

DESCRIPTION

Stereozoom microscopes are optical microscopes that give a three-dimensional (3-D) view of a sample and generally operate at low magnification. The 3-D image allows solid surfaces to be examined with greater clarity and permits the precise manipulation of samples during magnification.



Stereozoom microscopes are used in food science, marine biology, embryology, environmental science, and forensic science. In pharmaceutical and biotechnology labs, stereozoom microscopes are commonly used for magnifying biological samples such as plant tissues and organ samples. Wider industry applications include microsurgery, geology, and microelectronics, including the examination of circuit boards and microchips. Working & inspection of Printed Circuit Boards with uneven electronics & soldering surface. Stereo Microscope is capable of testing in microscopic/macroscopic examination of Al. Alloy, Steel, Cast Iron, Cu-Based alloy and polymer/composite materials.

TECHNICAL SPECIFICATION

Optical System

- Greenough Plan Optics Zoom based Stereoscopic Microscope with Plan Apochromatic & Lead Free fusion optics providing plan field of view and large depth of field .
- Specialized optics that combines High Resolution and high Depth of Field for Ideal 3D Optical Images.

Trinocular Observation Head

- Observation head inclined at 35°, rotatable at 360°.
- Vertical phototube for micro photography with 50:50% beam splitter for simultaneous documentation as well as unhindered observation through the eyepieces.
- Inter-pupillary distance adjustment from 50mm to 70mm.

Eyepiece

- Focusable Extra Wide field 10X (paired) F.N. 23mm with Diopter adjustment facility in both eyepieces.
- Built in reticule holder .
- Additional 15X/FN16, 20X/FN12 & 30X/FN8 eyepiece pairs.

Objective

- Inbuilt 1X Objective
- Additional 0.63X, 1.5X & 2X Apo Objective

Zooming Range & Ratio

- Coded Manually Operable Click stop Zoom 0.6 X to 5.5X with Optical Zoom ratio of 9:1.
- Clickstops at 10x, 20x, 30x, 40x and 50x for easy operation.

Optical Magnification Range

- 6X-55X with 10X eyepiece pair and no front optics.
- 3.9X to 250X with Interchangeable Optics (Eyepieces, Front Optics).

Working Distance : 110 mm without any front optics

Resolution : 450lp/mm

Depth of Field : 12mm

Numerical Aperture : 0.167

Field of View (Object field Diameter): Maximum 38mm @ 10X eyepiece and 1x lens combination.

Mechanical Body

- Dual Arms Heavy Base Boom Stand for better stability.
- Freely moveable Arm and can be adjusted to any location i.e 90° left and right, and Up and Down.
Vertical Column length : 450mm or better
Horizontal arm length: 450mm or better
- Large Focusing knobs on both sides with tension adjustable.

Illumination System (Diascopic & Episcopic)

- Incident/Reflected light systems with white LED lamps.
- Removable Polariser attachment for LED lights.
- Illumination technique: reflected light : brightfield, polarization, oblique light.

Operating Conditions

- Power supply- 230AC \pm 10%. Single Phase, Frequency – 50Hz \pm 3%
- Ambient temperature 15°C to 50°C and 40 to 100% RH

Standard Accessories

- OEM glass scale stage micrometer with NABL calibration certificate, Operating Manual, Antistatic Polymer Dust Cover, Guarantee Card and Styrofoam Molded pack.

FEATURES

- High quality optical components, providing sharp and striking contrast image and ensure flat image at big depth of field.
- Ease the tiredness with ergonomic design.
- With LED light for both incident and transmitted illumination, Providing even illumination and life expectancy can reach 50,000 hours.
- With complete eyepieces, objectives and accessories it is an ideal instrument for industry assembling, inspection and teaching field.