



Optical Polariscopes

Model 243



Instructions

1. Loosen the red knob. Slide the Analyzer towards the top of the Support Rod. Tighten the knob.
2. Slide the Tint Plate up the Support Rod, giving enough clearance to place your sample between the Polarizer and the Tint Plate (which is at the top of the Base Assembly) and the Tint Plate.
3. Plug the cord into a standard 115-125VAC outlet and turn on the unit's light source with the switch on the Base Assembly.
4. Place the sample to be viewed on top of the Polarizer Ring.
5. Using the Tint Plate will show the strains in color. If desired, swing the Tint Plate out of the way for a black & white image.
6. Rotating the Polarizer Ring will adjust the contrast/brightness. The ring can be rotated a full 360 degrees.
7. The color balance/hue can be adjusted by rotating the Tint Plate .



SPECIFICATIONS

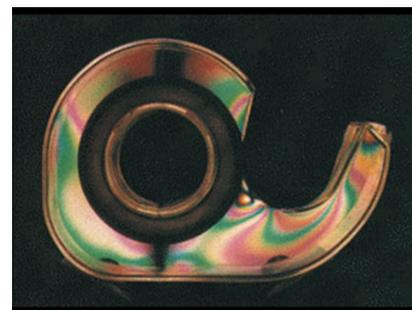
Field Diameter	5.75 in. (14.6 cm)
Unit Height	18 in. (46 cm)
Power	115-125V AC or DC
Cord Length	7 Feet
Weight	8 lbs. (3.6 kg)
Shipping Weight	11 lbs. (5.0 kg)

Polariscopes are essential tools for determining strain patterns developed during fabrication, manufacturing, or use. It can be used to check production items or in Quality Control to check incoming materials and parts.

Polariscopes are used to inspect glass welds and bends for strains or flaws. The degree of annealing in fabricated glassware can be shown using the Model 243.

As polarized light travels through strained glass or plastic, it undergoes a retardation proportional to the amount of stress. A polariscopes is an instrument which can be used to qualitatively view this retardation.

The instrument has a generous 5.75" diameter polarizer. The unit plugs into standard 115-125 volt wall sockets. A voltage convertor for 220 volt is available.



This photo shows the strains in a clear plastic tape dispenser. The polariscopes shows true strain patterns in transparent materials.