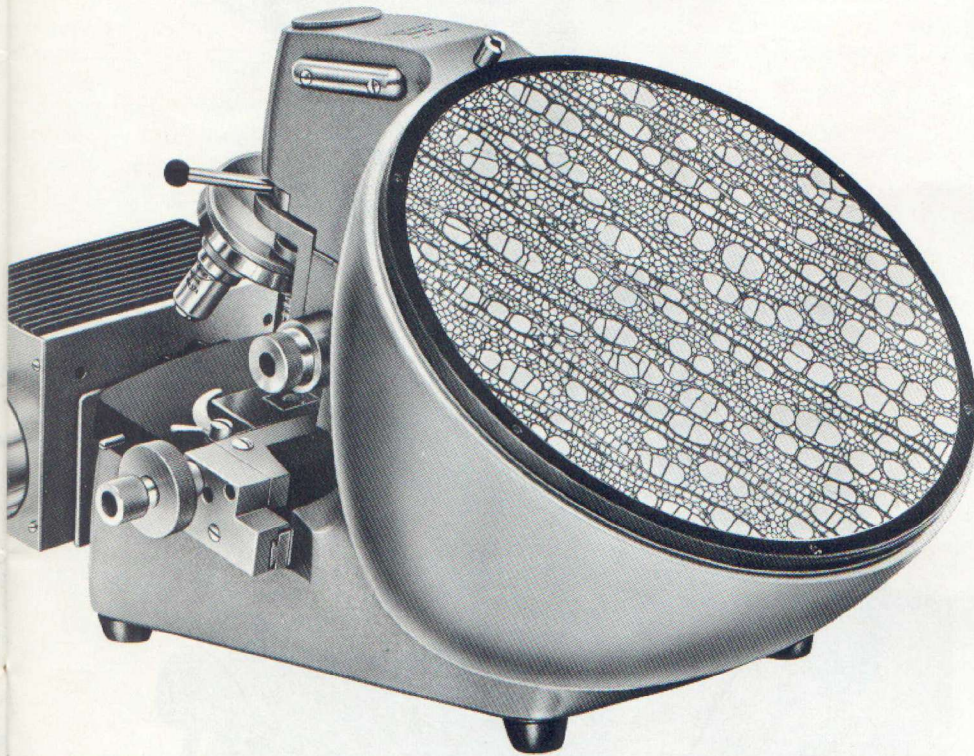
Special Microscope for Quantimet 720

**VISOPAN Projection Microscope with
100 W low-voltage quartz iodine lamp**

This well-established instrument has now been fitted with the new 100 W low-voltage quartz iodine lamp, giving a 3-to-4 fold increase in image brightness and, therefore, greatly extending its field of application. The overall magnification obtainable is between 50X and 1250X. The bright, high-contrast image on the ground glass screen (8 in., 200 mm dia.) is suitable not only for demonstration to small groups but in particular also for **measuring, counting and drawing.**

The instrument can also be employed as LANA-METER for wool and fibre measurements, and as SPECIAL MICROSCOPE for blood cell counting.

Through its simple operation and compact construction the Reichert VISOPAN is ideally suitable for teaching, for material testing outside the laboratory, and for demonstrations during discussions.



Visopan

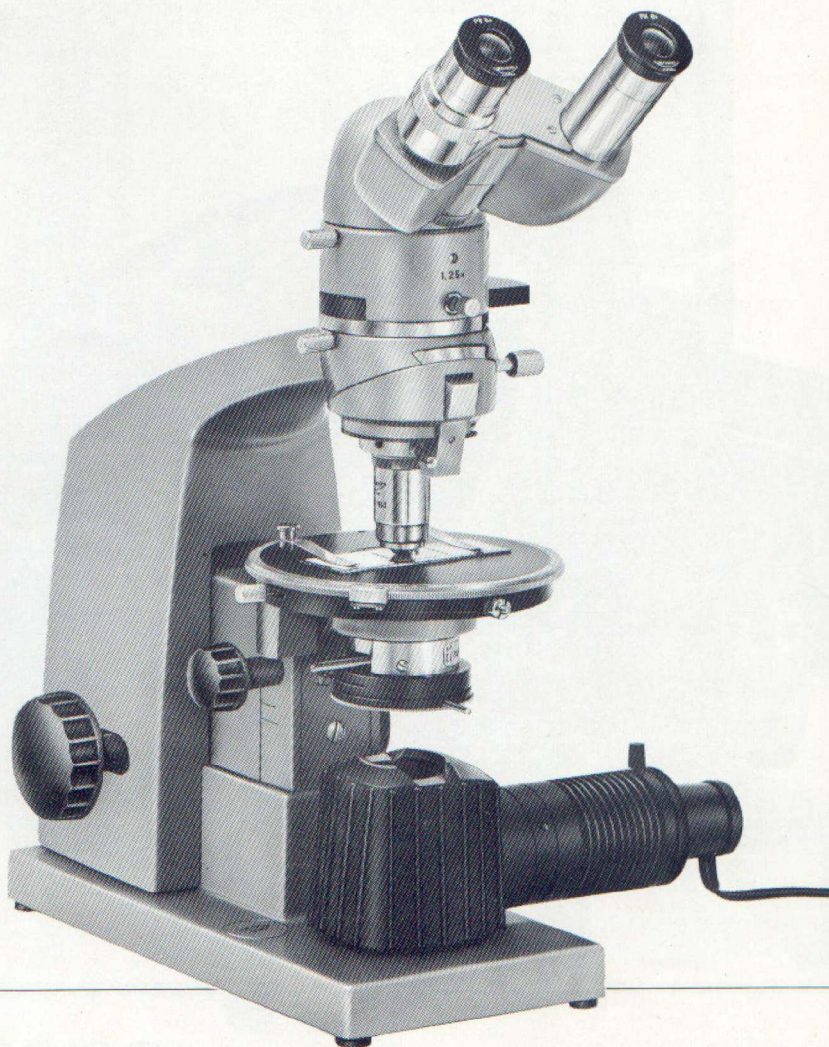
NEOPAN-POL II Polarization Microscope

Derived from our well-established NEOPAN laboratory microscope the polarization variant again offers all the advantages of this instrument group.

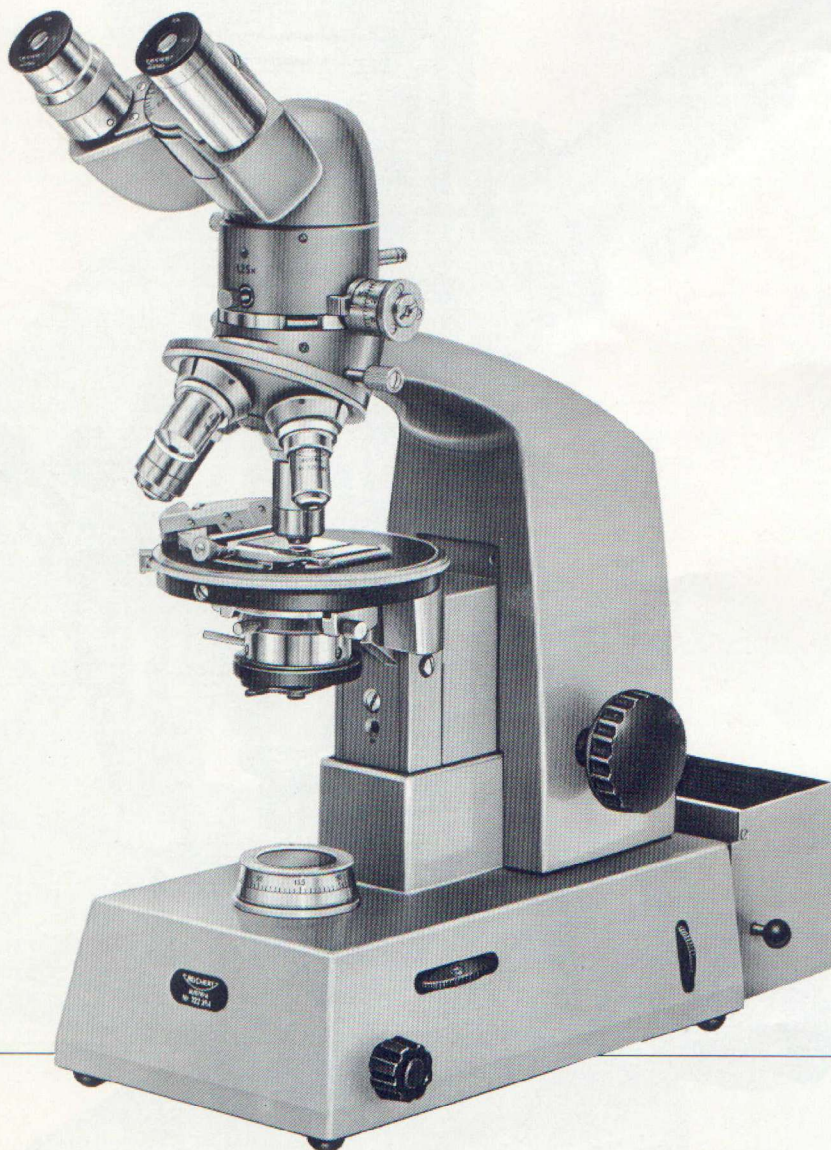
The NEOPAN-POL II is fitted like the DIAPAN with an intermediate tube which contains a centring and focusing Bertrand lens. In this way the observation of the axial image on many specimens can be made with the binocular body. The photography of axial images with the attachment cameras is also possible. A monocular body with iris diaphragm is fitted for special applications. The objectives are carried either on a quadruple centering nose-piece or on an objective clutch. A 15 W low-voltage lamp is provided as light source.

NEOPAN-POL I Polarization Microscope

This instrument is offered as a teaching microscope of exceptional performance at a low price. The intermediate tube is the same as on the other instruments of the POL-Series. The objectives are carried on a precision revolving nosepiece with extremely accurate click stops; re-centering of objectives, a considerable inconvenience on a teaching instrument, can, therefore, be omitted for the first time. The light source is a 25 W mains-voltage lamp.



Neopan Pol



DIAPAN-POL **Large Polarization Microscope**

This instrument contains in the intermediate tube a centering and focusing Bertrand lens which acts on all bodies and permits observation of axial images also with the binocular and photographic body. The 360° rotation analyzer can be fitted into the intermediate tube which carries a compensator slot. Centering nosepiece and objective clutches or condensers are fitted with slides to ensure rapid change of the observation method. The entire range of DIAPAN accessories can be used. The base contains the aspherical condenser, the field-iris diaphragm and a turret with 4 filters. The standard illuminator is the high-intensity 100 W low-voltage quartz iodine lamp. The DIAPAN-POL is, therefore, the first instrument incorporating in its basic outfit this high-intensity illuminator which offers special advantages in polarization microscopy and photography.

Diapan Pol

MICRO SPECTRAL PHOTOMETER

for the quantitative determination of
reflectivity
absorption (extinction) and
fluorescence intensity of microscopic
details and their variation with wave-
length.

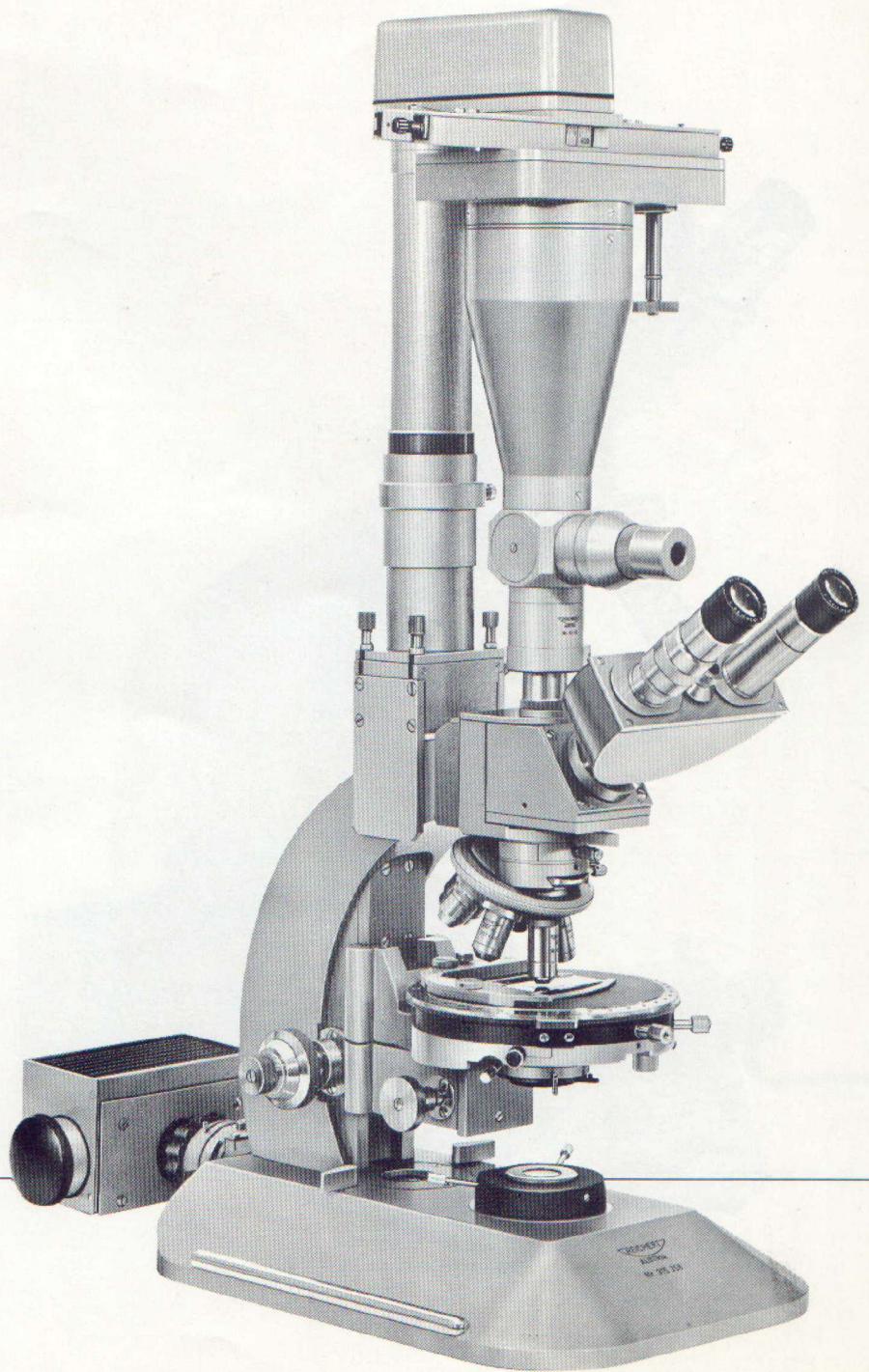
Through measurements of the reflectivity it is possible to select and identify small and very small structural components, e.g. non-metallic inclusions in metals.

Absorption measurements permit not only the determination of the degree of blackening of film material, e.g. in auto-radiography, but also the evaluation of all types of staining which follow histochemical reactions, such as the Feulgen reaction for DNA representation.

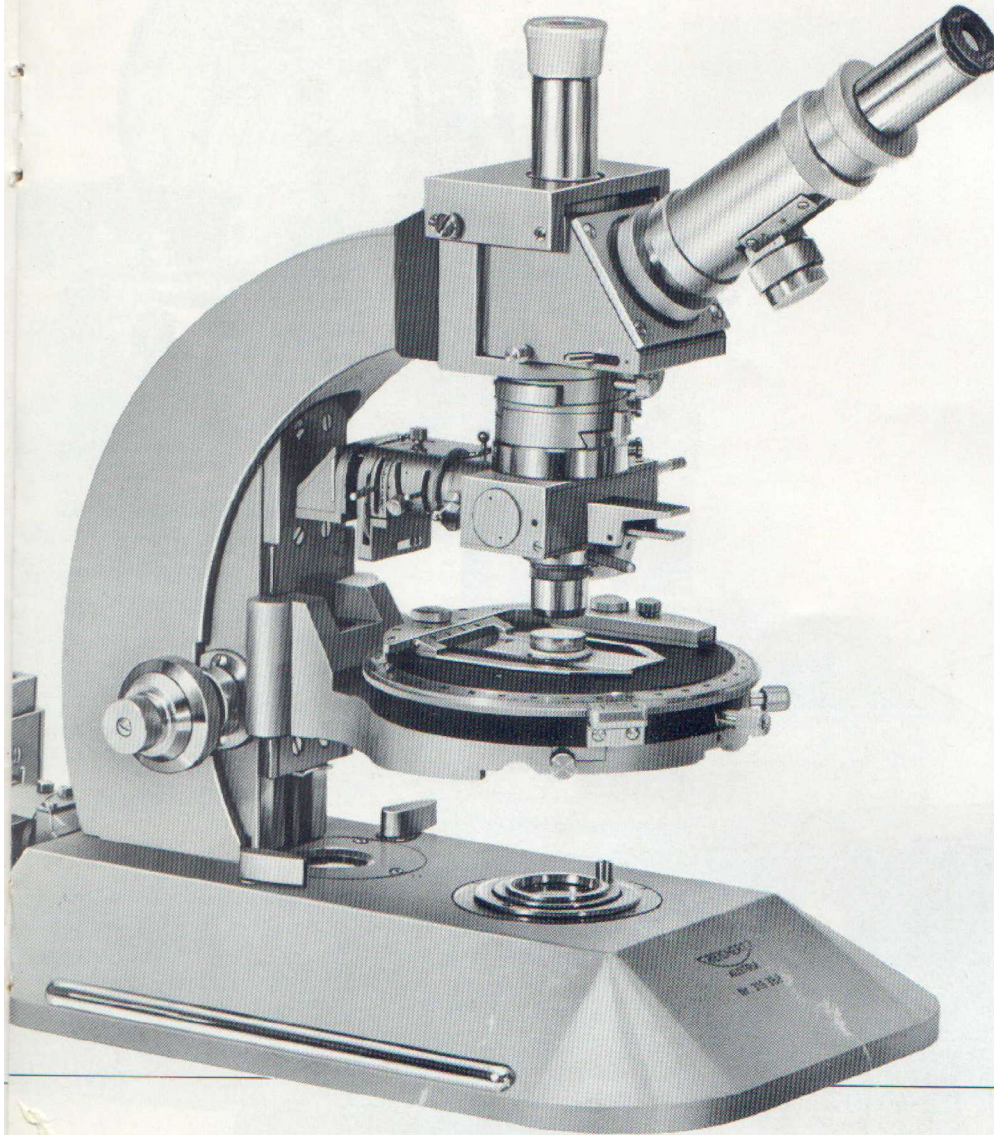
The photometer is completely adjusted within itself; the measuring area can be seen together with the microscopic image. Operation is therefore very simple; the measurements are accurate and reproducible. The measuring area can be selected in steps down to an object diameter of $0.5\ \mu\text{m}$.

In conjunction with suitable incident or transmitted light equipment the photometer can be used with our

Me F 2 Universal Camera Microscope
and the
ZETOPAN Large Research Microscope.



Photometer



ZETOPAN-POL **Polarization Research Microscope**

The following are included in the basic outfit:

- Built-in adjusted illumination for transmitted, incident and mixed light.
- Polarization body with adjustable Bertrand lens and iris diaphragm.
- Equipment for conoscopic investigations.
- Rotating filter analyser with vernier reading to 1° .
- Rotating filter polarizer, graduation 5° .
- Quadruple nosepiece with individually centring objectives.
- Large circular rotating stage, mounted on ball-bearings, with vernier reading to 0.1° ; click stops (45°).

Polarization opaque illuminator-Special Equipment for examinations in Reflected Light

- alternative use of Gauss plane glass illuminator and Berek illuminator with trapezoidal prism
- exact adjustment of Köhler illumination through aperture iris diaphragm and focusing field iris diaphragm
- aperture diaphragm can be decentered to one side for work with the trapezoidal prism
- built-in Stach central diaphragms for reduced reflection and enhanced contrast
- simultaneous use of 2 compensators
- simple changeover for work in bright ground, dark ground and polarized light.

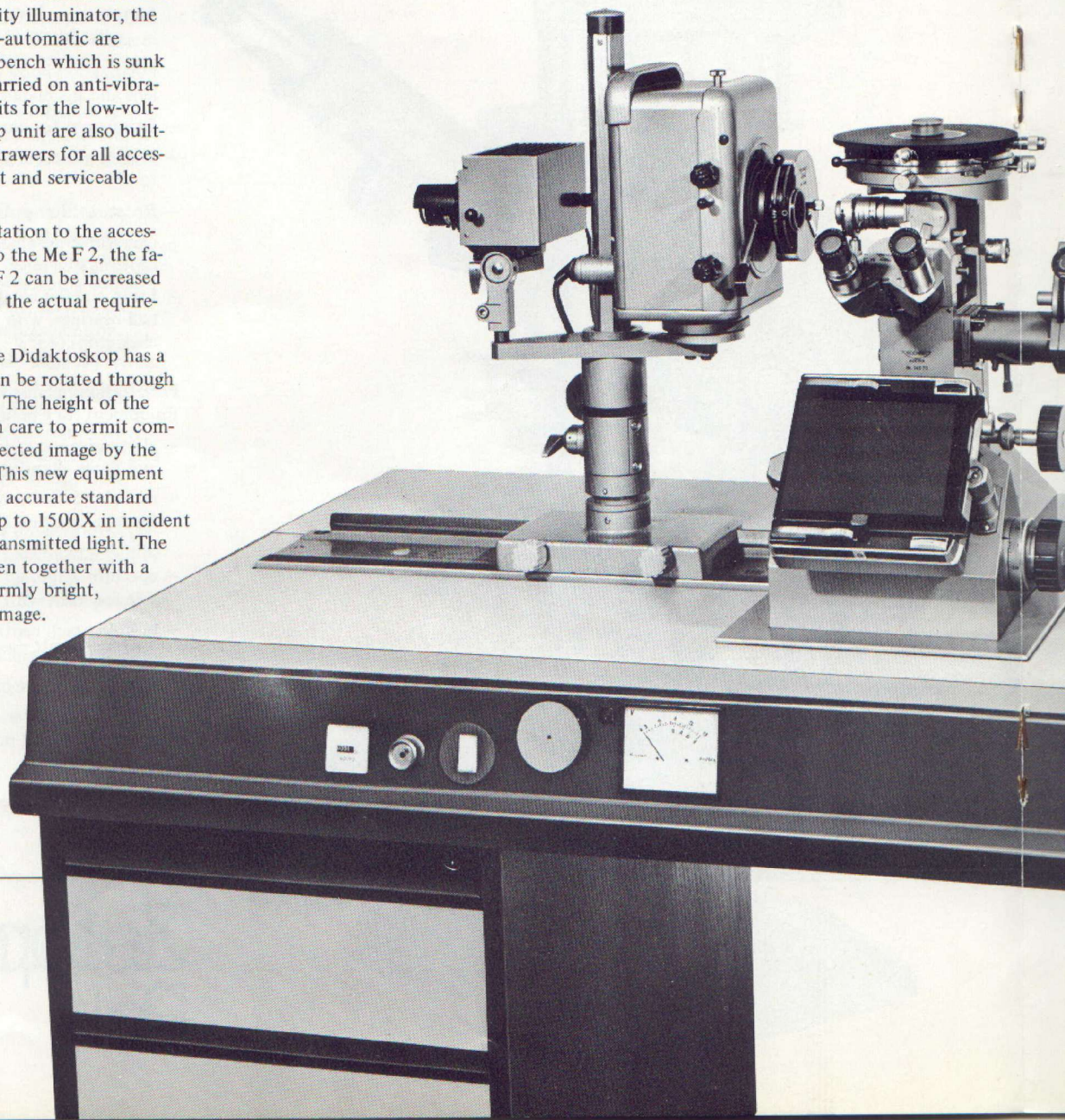
Zetopan Pol

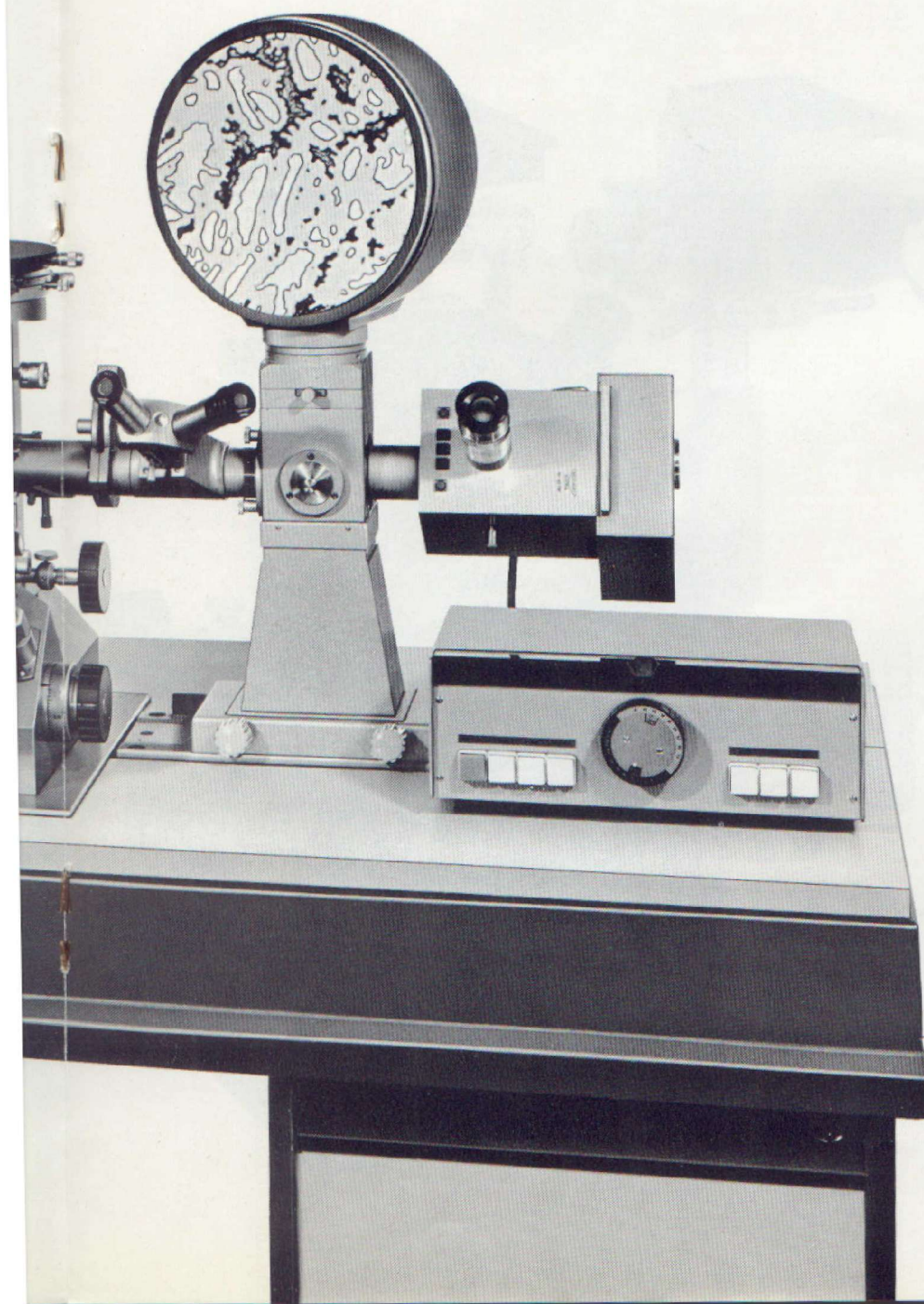
Me F 2 universal camera microscope

The illustration shows this microscope fitted with a comprehensive range of attachments. The microscope, the high-intensity illuminator, the Didaktoskop and the Photo-automatic are mounted on a rigid optical bench which is sunk into a solid work top and carried on anti-vibration mountings. Control units for the low-voltage lamps and the twin-lamp unit are also built-in. The provision of fitted drawers for all accessories results in a convenient and serviceable work table.

As there is virtually no limitation to the accessories which can be fitted to the Me F 2, the facilities available on the Me F 2 can be increased in stages to meet changes in the actual requirements.

The projection screen of the Didaktoskop has a diameter of 220 mm and can be rotated through 360° about its vertical axis. The height of the screen has been chosen with care to permit comfortable viewing of the projected image by the microscopist while seated. This new equipment provides microprojection at accurate standard magnifications from 50X up to 1500X in incident light and up to 2000X in transmitted light. The use of a special frosted screen together with a Fresnel lens ensures a uniformly bright, brilliant and high-contrast image.





The Me F 2 offers reliable mechanical and optical performance and is suitable for all methods of observation in use today:

in **incident and transmitted light**

- brightfield
- darkground
- polarization
- phase contrast
- fluorescence
- photomicrography
- low-power photomicrography
- cinemicrography
- micro television
- micro projection

in **incident light**

- micro hardness testing
- high-temperature microscopy
- micro photometry
- grain-size measuring
- interferometry

with 30 W low-voltage lamp

- 100 W low-voltage quartz iodine lamp
- xenon high-pressure burner
- mercury-vapour burner
- micro flash equipment

Me F2

Universal Camera Microscope Me F 2

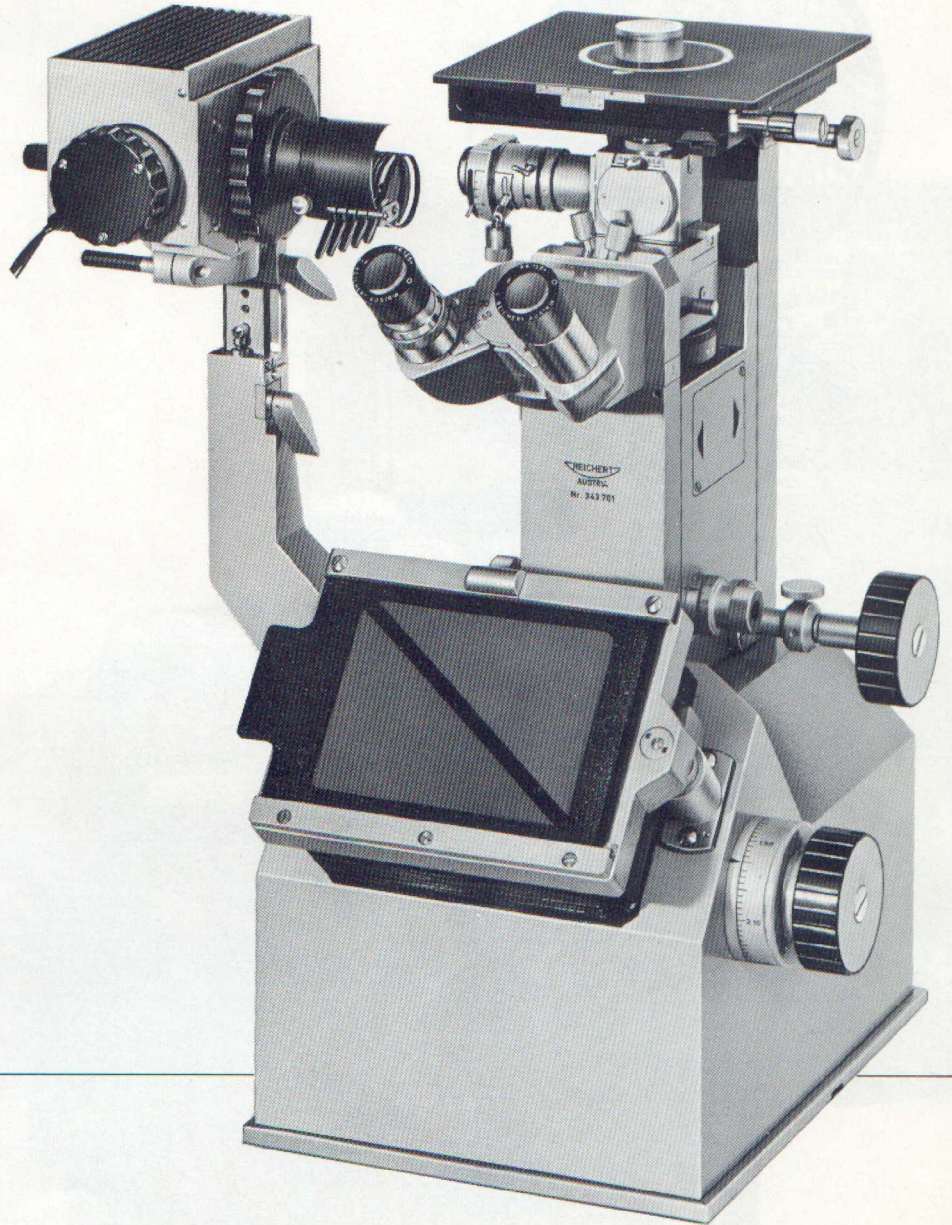
The basic equipment of this microscope is particularly suitable for industrial material testing laboratories, for technical universities and colleges and, when equipped for transmitted light, for the investigation of plankton and cell cultures.

The instrument has been developed from our Me F which has proved highly successful over many years, and incorporates numerous improvements to meet the latest requirements. The inverted type (after Le Chatelier) and the arrangement of the accessories permit a rapid change of the observation methods without changing the position of the specimen or losing the detail under observation from the field of view. Opaque illuminator, objectives and eyepieces have been newly computed using the most recent glass grades and manufacturing methods, in order to achieve optimum image quality. In addition it is now possible to use all the transmitted light objectives employed on the ZETOPAN. The adjustable focusing stop together with the parfocalized objectives with spring mounts ensure rapid and reliable objective changing.

Operator convenience has been further improved by new bodies (binocular body with factor 1 X) and the extremely favourable seating arrangement.

The universal lamp housing takes alternatively the 30 W low-voltage lamp, the 100 W low-voltage quartz iodine lamp or the micro flash equipment. A deviating prism permits projection on the table surface as well as the use of our attachment cameras and PHOTO-AUTOMATIC.

Even the simplest model of the Me F 2 can be converted in steps to a Universal Metallurgical Microscope and equipped at a later stage with a work table and an optical bench.

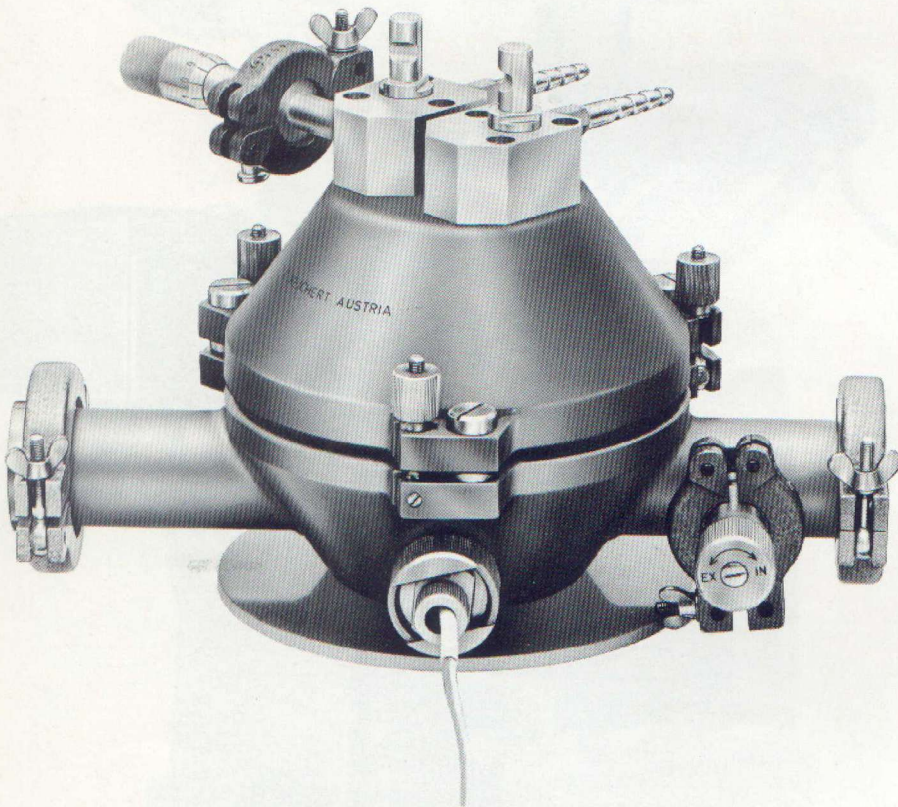


Me F2

VACUTHERM 2 High-Speed Micro Furnace

Used in conjunction with the Me F 2 Universal Camera Microscope for investigations into materials at high and extremely high temperatures. The specimen can be heated to 1800°C and subjected to heat treatment of any form and in any atmosphere. The resulting phenomena are open to direct and continuous microscopic observation and recording with still and cine cameras.

The **VACUTHERM 2** permits the systematic investigation evaluation and monitoring of those processes which occur during the production treatment processing and use of metallic or non-metallic materials.

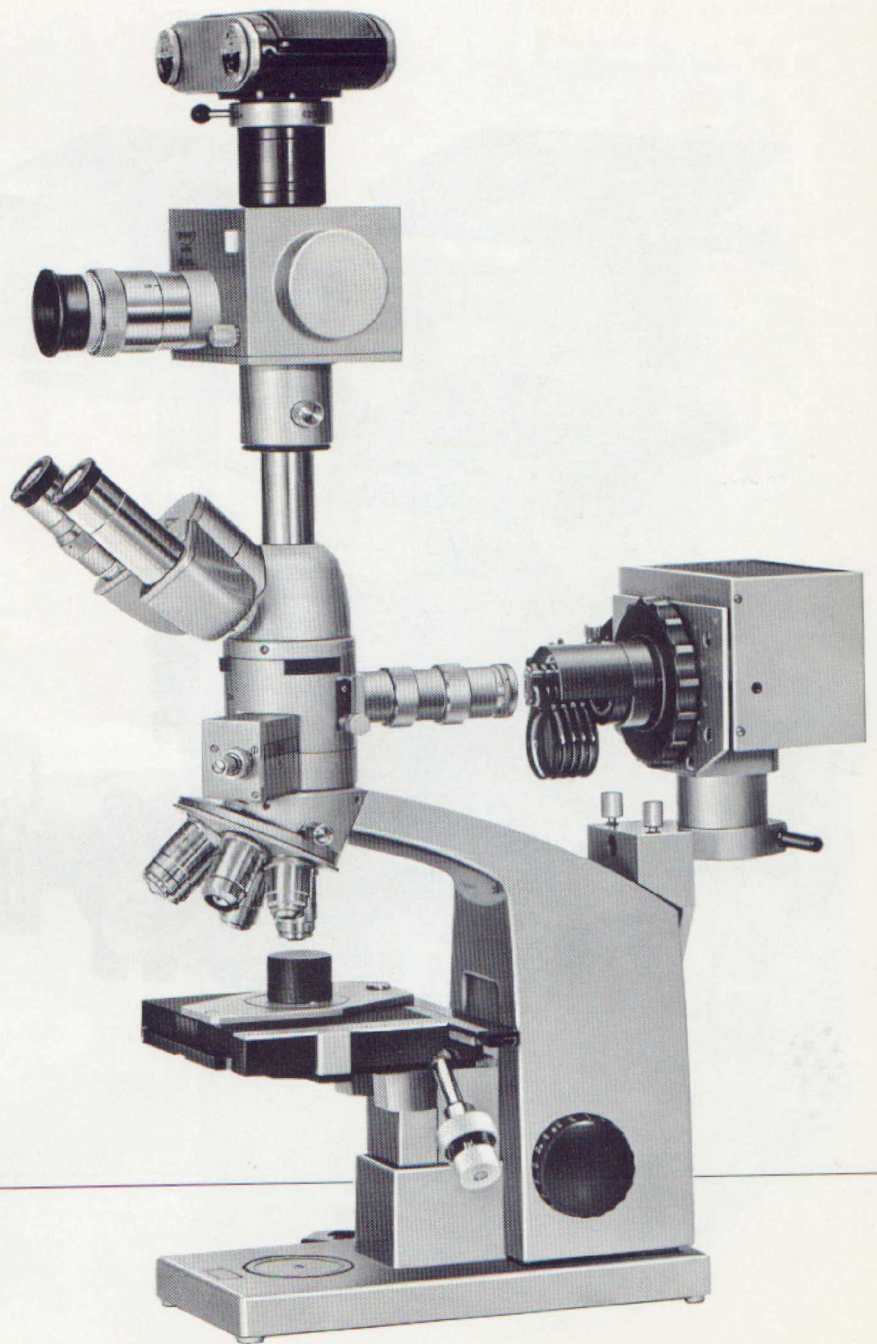


Vacutherm 2

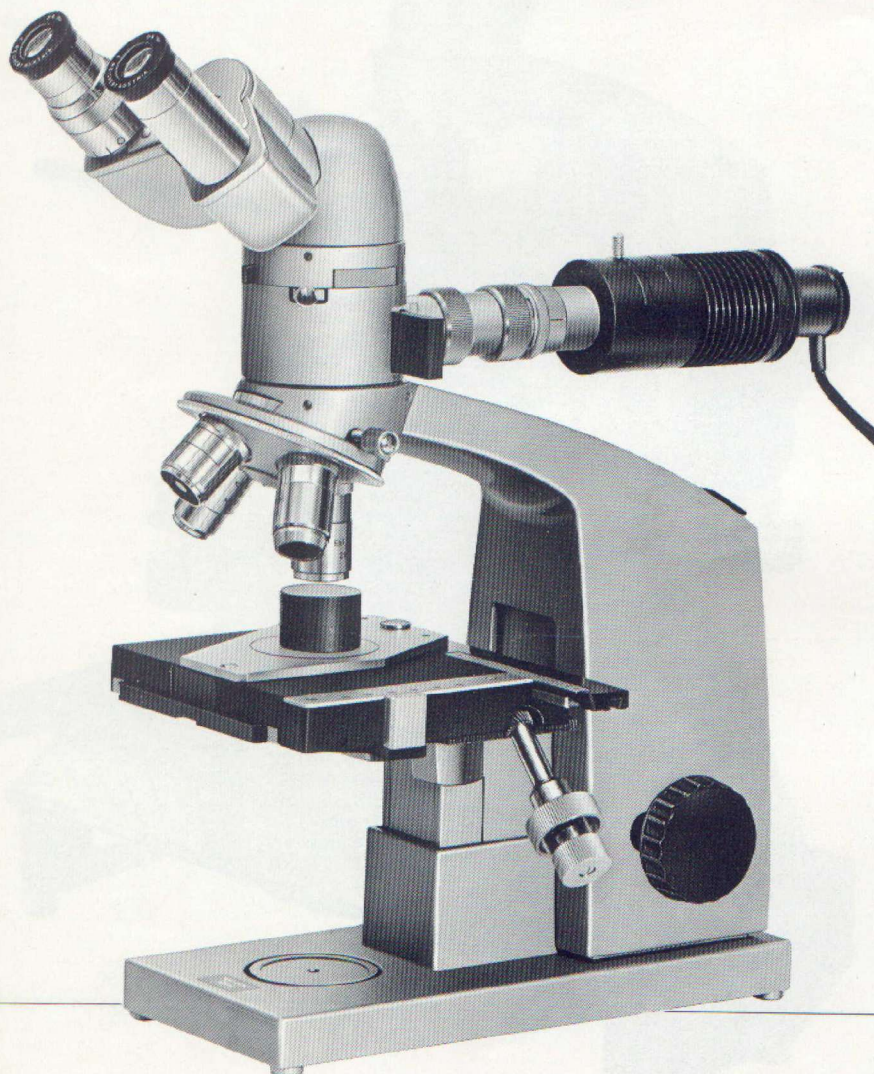
METAPAN 2 IK — for examinations in bright-field, interference contrast and polarized light

Interference contrast after Nomarski is one of the latest techniques for optical contrast magnification and is employed in all fields of incident light microscopy. Interference contrast can be used to special advantage where satisfactory results are not obtained with bright ground, dark ground or phase contrast. Extremely small variations in level show up clearly in 3-D presentation as a light-dark contrast against the background or are reproduced with strong contrast in interference colours. The absence of any halo effect and the continuous adjustment of both intensity and colour of the contrast permit optimum examination of virtually all specimens. Observations in interference contrast can be carried out at all standard magnifications.

This incident-light equipment, too, permits accurate Köhler illumination. The components required for interference contrast (polarizer, analyzer, Wollaston prism) remain attached to the microscope but can be swung out of the beam to permit observation in bright ground and polarized light.



Metapan 2IK



METAPAN 2 U – for work in bright ground, dark ground and polarized light

This instrument is part of an incident-light microscope system used in various combinations in metallography, electronics, mineralogy, biology, materials testing and petrography.

The incident light equipment illustrated here is suitable for the three most important methods of observation. Aperture and field diaphragm permit accurate adjustment of Köhler illumination in bright ground; the change to dark ground or polarized light is made by altering the position of a slide. The polarizer can be rotated through $\pm 5^\circ$. An aperture pre-selector ring ensures reproducible diaphragm settings when changing the observation method.

The strain-free Epilum objectives can be used equally well for all 3 observation techniques and provide high resolution, flatness and brilliance. All objectives are centered and parfocalized on the ball-bearing nosepiece. Combined with the specially colour-free and highly corrected eyepieces they give a series of standard magnifications.

Stage, body, and powerful lamps can be freely selected to make this incident light microscope the ideal instrument for all applications.

Metapan 2U

**THERMOPAN Microscope
with Kofler MICRO HOT STAGE
and Kofler MICRO COLD STAGE**

for melting point determination, identification of substances, purity tests and the thermal analysis of organic substances in the temperature range -50 to $+350^{\circ}\text{C}$, with a minimum amount of material (down to 1 mg), with low thermal inertia, accurately and quickly.

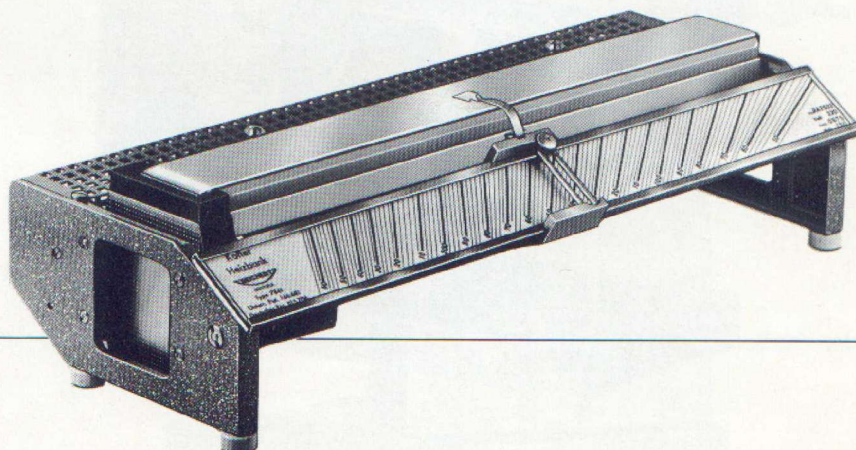
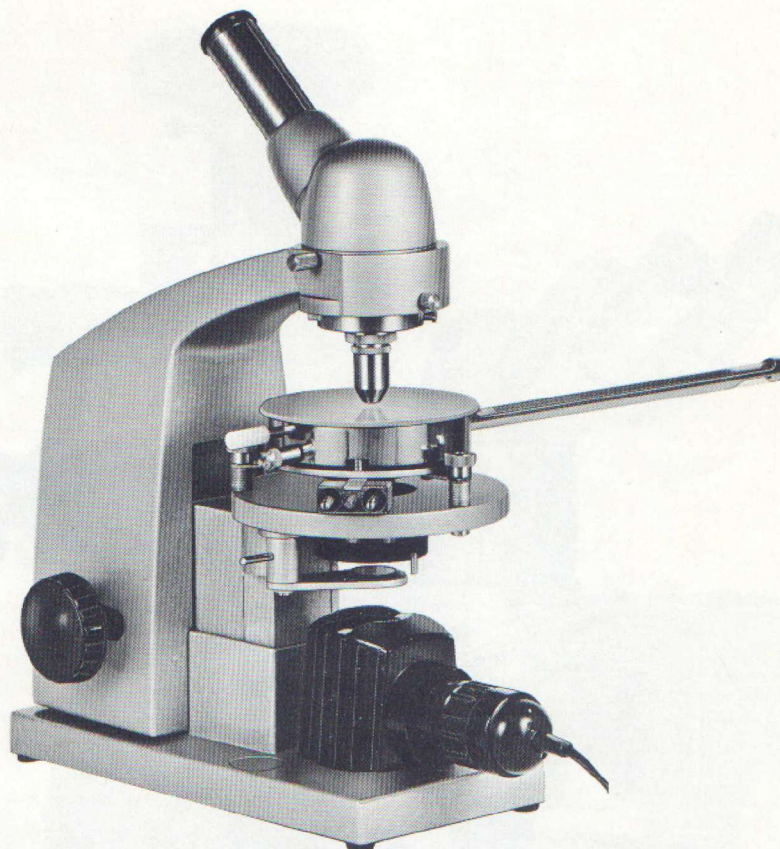
It is important to note that the melting point is determined neither macroscopically nor by absorption measurements but under microscopic observation of the actual specimen before, during and after melting. With many substances this forms the only method for unambiguous identification.

The instrument is fitted as standard with swing-out polarizer and analyzer; compensators can also be used. Both monocular and binocular observation is possible. Apart from the mirror, a mains-voltage lamp and a low-voltage illuminator are available as light sources. Our standard equipments for photomicrography and micro-projection can also be used.

Kofler HOT BENCH

for the rapid determination of melting points and eutectic temperatures, the softening point of plastics in powder form, the purity of substances, and other investigations for identifying organic substances. Also used in preparative work and preliminary investigations in conjunction with the Kofler hot stage.

- **Rapid operation** (melting points determined within seconds)
- **Direct reading**
- **Small substance requirement**
- **Temperature range $+50$ to $+260^{\circ}\text{C}$.**



Thermopan Hot Bench



MAK Stereoscopic Microscopes

for observation in incident and transmitted light at magnifications from 6.3X to 200X. The twin body (Greenough system) can be mounted on different stands and carries a low-voltage illuminator.

Accessories available include insect holder, petri dish carrier and our cameras.

MAK MS: stand with co-ordinate movement of body for systematic specimen scanning.

MAK KS: stand with rigid body.

MAK GS: stand with rigid body, for incident-light work only.

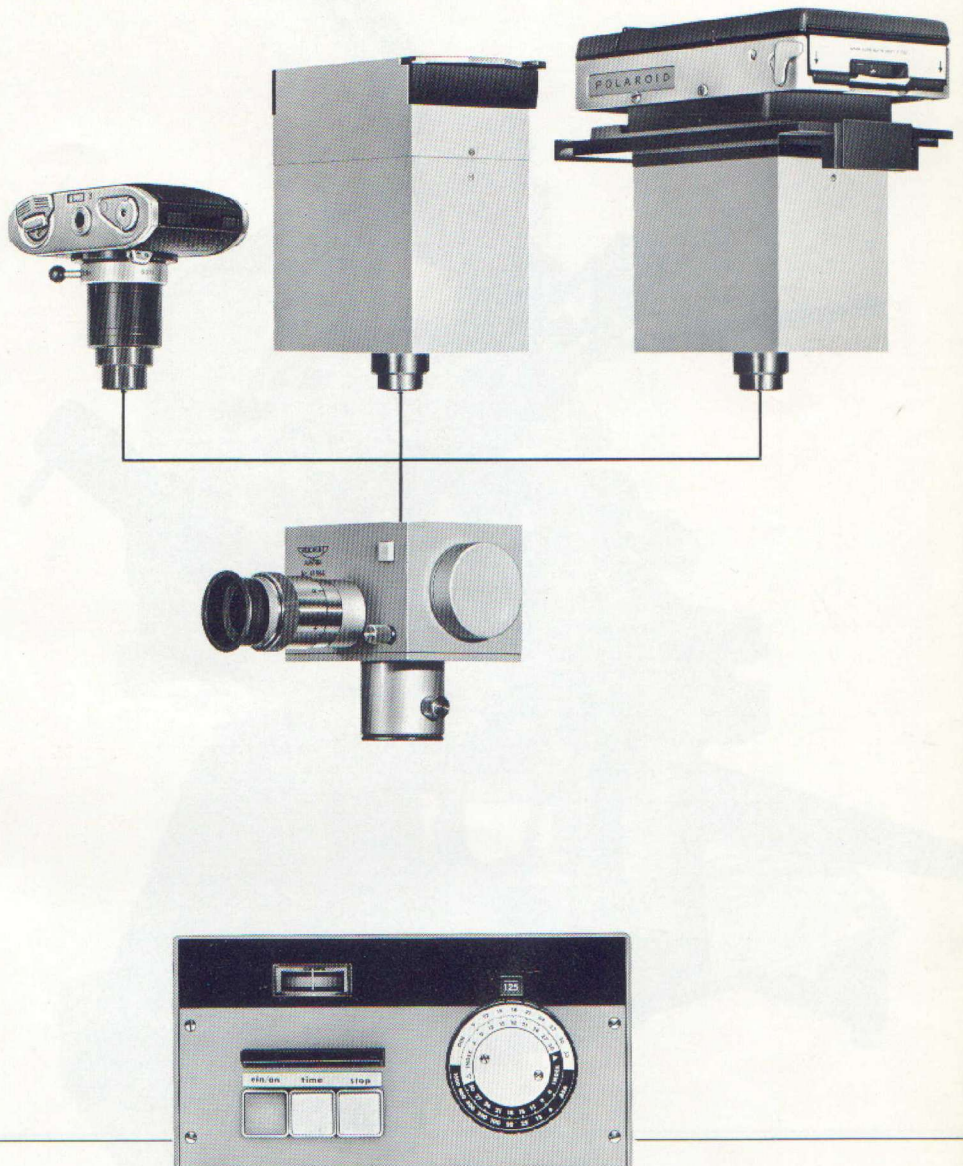
MAK JS: column stand with extended horizontal support for investigating large specimens. Fitted with either rigid or co-ordinate link.

Mak

KAM ES – electronic camera system with exposure time indication

The attachment camera for photomicrography can be used with all standard frame sizes and also for cinemicrography.

The electronically controlled mirror shutter system permits automatic exposure measurement at full illumination. The time is indicated numerically and fed automatically into the electronic shutter. A balance indication system which is linear over a wide range and provides an additional indication of the optimum exposure time within an illumination step. This measuring system offers particular advantages in cinemicrography since the time can be checked during the actual exposure. A special combination of this system can be employed as an exposure meter. A recording attachment with projector is available for marking the photomicrograph (arrows, numbers). Its wide light measuring range, its use for short and long exposures and the ease of introducing corrections for special conditions, make this camera system the universal instrument for every microscopist.



Kam ES

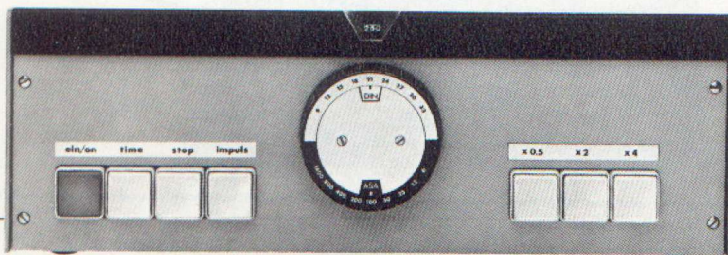
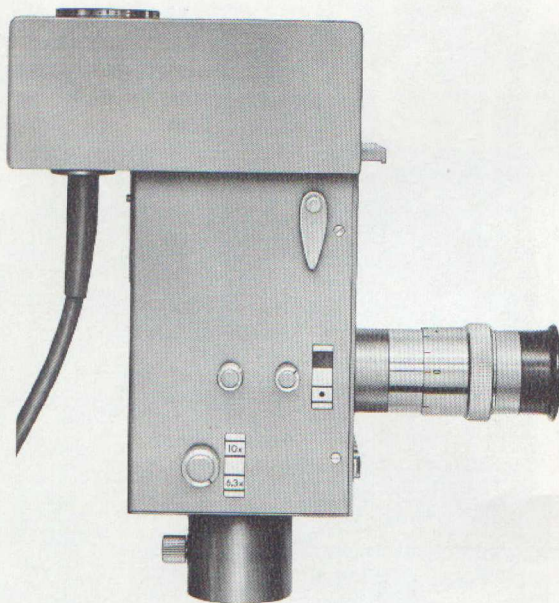


PHOTO-AUTOMATIC

This camera covers for the first time not only the field of routine photography but can also be used to determine the optimum exposure time for specimens involving difficulties of photography or technique.

As a decisive advance in this direction the PHOTO-AUTOMATIC not only evaluates the exposure time and feeds it into the electrical circuit, it also indicates it before the actual exposure, an essential requirement, so that corrections for reciprocity failure or intentional alterations in the exposure time can be included in the automatic operating sequence by means of the factor keys.

While these features are important in scientific photography, for routine work it is only necessary (as has been common practice in the past) to press the control which triggers the shutter and operates the film transport. A green light on the outside of the camera is reflected into the observation telescope to show that the correct exposure time has been set.

The interchangeable 24 x 36 film cassette provide for the use of a wide range of film grades. The shortest exposure time is $\frac{1}{250}$ sec. The built-in photographic eyepiece has a magnification variable from 6,3X to 10X.

The PHOTO-AUTOMATIC can be used on any microscope.

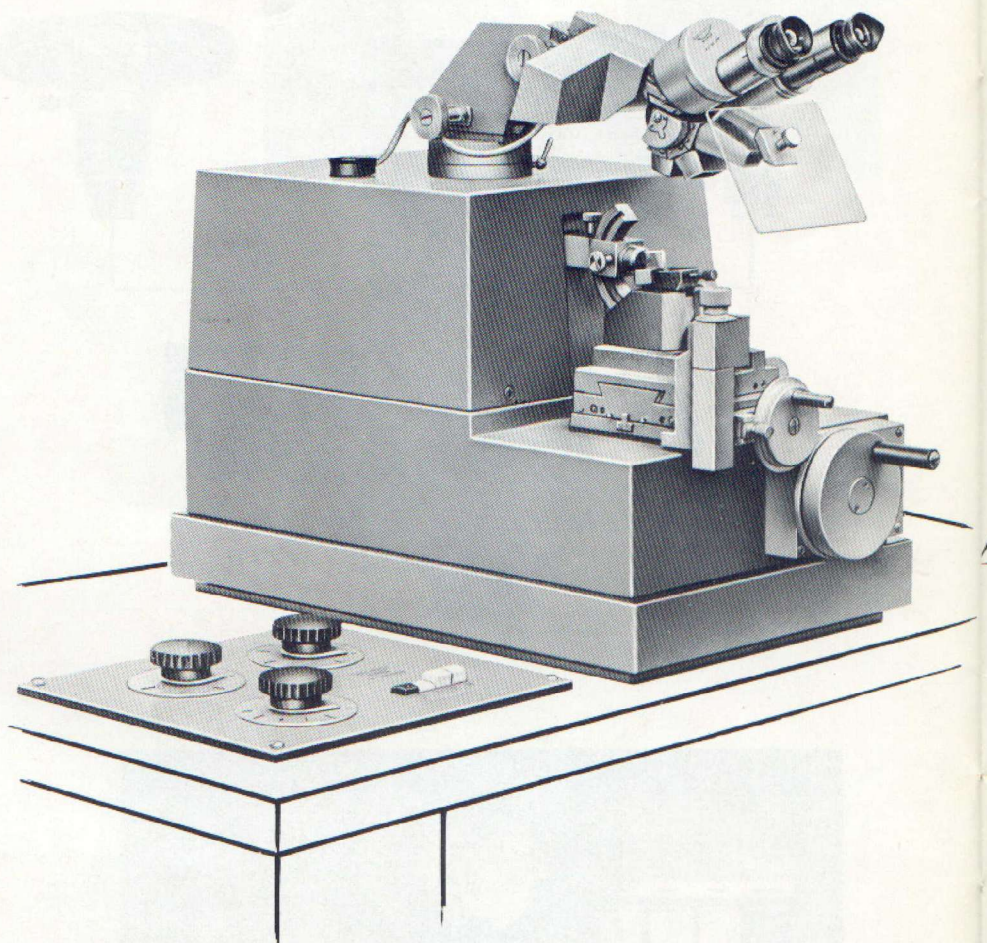
Photo- automatic

Om U 2 Ultra Microtome (after Sitte)

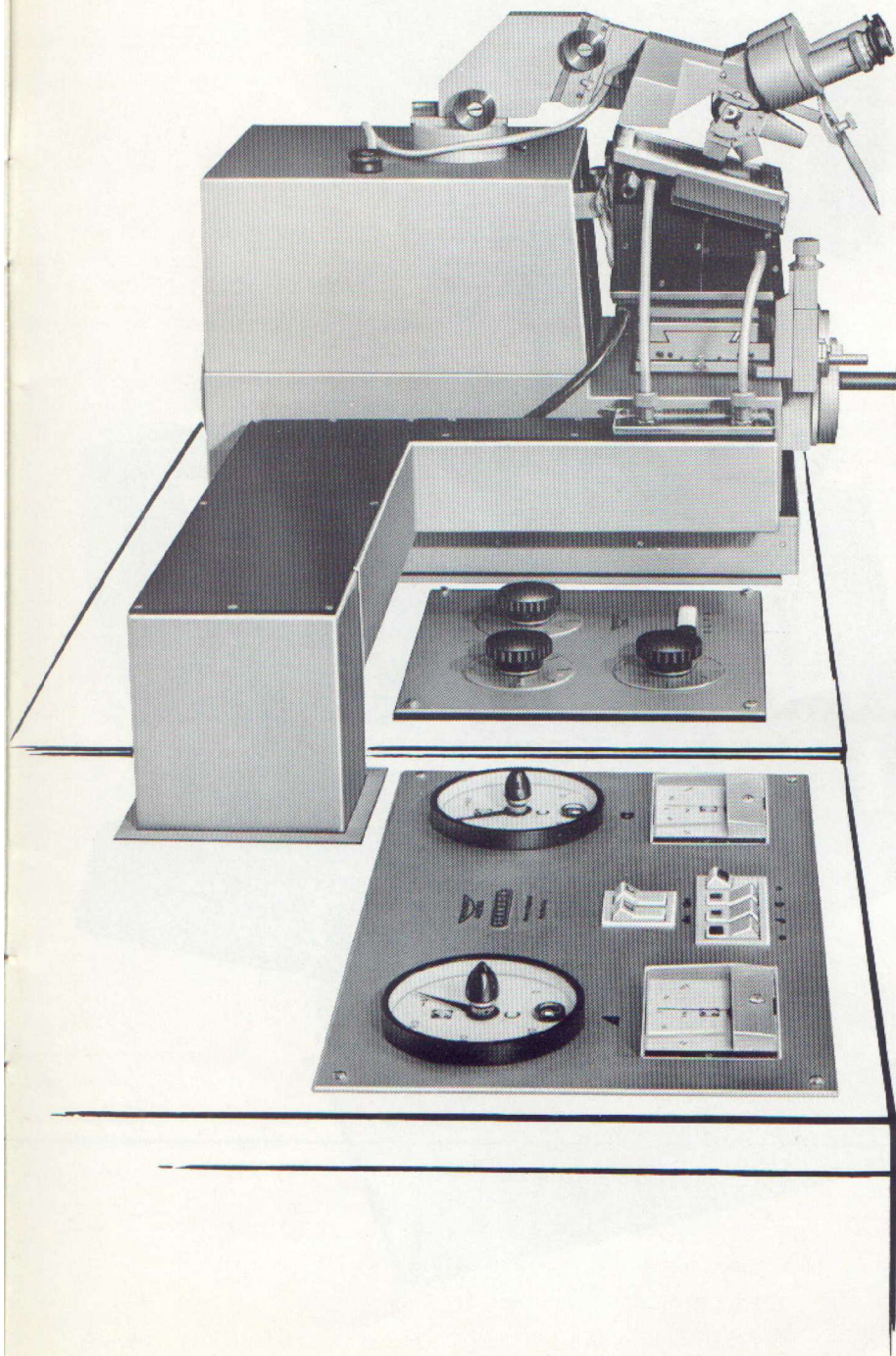
for preparing long, chatter-free serial sections or single sections for electron and light microscopy with reproducible section thickness.

This new design incorporates numerous new ideas which ensure maximum simplicity, accuracy and convenience. While push-button control simplifies routine work, the instrument can readily be adjusted for optimum performance to suit difficult special applications.

- Ultra-thin sections for electron microscopy up to 4 mm² cutting area.
- Thin sections for light microscopy up to 25 mm² cutting area.
- Inertia-free thermal feed
- Push-button controls
- "Red dot" setting for standard section thicknesses
- Electrical height adjustment of the cutting zone
- 2-speed motor drive
- Manual operation
- Maintenance-free precision bearings
- Straight-line specimen guide in the cutting zone
- Stereo microscope with pre-set illumination
- For glass or diamond knives
- REFLEXOMAT for setting the water level in the knife trough



Om U2



Low-temperature Freezing Attachment FC 150

An accessory for the standard ultramicrotome Om U 2. Biological or engineering materials are cooled below their glass point and ultrathin sections are then prepared at this temperature.

Specimen and knife are located in a cooling chamber, surrounded by a completely dry and inert atmosphere. The sectioning process can be observed continuously through a heated window.

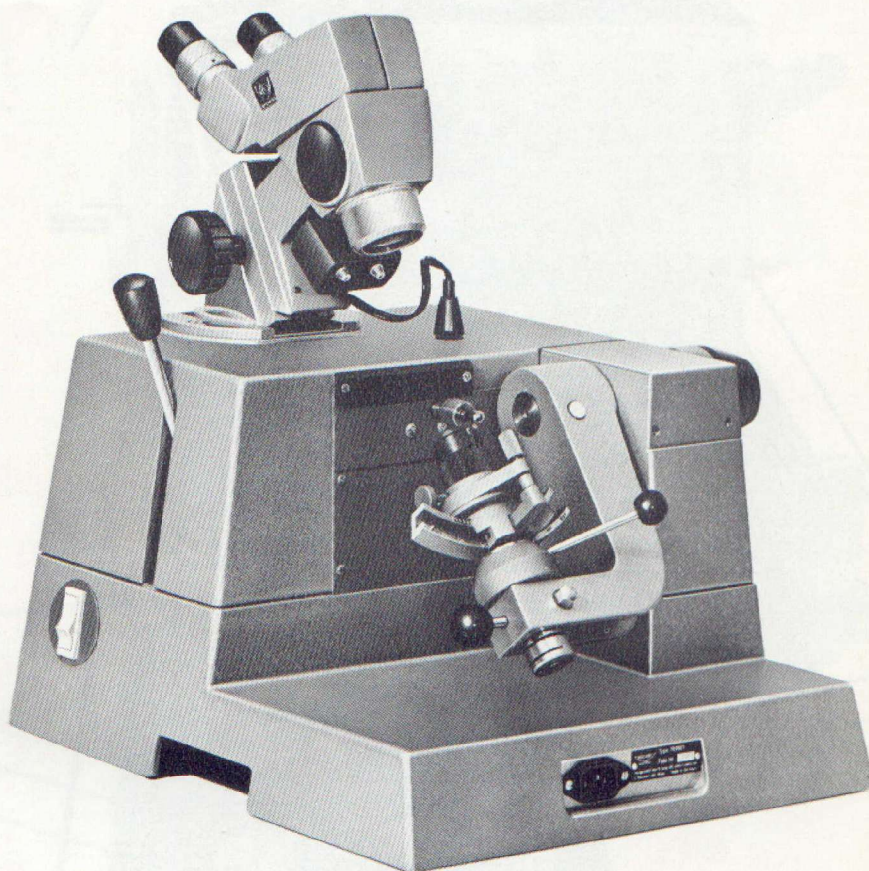
The equipment permits rapid cooling of knife and specimen. Their temperatures can be set independently between 0° and -150°C and maintained constant automatically to a high degree of accuracy. Very economic cooling is ensured by the use of cold gaseous nitrogen. A rapid specimen freezer permits shock freezing of water-containing materials to prevent the formation of freezing artefacts.

FC 150

Specimen Trimmer TM 60

For the precise and accurately controlled preparation of pyramid and cutting face on specimens for electron microscopy:

- for blocks and flat embedded specimens
- with adapters to take specimen holders for most ultramicrotome types
- without lengthy adjustment or tedious trimming operation
- with accurately parallel edges or in any other form
- plane and smooth
- in any direction relative to the specimen axis
- at any point within the specimen
- with continuous observation under the microscope
- in any size from about 0.02 x 0.5 mm
- with an accuracy of $\pm 5 \mu\text{m}$
- without pressure effects, compression cracks or tearing-out of particles from the specimen
- for easily separated serial sections
- with maximum safety through an automatic protection switch
- in 60 seconds



TM 60



Illumination Plate LP 18

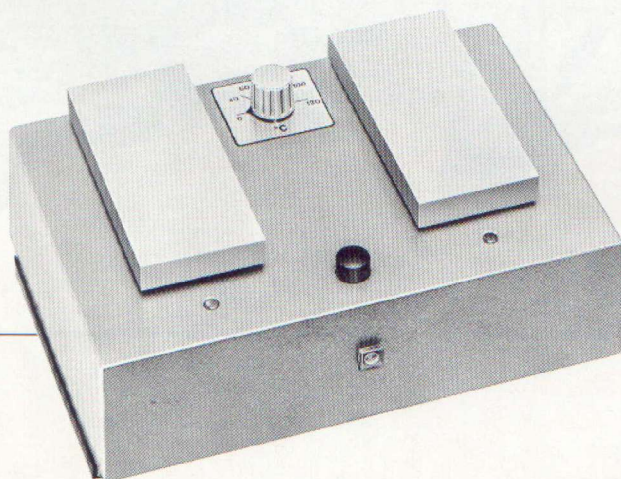
This new unit is a valuable aid in embedding specimens for electron microscopy. Various holders for 36 capsules each or divided troughs for 84 flat specimens are placed in a carrier and illuminated from below. This ensures a rapid and clean operation and in particular the exact orientation of the specimen within the embedding medium.

Since the illumination plate gives a very bright white light of uniform intensity it can also be used for examining negatives and transparencies.



Polymerisation Unit KT 100

A small handy unit for polymerising specimens for the electron microscope at temperatures up to 100°C. The drawer runs on ball bearings and takes the embedding units of the LP 18; it holds 36 blocks of all sizes or 84 flat embedded specimens. If a number of differently embedded specimens have to be polymerised simultaneously at different temperatures, it is advisable to stack several KT 100 units on top of each other to save space.



Heating and Cooling Plate HK 120

for handling the comparison sections for optical microscopy in the electron microscope laboratory.

The heating plate can be adjusted from 40° to 120°C and ensures reproducible warming of the sections for spreading, after-treatment if any, staining and covering.

Between these operations the glass slides are brought down quickly and uniformly to room temperature on the cooling plate.

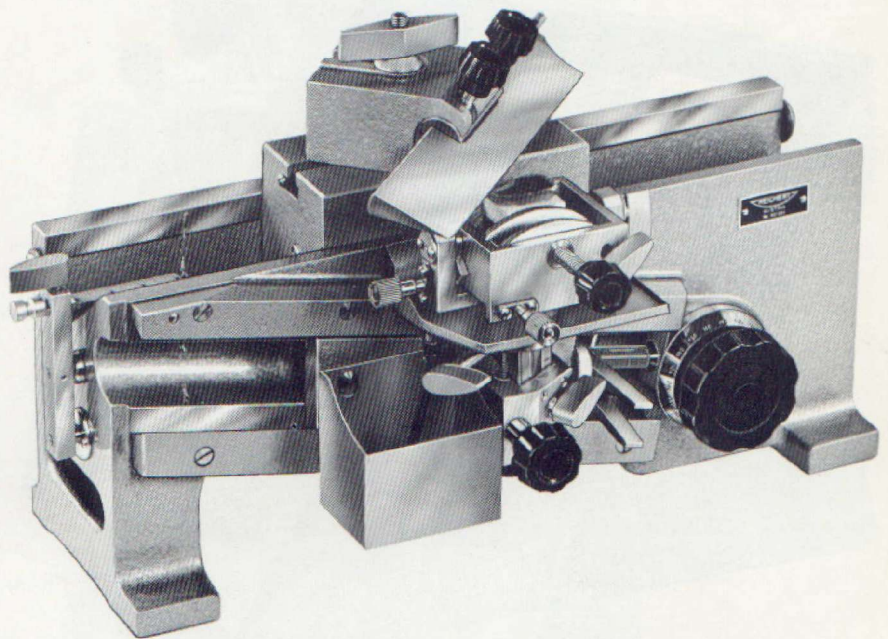
Each of the two plates can take 5 slides at the same time.

KT 100 LP 18 HK 120

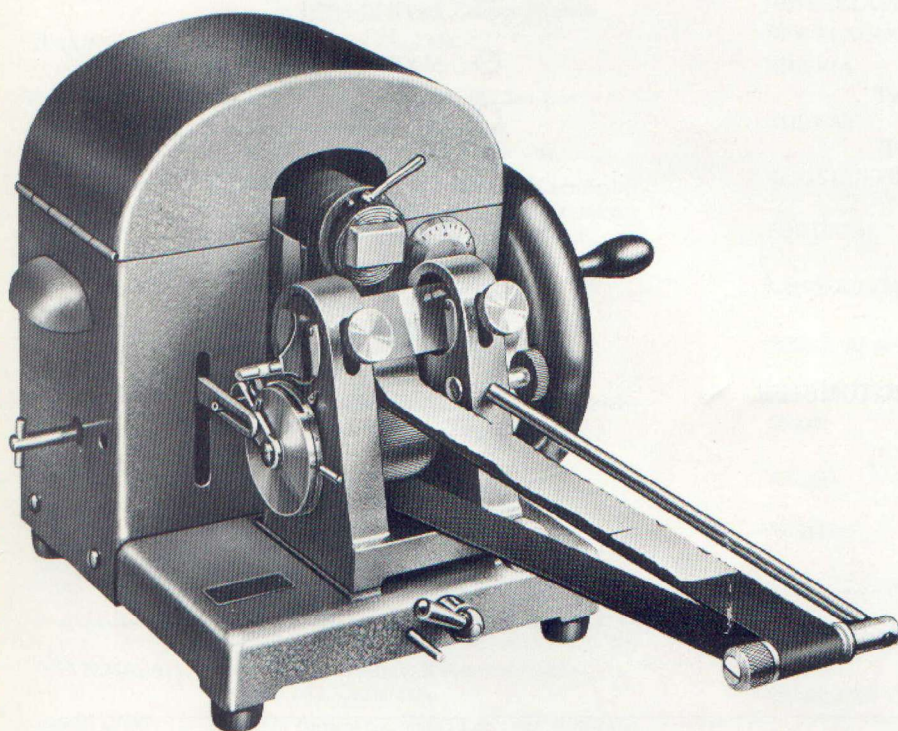
Om E Large Sliding Microtome

for preparing paraffin, cellodion and frozen sections. The heavy, rigid construction permits sectioning of large or relatively hard objects such as major muscles, bones, wood, plastics and other technological materials.

- Section thickness and adjustment automatic in steps of $1\text{ }\mu\text{m}$ over the range 1 to $30\text{ }\mu\text{m}$ or manual over any desired range
- Adjustment for cutting angle and knife angle
- Height adjustment of specimen with gear drive and by adjustment of object stage on slide track
- Specimen support:
Naples clamp with 2 gear drives for adjustment in two planes
- **Rigid object clamp**
- **Freezing stage** with knife cooling device
- **Thermoelectric cold stage**



Om E



Om S Serial Section Microtome

for investigating the three-dimensional structure of biological specimens. The automatic feed of the conveyer belt which can be adjusted for block size permits the preparation of continuously connected series of paraffin sections.

- Drive of instrument through balanced hand wheel
- Section thickness adjustment in steps of $1\text{ }\mu\text{m}$ over the range 1 to $25\text{ }\mu\text{m}$, automatic or manual
- Knife angle can be read on scale
- Specimen adjustment through mechanical movement of knife support or object stage on the slide track
- Specimen support: object stages 20, 30 and 40 mm dia. or rigid object clamp

A ball joint permits alignment of specimen to knife.

Om S

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