















WITH excellent imaging performance and comfortable operating experience, M50 provides high cost-effective solution for metallographic analysis and industrial inspection.



1. With the most suitable viewing degree, 30° inclined head holds everyone in the best working state, less tension and fatigue. You can adjust the interpupillary distance to optimum according to the scale on viewing head.

2. Reflected illuminator with field/aperture diaphragm and oblique light device, as well as slots for polarizing kit and filters, adopts Koehler illumination system.

2.1. Comparing with other LED, single 5W LED with warm white light (3000-3300K) reduces the fatigue on observer's vision at the extreme.

2.2. With pull-rod devices for adjusting the center of field and aperture diaphragm, stray light can be eliminated by expanding or shrinking the illumination zone.

2.3. Simple polarizing observation is available with pluggable polarizer kit. More ideal images are here with different filters.

3. The highest sample can be tested is 28mm with transmitted & reflected frame while 78mm high sample is available with reflected frame, as the stage can be dropped 50mm by loosening the screw in the stage holder.

4. M4 wrench for socket head screws places in the frame, making the best of the available space and improving your working efficiency.

5. Up-limit device is helpful to avoid the damage caused by impact between sample and objective lens.

6. Using the outstanding condenser system, much more transmitted light can be through with bigger numerical aperture and stronger intensity.



Item	Magnification	N.A.	W.D. (mm)	Cover Glass (mm)	Parfocal Distance (mm)	Conjugate Distance (mm)
LMPLan	5x	0.15	10.80	0	45	ω
	10x	0.30	10.00			
	20x	0.45	4.00			
	50x	0.55	7.90			
	100x	0.80	2.10			





Koehler Illumination System

Transmitted lamp-house with single 5W LED. The warm color presents bright and uniform field under every magnification. Working with N.A.0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm.



Moveable Working Stage

175mm x 145mm double layer mechanical stage with operating handle in the right hand. Damped specimen retainer design, two slices can be put together for testing and analyzing comparatively. Moving range 76mm x 42mm gives user ultimate handling of sample.



High Rigidity Body Structure

Fire-new designed integrative Y-shaped body, all-metal diecasted under high pressure. High stability, no image dithering under high magnification observation, ensures the test precision of multi-channel fluorescence diagnosis. The hole on the back of the body make it safe and easy when carry the whole microscope.

Metallurgical Image

Bright field, oblique light and simple polarizing are all available with M50. Brightfield image with high brightness and high resolution shows original colour of samples. And oblique light is used to show 3D relief image.







Bright field

Oblique Light

Polarized





M50 Configuration Chart

Model	M50				
Optical System	Infinity color corrected optical system				
	High eye-point wide field plan eyepiece PL10 x 22mm				
Eyepiece	High eye-point wide field plan eyepiece PL10 x 22mm, with reticle				
	High eye-point wide field plan focusing eyepiece PL10 × 22mm				
Objective	LWD plan achromatic metallurgical objective 5X / 10X / 20X / 50X / 100X				
Viewing Hood	30° inclined gemel binocular head, interpupillary distance: 54mm ~ 75mm, left diopter ± 5 adjustable				
Viewing Head	30° inclined gemel trinocular head, interpupillary distance: 54mm ~ 75mm, diopter ±5 adjustable, splitting ratio R:T = 100:0 or 50:50				
Nosepiece	Reversed quintiple nosepiece				
Stage	Double layer mechanical stage with X/Y coaxial adjustment, size: 175mm × 145mm, moving range: 76mm × 42mm				
	Metal plate for transmitted frame; glass plate for transmitted & reflected frame				
Condenser	N.A. 0.9 swing-out achromatic condenser for transmitted frame, with center adjustable aperture iris diaphragm				
Focus	Transmitted & Reflected frame, coaxial focus system with tension adjustment and up-limited device, coarse range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 28mm high sample is available				
rocus	Reflected frame, coaxial focus system with tension adjustment and up-limited device, coarse range: 28mm, fine precision: 0.002mm. Stage can be adjusted up and down, 78mm high sample is available.				
Reflected Illumination	Wide-range voltage 100V - 240V, AC50/60Hz, reflected lamp-house with single 5W LED, warm color. Koehler illuminator with oblique light device, center adjustable field and aperture diaphragm				
Transmitted Illumination	Wide-range voltage 100V - 240V, AC50/60Hz, transmitted lamp-house with single 5W LED, warm color.				

M50 Dimension Chart



