

## CX43M metallographic microscope



CX43M provides customers with cost-effective metallographic analysis and industrial inspection solutions with its excellent imaging system and comfortable operating experience.

The structure adopts the observation tube with the best comfortable angle of the neonatal bed, which can relieve the tension and fatigue of users in long-term working state and ensure the best observation state. The scale on the observation tube is convenient for users to adjust the best pupil distance range.

High-precision internal positioning 5-hole bright field encoder converter with brightness memory function.

The coded nosepiece integrates the microscope hardware settings with the OMET image analysis software. The screen displays the objective magnification and automatically adjusts the calibration value recorded in the software when switching magnification, eliminating measurement errors caused by forgetting to switch software magnification.

The brightness memory function can memorize the lighting brightness when using each objective lens. When different objective lenses are switched to each other, the light intensity is automatically adjusted to reduce visual fatigue and improve work efficiency.

Newly designed integrated T-type frame, all-metal high-pressure mold casting, with excellent stability. The image surface will not shake during high magnification observation, which ensures the detection accuracy of high magnification measurement.

The epi-illuminator adopts the Koehler illumination system, with field diaphragm and aperture diaphragm, and preset polarizer, analyzer and filter slots. A single 10W LED warm white light illumination can minimize the visual fatigue of the observer.

The field of view diaphragm and aperture diaphragm adopts a tie rod device with adjustable center, which can flexibly adjust the size of the illumination range and effectively avoid the influence of stray light on the image.

Polarizing mirror and polarizing mirror can realize simple polarized observation.

The transreflective rack can hold samples up to 40mm, and the rack can be adjusted for greater sample height by rotating the "mouth" screw in the same position as in the picture to the right.

The random limit device can effectively prevent the sample from colliding with the objective lens and avoid damage.

Excellent focusing system, larger numerical aperture, higher brightness, greatly improving the transmission rate of transmitted light.

There are many options for imaging systems, including 4K high-definition imaging system, USB3.0 computer version imaging system, ultra-depth of field fusion function imaging system, high-precision measurement imaging system, metallographic analysis imaging system, etc.

It can provide a variety of observation functions such as bright field, simple polarization, etc., with high brightness, high resolution, and positive color reproduction for both bright and dark images.

### Specification Sheet:

Optical system	Infinite Apochromatic Correction Optical System
Observation tube	30° tilt, infinity hinged three-way observation tube, pupil distance adjustment: 50mm~75mm, single-sided diopter adjustment: -2/+8 diopter, two-speed split ratio R:T=100:0 or 50:50
Eyepiece	High eye point, wide field of view, flat field eyepiece SWH10X23mm (diopter adjustable)
Objective	Plan semi-compound metallographic bright field 5X objective NA0.15, WD15
	Plan Semi-Compound Metallographic Brightfield 10X Objective NA0.30,WD8.4
	Plan Semi-Compound Metallographic Brightfield 20X Objective NA0.45,WD3.0
	Plan semi-complex metallographic bright field 50X objective NA0.75,WD3.0
	Plan semi-compound metallographic bright field 100X objective lens NA0.90, WD1.0 (optional)
Encoded lens converter	High-precision internal positioning 5-hole bright field encoder converter, brightness memory function. The coded objective lens changer integrates the microscope hardware settings with the OMET image analysis software. The screen displays the objective magnification and automatically adjusts the calibration value recorded in the software when switching magnification, eliminating measurement errors caused by forgetting to switch software magnification. The brightness memory function can memorize the lighting brightness when using each objective lens. When different objective lenses are switched to each other, the light intensity is automatically adjusted to reduce visual fatigue and improve work efficiency.

Coarse and fine focusing mechanism	Transflective and reflective dual-purpose rack, low-hand position coaxial focusing mechanism, coarse adjustment stroke 30mm, fine adjustment accuracy 0.001mm. With a tension adjustment device to prevent slipping and a random upper limit device. With a platform position up and down adjustment mechanism, the maximum sample height is 40mm.
Stage	Double-layer mechanical moving platform, low hand position X, Y direction coaxial adjustment; platform area 240X175mm, work surface: 135X125mm, glass table: 101X101mm, moving range: 75mmX50mm, can be equipped with reflective metal stage plate, transflective and dual-purpose glass stage plate
Upper lighting system	Adaptive Wide Voltage 100V-240V_AC50/60Hz, Reflector Chamber, Single High Power 10W LED, Warm, Cora Illumination with Field of View Diaphragm & Aperture Diaphragm, Center Adjustable,...
Down lighting system	Adaptive wide voltage 100V-240V_AC50/60Hz, transmissive light chamber, single high power 10WLED, warm color
Spotting scope	Swing-out achromatic condenser for transmission (N.A0.9) with variable aperture diaphragm, center adjustable
Other accessories	Photographic accessories: 1X, 0.65X, 0.5X C-mount, adjustable focus;
	4K high-definition imaging system, USB3.0 computer version imaging system
	High-precision micrometer with a grid value of 0.01mm