

MICROSCOPY

Microscopy, analysis of features or microstructures, and other analytical testing is usually performed on specimens once they have been sectioned, mounted, and prepared with suitable grinding and polishing steps to reveal the features of interest. In general, the type of information that is of interest will dictate the type of microscope that will be most suitable for the application.

Microscopes offered by Buehler generally fall into the categories of stereo microscopes, upright microscopes, or inverted microscopes. Inverted microscopes are commonly referred to as metallurgical microscopes. Microscopes may offer episcopic (reflected light) observation, diascopic (transmitted light) observation, or both possibilities. Illumination may be delivered in bright field mode (BF) or dark field mode (DF), and several techniques such as differential interference contrast (DIC) and polarized light microscopy make use of the nature of light to reveal specific pieces of information when studying materials.

STEREO MICROSCOPES

Nikon SMZ745 Zoom Stereomicroscope ▶

- Ideal for inspection use with a wide range of stands and illumination possibilities
- 7.5:1 zoom ratio
- 0.67x - 5x magnification
- 45° eyepiece orientation
- Erect/unreversed image 360° rotatable with dual lateral zooming knobs with on/off clickstops

Available in the following standard configurations:

0708-50000 Nikon SMZ745 on plain stand, 10x eyepieces (*does not include an illuminator*)

0708-50001 Nikon SMZ745T on plain stand, 10x eyepieces, includes a camera port (*does not include an illuminator*)

Accessories for Nikon SMZ745

See FibrFlex Illuminator on next page



◀ Nikon SMZ800 Zoom Stereomicroscope

- Ideal for inspection use with a wide range of stands and illumination possibilities
- 6.3:1 zoom ratio
- 5x - 378x magnification
- Coaxial illumination available for metallographic specimens
- Variety of stands, digital imaging and other accessories are available

Available in the following standard configuration:

0708-50010 Nikon SMZ800 on plain stand, 10x eyepieces, 1x objective (*does not include an illuminator*)

Accessories for Nikon SMZ800

0708-3440 P-IBSS2 single port beam splitter (*accepts 0710-2125 or 0706-0150*)

0710-2125 C-mount adapter 0.55x, direct mount

0706-0150 LV-TV ISO adapter tube

0706-0176 C-mount ISO adapter 1x (*requires 0706-0150*)

0709-7073 C-mount ISO adapter 0.7x (*requires 0706-0150*)

Also see FibrFlex Illuminator on next page.





◀ Nikon Eclipse MA200 Inverted Microscope

- Innovative design optimized for ergonomic efficiency
- High numerical aperture CFI 60 optics for optimal performance across all observation modes
- May be configured for various modes of operation: BF, DF, DIC, etc.

Available in the following standard configurations:

0710-50010 Nikon MA200 in BF configuration. Includes lamp house with 50W bulb, trinocular head, 10x eyepieces, manual XY stage with insert (50 x 50mm travel), ISO camera ports on body and trinocular head, 6-position nosepiece with 5x, 10x, 20x, 50x CFI LU Epi Plan Fluor objectives.

0710-50020 Nikon MA200 in BF / DF configuration. Includes lamp house with 50W bulb, trinocular head, 10x eyepieces, manual XY stage with insert (50 x 50mm travel), ISO camera ports on body and trinocular head, 5-position nosepiece with 5x, 10x, 20x, 50x CFI LU BD Epi Plan Fluor objectives.

0710-50030 Nikon MA200 in BF / DF / DIC configuration. Includes lamp house with 50W bulb, trinocular head, 10x eyepieces, manual XY stage with insert (50 x 50mm travel), polarizer and analyzer set, L-DIHC high contrast Normarski prism, ISO camera ports on body and trinocular head, 5-position nosepiece with 5x, 10x, 20x, 50x CFI LU BD Epi Plan Fluor objectives.

Accessories for Nikon Eclipse MA200

0710-2160 MA2-MC Intelligent Magnification Module for all ports 1x, 1.5x, 2.0x

0715-1700 100X CFI LU Epi Plan Fluor objective

0709-1509 100x CFI LU BD Epi Plan Fluor objective

0710-2135 MA2-PA EPI Polarizer & Analyzer Set (included in 0710-50030)

0710-2125 C-mount adapter 0.55x, direct mount

0706-0150 LV-TV ISO adapter tube

0706-0176 C-mount ISO adapter 1x (requires 0706-0150)

0709-7073 C-mount ISO adapter 0.7x (requires 0706-0150)

UPRIGHT INDUSTRIAL MICROSCOPES

Nikon Eclipse LV100D Upright Microscope ▶

- Suitable for both reflected and transmitted light applications
- CFI infinity corrected optical design with 60mm parfocal length
- CFI LU Plan Fluor objectives feature high Numerical Aperture (NA), long working distances and an extended transmission wavelength range
- Variety of stages, illuminators, nosepieces and camera adapters are available

Available in the following standard configurations:

0789-50010 Nikon LV100D-U. Upright microscope in BF / DF configuration with episcopic (reflected) and diascopic (transmitted) illumination capabilities. Includes illuminator, lamphouses, and 50W bulbs for episcopic and diascopic illumination, trinocular head with 10x eyepieces, manual XY stage, NCB11 and ND4 filters, 4-40x condenser, 5-position nosepiece with 5x, 10x, 20x, 50x CFI LU BD Epi Plan Fluor objectives.

Accessories for Nikon Eclipse LV100D

0709-1509 100x CFI LU BD Epi Plan Fluor objective

0710-2125 C-mount adapter 0.55x, direct mount

0706-0150 LV-TV ISO adapter tube

0706-0176 C-mount ISO adapter 1x (requires 0706-0150)

0709-7073 C-mount ISO adapter 0.7x (requires 0706-0150)

