

VERTEX

INVERTED METALLURGICAL MICROSCOPE



Inverted Metallurgical Microscope has been engineered to meet the various requirements of modern metallurgical laboratories. A special feature of the inverted design is a flat unobstructed stage surface which places no limitation on the size and height of the specimen. Quality assurance throughout manufacturing process ensures that the compliance with demanding performance is matched.

CHARACTERISTICS:

- Optical system: Adopt special metallurgical objective and PL10X plan eyepiece, High image quality, high resolution and comfortably viewing.
- Focus system: Low position coaxial focus system, coarse: 38mm per rotation, fine precision 0.002mm, Mechanical stage, Size: 180mmX155mm, Moving range: 75mmX40mm.
- Illuminator system: Transmission Koehler illuminator with alterable aperture diaphragm and centerable field diaphragm, wide-range voltage 90-240V, 6V/3W high brightness and long-life LED bulb.
- Video & photo accessories: Adopt the corresponding photographic accessories, to acquire and save the image, Analysis with computer and professional metallographic image analysis software.

SPECIFICATION:

Optical System	Color corrected finite optical system				
Viewing Head	Gemel trinocular head, 45° inclined, with adjustment diopter, inter-pupillary range: 54 mm to 75 mm				
	Light split rate: 80% / 20%				
Eyepiece	High eye point plan eyepiece PL 10X / 18 mm				
Nosepiece	Quadruple nosepiece; Optional; quintuple nosepiece				
Objective	Long working distance plan achromatic metallurgical objective 5X, 10X, 20X, 50X, 100X				
Stage	Mechanical stage, Size: 180mm X 155mm, Low position control by right hand				
	Moving Range: 75mm X 40 mm, precision: 0.1mm				
Focus	Low position coaxial focus system, coarse: 38mm per rotation, fine precision 0.002mm				
Illuminator	Transmission Koehler illumination with alterable aperture diaphragm and center able field diaphragm				
	wide - range voltage 90-240V, 6V/30W halogen bulb, with continuous intensity				
Polarizer device	360° rotary analyzer, the polarizer and analyzer both can shift out the optical way				
Video & Photo accessories	C-mount adapter (1/2, 1/3) and Relay mirror				

OBJECTIVE PARAMETER TABLE:

Item	Magnification	N.A.	Working Distance(mm)	Coverslip Thickness(mm)	Conjugate Distance(mm)
Long working distance plan achromatic metallurgical objective	5X	0.13	15.5	0	195
	10X	0.25	8.7	0	195
	20X	0.40	8.8	0	195
	50X	0.60	5.1	0	195
	100X	0.80	2.0	0	195

EYEPIECE PARAMETER TABLE

EYEPIECE	PL 10X/18	PL10X/18R	WF15X/13	WF15X/13R	WF20X/10	WF20X/10R
Field of view	18mm	18mm	13mm	13mm	10mm	10mm

INVERTED METALLURGICAL MICROSCOPE CONFIGURATION CHART -VMM1000-M





