

### DESCRIPTION

ACUCAL Polarising Microscope is a type of microscope that uses polarized light to study the optical properties of materials. It is widely used in geology and mining and is therefore often referred as Polarised Metallographic Microscope or geology microscope or Petrographic Microscope.



*The characteristic of polarizing microscope is to change ordinary light into polarized light for microscopic examination to identify whether a material is monorefringent or birefringent. Birefringence is an essential characteristic of crystals.*

*ACUCAL ACUPOL series microscopes are reliable partner in scientific research and industrial inspection. It can realize many kinds of observation and provide excellent optical imaging quality.*

### Applications

- *Polarizing Microscope for Inspection & Education.*
- *Excellent Optical Quality and.*
- *Powerful and Applicable to the Variety of Research*
- *Widely used in Crystallography , Geology , Analytical Chemistry, Medicine, Biology, Environmentalogy, Pharmacy, Toxicology, Asbestos analysis and so on.*

**TECHNICAL SPECIFICATION****Main Body**

- Upright main frame Research polarizing microscope for Transmitted observation. Compact, stable and suitable for clean bench. sturdy Ergonomic Design, Highly rigid, Non Hinged type, vibration free Aluminium alloy casting, Robust mechanics combined with improved optical performance.
- The volume and weight of the body is reduced as much as possible in principle of stability.

**Optical System**

- Plan Infinity corrected Optical System having Anti Fungus coated optics.
- Strain-free optical component.

**Observation Head: Binocular or Trinocular**

- Sidentopf Butterfly design Binocular Observation tube 30° inclined .
- Sidentopf Butterfly design Trinocular Head Inclined at 30°, Light Distribution is 50:50% for simultaneous view on Microscope & Computer, Light Distribution 20:80 (Optional).
- Inter-pupillary distance from 48mm to 75mm.

**Eyepiece**

- Compensating Wide field 10X (paired) F.O.V. 20mm. Bright Field Br, Focusable Foc., Field of view number F.N. 20mm, with Cross Hair Reticule 0.1mm.
- Anti-fungal & Anti-reflection hard coated conforming to IS: 8275/1976 ( latest)
- Diopter adjustment facility (+5).
- High Quality & Anti mould eyepieces to get the Image of object well defined over the entire field with good contrast rendition and practically free from spurious color effects.

**Nose Piece**

- Backward Quadruple Nosepiece, Ball Bearing loaded, interchangeable, Precise, Positive click stops for centred alignment.
- Nosepiece provided with grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment.

**Objectives : Strain Free Infinity Plan Achromatic Polarizing Objectives : Anti-fungus, Interchangeable & Par focal**

- ∞ 4X,      ∞ 10X ,      ∞ 20X(S)      ∞ 40X(S)
- ∞ 60X ,      ∞ 100X OIL (Optional)

**Condenser :**

- Strain Free Abbe Condenser Numerical Aperture 1.25 with iris diaphragm with polariser.

**Revolving Round Mechanical Stage:**

- Revolving Round Stage, Diameter 142mm, Center Adjustable, 360° Scale and Minimum Division 1°, Minimum reading 6' by Means of Vernier Scale.
- Attachable stage with Moving range (Optional)

### Intermediate Attachment :

**Analyser :** 0-90°, It can be moved out of the optical path for single polarizing observe.

**Bertrand Lens :** Puller type that can be moved out of the optical path & centre adjustable.

**Optical Compensator :** First-order red plate, Quarter-wave plate, Quartz wedge (I-IV Class)

### Focusing Control:

- Co axial Graduated Coarse and Fine focusing knob on gear systems for smooth operations.
- Tension Adjustable, Ergonomically designed for easy grip.
- Fine division 0.001mm, Coarse Stroke 37.7mm per rotation, Fine stroke 0.1mm per rotation

### Illumination:

- Koehler Transmitted Illumination, 12V/20W Halogen lamp or 5W LED, Brightness Adjustable.
- Blue filter

### Electronics

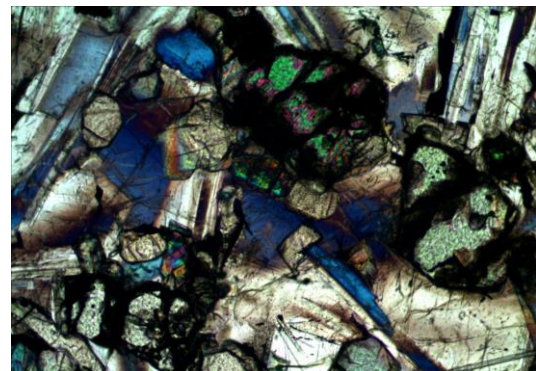
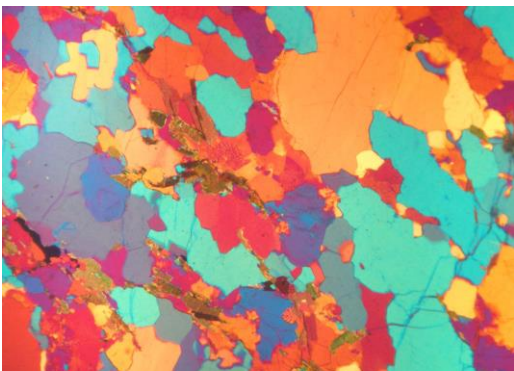
- Universal Input 100V-240 V AC, 50/60 Hz.

### Standard Accessories

- Operating Manual, Dust Cover, Guarantee Card and Styrofoam Molded pack.

### Optional Accessories

- Microscopy Camera, Software.



### CONTACT US:

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