



- **Binocular Head:**

The microscope is equipped with a binocular head, typically a Siedentopf type, which allows for comfortable, simultaneous viewing with both eyes. This reduces eye strain and fatigue, especially during extended use.

- **Magnification:**

It offers multiple magnification levels, usually achieved through a combination of objective lenses (e.g., 4x, 10x, 40x, 100x) and eyepieces (e.g., 10x, 25x). The total magnification is the product of the eyepiece and objective lens magnification.

- **Objectives:**

The microscope typically has a revolving nosepiece (often quadruple or quintuple) that holds the objective lenses. These lenses are usually achromatic, meaning they are corrected for chromatic aberration (color fringing) to produce sharper images.

- **Stage:**

It includes a mechanical stage, which allows for precise movement of the slide in both the X and Y directions. This is crucial for locating and examining specific areas of the specimen.

- **Condenser:**

A brightfield Abbe condenser with an iris diaphragm is used to focus and control the light that illuminates the specimen, optimizing image contrast.

- **Illumination:**

LED or halogen illumination is commonly used, with intensity control for adjusting the brightness of the light source