

Leitz
WETZLAR

Polarizing Microscope
DIALUX-Pol.

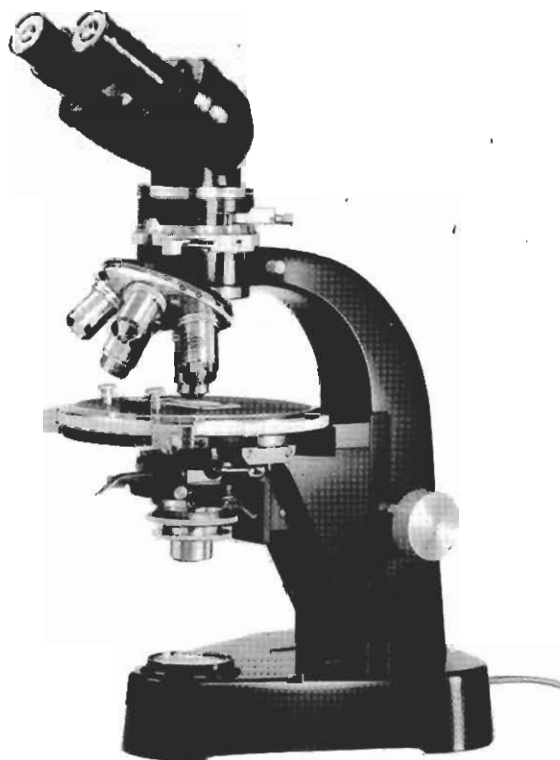
ERNST LEITZ GMBH WETZLAR®



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Polarizing Microscope DIALUX-Pol
for examinations in polarized
transmitted and incident light

DIALUX -Pol stand
with binocular body
and revolving nosepiece
with individual objective
centration



Special Features

- 1.) Stand arranged for taking a condenser and objectives for work in transmitted light or a vertical illuminator for incident light.
- 2.) The polarizing equipment is available in the form of high-grade filters (DIALUX-Pol-f) or as polarizing prisms (DIALUX-Pol-p), as desired.
- 3.) Tube changing head with precision bayonet for taking an inclined monocular tube for wide-field eyepieces, a binocular body S 20 or a combined binocular observation and photo tube FS 21. The binocular observation also includes conoscopic work without any restrictions making the instrument superior to all other types.
- 4.) Choice of two interchangeable types of changing devices for objectives for work in transmitted light, i.e. a precision centring clutch taking the objectives with interposed three-point centring collars and a quadruple revolving nosepiece with individual objective centration. The horizontal changing slide of the stand also takes a polarizing vertical illuminator for ore microscopy etc. or an ULTROPAK illuminator with special objectives having ring condensers for incident (dark-field) illumination.
- 5.) Centred precision rotating stage with ball-bearings and 360° graduation, vernier, and arresting device for every 45° setting. The stage is specially flat to allow the use of all standard condensers on changing slides in addition to the interchangeable polarizing condenser.
- 6.) Full suitability for using attachable universal rotating stages.
- 7.) Microscope foot arranged for the insertion of a lamp unit, which can also be fitted subsequently, while for the use of separate light sources an ordinary adjustable microscope mirror can be fitted.
- 8.) An arrangement for the synchronous rotation of the polarizer and analyser (both the filter and prism types) is offered as an optional equipment.

Specification

Modern stand on three-point base designed for the reception of a lamp and collector unit, with combined coarse and fine adjustment mechanism to actuate the object stage along ball-races with single-knob control on either side of the stand and a micrometer scale divided into intervals of 0.002 mm.

The top portion of the stand carries the tube changing head with precision bayonet, a built-in filter analyser with 180° rotation and scale with 2° intervals and lever control for putting the analyser in and out of operation, swing-out focusing and centring Bertrand lens system, and lower horizontal dovetail slide for fitting an objective changing device or an incident light illuminator.

Gypsum compensator red 1st order and mica plate 1/4 W. L.

Attachable inclinable and rotatable illumination mirror on circular fitting.

Wooden cabinet with fittings, handle and lock (PEIMS)

Detachable objective centring clutch with compensator slot and 4 objective centring collars (7.74. -. -) (PEZOB)

Rack and pinion substage with horizontal dovetailed condenser carrier (-. -. 5. -)

Lamp unit 6 volts 2,5 amps with bulb centring device for transmitted light (-. -. -. 30) (PELUN)

Transformer REROW_r for connection to 110 or 220 volts A. C. Basic stand DIALUX-Pol-f (7.74. 5. 30) + REROW

Interchangeable inclined monocular tube P 10 for wide-field eyepieces, with bayonet fitting, with built-in iris diaphragm for singling out small specimen details.

PEBUD

Centred precision rotating stage, large 150 mm model No. 37, with ball-bearings, 360° graduation and 2 verniers, frictional clamp and arresting device for every 45° setting of the stage

PECEB

Two-diaphragm polarizing condenser No. 50f on changing slide with graduated rotating mount and centring device for the filter polarizer the direction of vibration remaining unchanged when the centring device is operated

PEVIV

Stand DIALUX-Pol-f (7.74. 5. 30) P 10 37/50f + REROW

Optical Equipment (B 21-FE)

Achromatic objectives, free from polarization,

P 3.2/0.12

P 10/0.25

P 45/0.65

Oil P 100/1.30

PETTA

PETRI

IAZYI-FE

PELIM-FE

Wide-field Huygens eyepiece 5x
with cross lines and focusing eyelens

IIAWS

Wide-field Huygens eyepiece 8x
with cross lines and focusing eyelens

IIAXU

Huygens eyepiece 6x with focusing eyelens
and micrometer scale 10 mm = 100 intervals

IIAYW

Net micrometer plate fitting inside
the 6x micrometer eyepiece

ICKRI

Stage micrometer 0.01 mm (2 mm = 200 intervals)

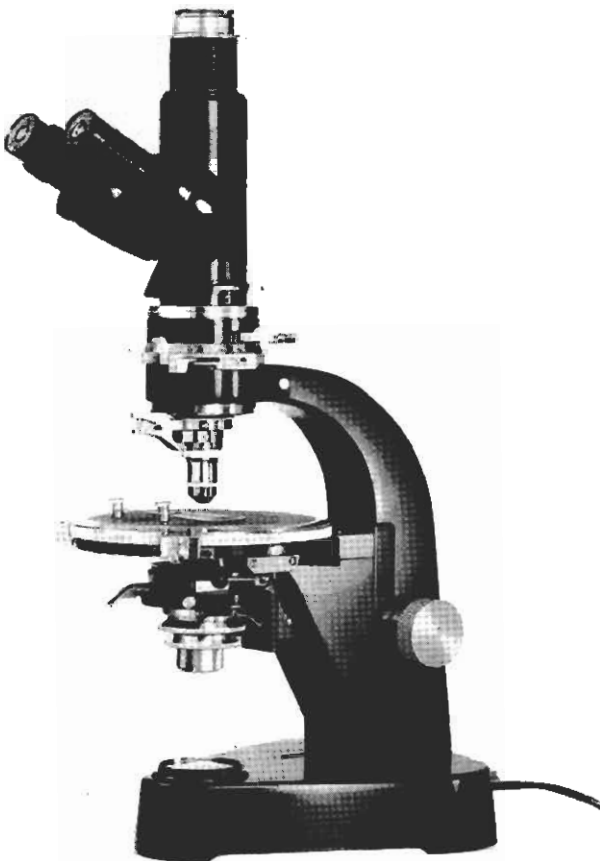
OBMET

Immersion condenser cap for 1.40 num. aperture

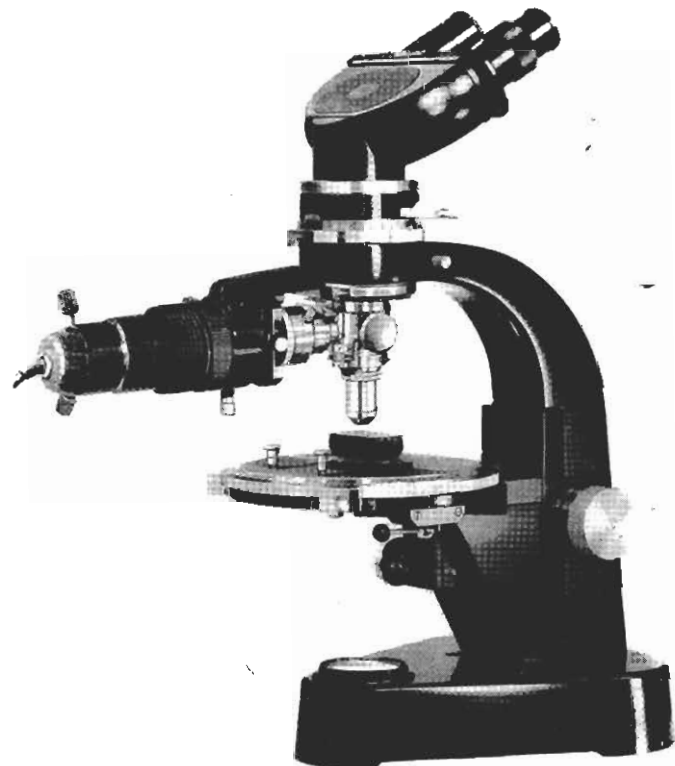
PUKAP

Large polarizing microscope complete with optical
equipment for magnifications 16-800x

DIALUX-Pol-f (7.74.5.30) P 10 37/50f B 21-FE + REROW



DIALUX-Pol stand with combined
binocular observation and photo
tube FS 21



DIALUX-Pol stand with vertical
illuminator and lamp attachment

Individual prices and supplementary items

| | |
|---|-------|
| 1. Plane and concave mirror | PEJUL |
| 2. Lamp unit with collector system for transmitted illumination, 6 volt 2, 5 amp bulb and centring arrangement | PELUN |
| 3. Gypsum compensator red 1st order | KOGIP |
| 4. Mica compensator 1/4 W. L. | KOMER |
| 5. Objective centring collars, each | PIZUT |
| 6. Wooden cabinet with fittings, handle and lock | PEIMS |
| 7. Prism analyser and prism polarizer in place of filter polarizing equipment, additional price | PEPUS |
| 8. Alternative equipment fitting the horizontal changing slide in place of the objective centring clutch (7. 74. -. -) | PEZOB |
| a) Quadruple revolving nosepiece with individual objective centration, on bracket (7. 34. -. -) | PEZUC |
| b) Vertical illuminator for observations in incident polarized light, comprising bracket with housing, optical intermediate system, field of view and aperture diaphragms, graduated rotating filter polarizer, supplementary collector, diaphragm slide with 4 centre stops, 4 objective centring collars, lamp attachment 6 volts 15 watts and auxiliary collector lens for use with separate light-sources, complete with transformer REROW für 110 or 220 volts A. C. (vertical illuminator 7. 54. -. 35 + REROW) | PEDAB |
| c) ULTROPAK illuminator on bracket with built-in annular mirror for directing the illumination on to the specimen through ring condensers arranged around the ULTROPAK objectives, filter set (daylight, heat, green and yellow filters), ground glass disc and adjustable sector diaphragms, bayonet objective changer, 6 volt 15 watt lamp attachment and auxiliary collector lens for use with separate light-sources, complete with transformer REROW for 110 or 220 volts A. C. | |
| 1. for ordinary light (ULTROPAK 7. 21. -. 35 + REROW) | PEURY |
| 2. for polarized light (ULTROPAK 7. 22. -. 35 + REROW) | PEULT |

9. Inclined binocular observation body S 20 with bayonet fitting and optical components free from polarization or alternatively: PEBIB
Inclined binocular observation body with vertical photo tube combined, model Fs 21, with bayonet fitting, optical components free from polarization, accessory holding ring with index, swing out non-adjustable diaphragm PEFOD
10. Simple vertical tube 013 with accessory holding ring with index, diaphragm and Bertrand auxiliary lens (for use in place of the inclined P 10 and S 29 tubes for crystal-optical measurements and photomicrography, especially with the application of a top analyser) PEFED
11. Supplementary arrangement for the synchronous rotation of the polarizer and analyser (suitable for both filter and prism equipments) PAZUR
12. Sodium vapour lamp, fitting the microscope foot in place of the standard lamp unit 6 volts 2,5 amps, consisting of
Housing with collector and centring mount, Philips sodium vapour lamp (NAPOB) and starting equipment for 220 volt mains (NARAY), identification No. -, -, -, 31 NATAB
Sodium vapour lamp, as described above, but with starting equipment NAPUC for 110 volt mains, No. -, -, -, 32 NATEC

