



China Top Electronic Microscope Brand

MT 系列 正置金相显微镜

TVN-MT60 series upright metallographic microscope



合作 · 共赢

The best solution of PCBA/Screen
checking and Measuring tools in Vietnam.

产品介绍 Product introduction

Meeting customer needs is the top priority of TROY VN.

The microscope solutions provided by TROY VN make industrial inspection easier, more convenient and more efficient. At the same time, when the microscope is successfully integrated into the production line, ergonomic issues such as operating comfort and wafer safety are particularly important, and we focus on solving such problems. Shengshi Technology has always provided new ideas, solutions and technical support for multiple industries including semiconductor wafers, flat panel displays and electronic devices.

Performance

- All optical components are specially treated and coated with special films
- Flexible and compact structure, suitable for microscopic observation in various environments
- Professional metallographic objective lens, high-power objective lens adopts semi-apochromatization technology
- Clear, sharp and high-contrast microscopic images can be obtained under various observation methods
- All series models are equipped with transreflective LED adjustable light source as standard

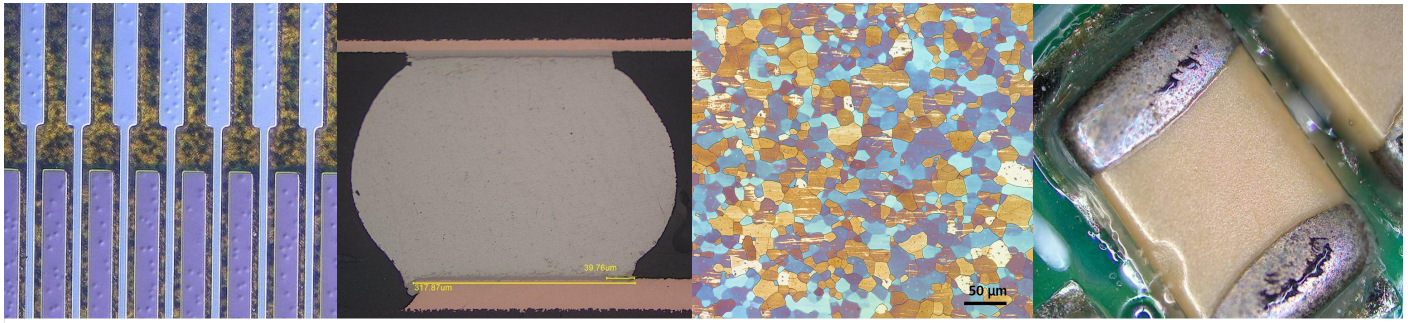
Univision's technology for metallographic inspection systems

It is stable and more flexible to operate. It integrates multiple observation functions such as bright field, dark field, polarization, DIC differential interference, etc., which can be selected according to actual application.



Bright and dark field reflection illuminator





DIC observation

Bright field observation

Piangan Observation

Dark field observation

High eye point, wide field of view, diopter-adjustable flat-field eyepiece

SWH10X-H/23mm high eyepoint, wide field of view, flat field eyepiece, adjustable diopter. SWH10X-H/25 mm ultra-wide 25mm field of view, high eyepoint eyepiece, compared with the conventional 22mm field of view, the field of view is flatter and wider, and the edge of the field of view can be guaranteed to be clear and bright, giving users a more comfortable visual experience. Provide a more flat observation range and improve work efficiency. The larger range of diopter adjustment can meet the needs of more users. Other magnifications and fields of view can also be selected, and pointers, micrometers and diopter adjustable functions can be added according to different needs.



High-quality professional metallographic objective lens



Name	Magnification	Numerical aperture	Working distance
Fluorite brightfield and darkfield objectives	5X	0.15	20mm
	10X	0.30	11mm
	20X	0.45	3.0mm
	50X	0.80	1.0mm
	100X	0.90	1.0mm

Name	Magnification	Numerical aperture	Working distance
Semi-compound bright-field and dark-field objective	5X	0.15	14.9mm
	10X	0.30	9.0mm
	20X	0.45	8.5mm
	50X	0.75	3.0mm
	100X	0.80	3.0mm



Polarized components and DIC polarized components and DIC micro-interference system accessories

The polarization system includes a polarizer plate and an analyzer plate, which can be used for polarization detection. In semiconductor and PCB detection, stray light can be eliminated and details can be clearer. The 360-degree rotating analyzer can conveniently observe the state of the specimen under light of different polarization angles without moving the specimen. On the basis of orthogonal polarization, DIC differential interference contrast observation can be performed by inserting a DIC prism. DIC technology can produce obvious relief effects on the tiny height differences on the surface of an object, greatly improving the image contrast. The use of high-performance differential interference components can convert the subtle height differences that cannot be detected under bright field observation into high-contrast light and dark differences and express them in the form of three-dimensional relief. It is widely used in LCD conductive particles, precision disk surface scratch detection and other fields.



Infinity hinged trinocular head



Forward image trinocular observation head



Inverted image trinocular observation head

High-precision mechanical stage



Technical Specifications:

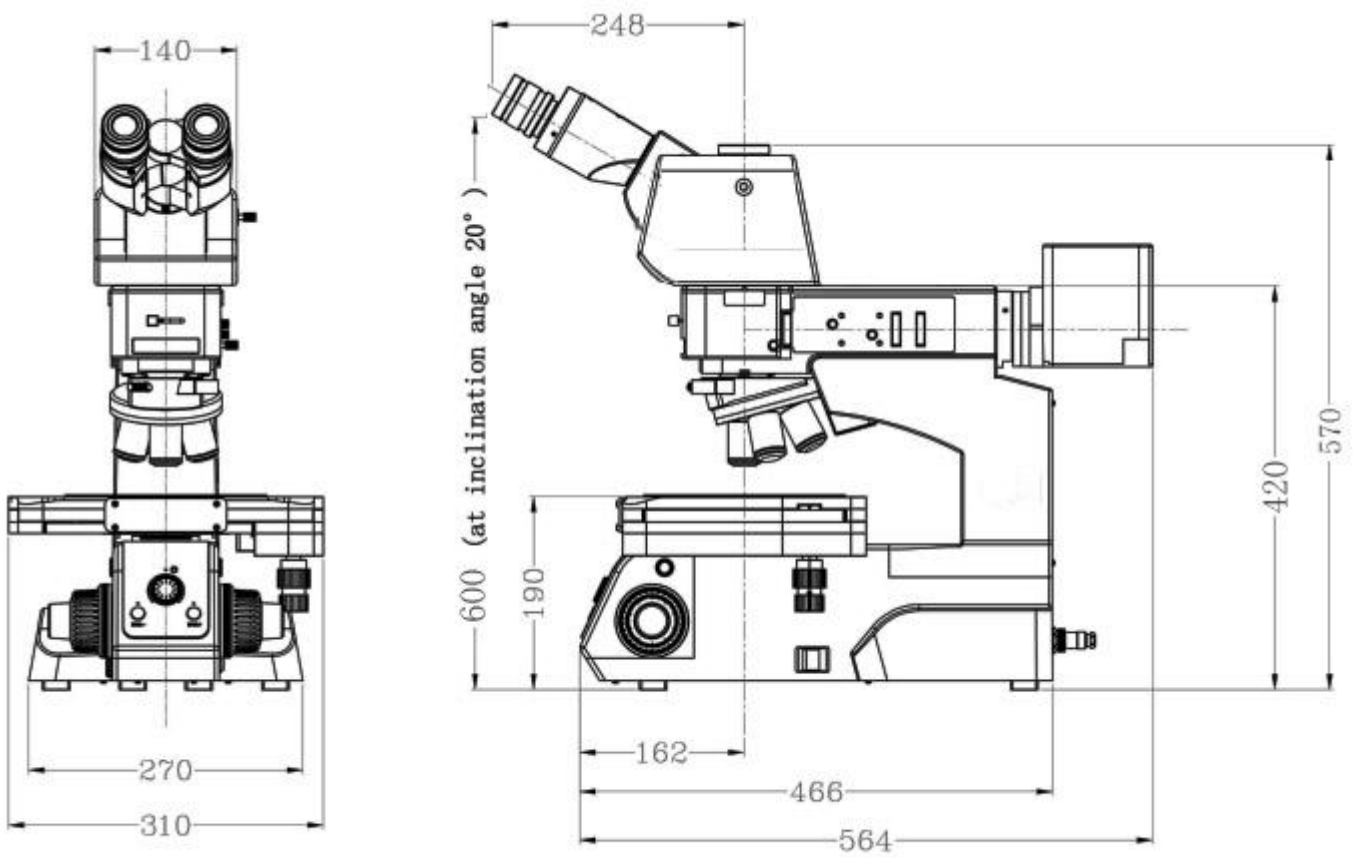
Model	Configuration	MT60-BD-1	MT60-BD-2	MT60-BD-A
Optical system	Infinity chromatic aberration corrected optical system	●	●	●
Optical magnification	50X-500X (optional 500/1000X)	●	●	●
Digital magnification	150x-1500x (21.5-inch display)	●	●	●
Industrial Cameras	12MP 1/1.8 inch color Sony industrial chip (optional 6.3MP and 20MP)	○	○	○
Observation tube	Erect image, infinity hinged three-way observation tube, pupil distance adjustment: 50mm-76mm, two-speed splitting ratio binocular: trinocular = 100:0	○	●	●
	Reverse image, infinite hinged three-way observation tube, pupil distance adjustment: 50mm-76mm, two-speed splitting ratio binocular: trinocular = 100:0	●	○	○
Eye Lens	High eye point, wide field of view eyepiece SWH10X-H/23mm, diopter adjustable	●	○	○
	High eye point, wide field of view eyepiece SWH10X-H/25mm, diopter adjustable	○	●	●
Object Lens	Infinity semi-asymmetric long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 5X NA0.15 WD14.8mm	●	●	●
	Infinity semi-asymmetric long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 10X NA0.30 WD8.5mm	●	●	●
	Infinity semi-complex long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 20X NA0.45 WD11.9mm	●	●	●
	Infinity semi-asymmetric long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 50X NA0.75 WD3.0mm	●	●	●
	Infinity semi-apochromatic long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 100X NA0.80 WD3.0mm	○	○	○
	Infinity semi-asymmetric long-distance bright and dark field objective lens 45MM visible light metallographic objective lens 100X NA0.90 WD1.0mm	○	○	○
Object lens converter	5-hole bright-field and dark-field objective lens revolving lens (with DIC slot).	●	●	
	5-hole bright and dark field motorized objective lens revolver (motorized/with DIC slot).	○	○	●
Rack mounted light source	Reflection rack, low hand position coarse and fine coaxial focusing mechanism. Coarse adjustment stroke 35mm, fine adjustment accuracy 0.001mm. With anti-slip adjustment tension device and random upper limit device. Built-in 100-240V wide voltage system, digital dimming, with light intensity setting and reset function	●	●	●
Stage	4-inch stage, platform area 310*240mm, moving stroke: 100mmX100mm mechanical stage, coaxial adjustment in X and Y directions;	●	●	●
Condenser	Swing-out achromatic condenser (N.A. 0.9)	●	●	●
Reflector Illuminator	Bright and dark field reflected illuminator with variable aperture diaphragm, field diaphragm, center adjustable, filter slot, polarizer/analyzer slot,	●	●	●
Light Room	10W adjustable LED lamp house, universal for transmission and reflection, predetermined center	●	●	●
Camera interface	Photographic accessories: 0.65X, C-mount, adjustable focus (optional 0.5X/1X)	●	●	●
Polarize components	Polarizer plate, 360° rotatable analyzer plate	●	●	●
PC	Brand computers and monitors	○	○	○
Measurement software	Measurement software OMT-1.5D, software-controlled electric objective turntable, photo taking, video recording, measurement, real-time image stitching, depth of field fusion	○	○	●
Ruler	High precision micrometer, scale value 0.01mm	○	○	●



Technical Specifications:

Model	Configuration	MT60-HD-1	MT60-HD-2	MT60-HD-A
Optical system	Infinity chromatic aberration corrected optical system	●	●	●
Optical magnification	50x-500x (optional 500/1000x)	●	●	●
Digital magnification	150x-1500x (21.5-inch display)	●	●	●
Industrial Cameras	12MP 1/1.8 inch color Sony industrial chip (optional 6.3MP and 20MP)	○	○	○
Observation tube	Erect image, infinity hinged three-way observation tube, pupil distance adjustment: 50mm~76mm, two-speed splitting ratio binocular: trinocular = 100:0	●	●	●
	Reverse image, infinite hinged three-way observation tube, pupil distance adjustment: 50mm~76mm, two-speed splitting ratio binocular: trinocular = 100:0	●	○	○
Eye Lens	High eye point, wide field of view eyepiece SWH10X-H/23mm, diopter adjustable	●	○	○
	High eye point, wide field of view eyepiece SWH10X-H/25mm, diopter adjustable	●	●	●
Object Lens	Infinity fluorite semi-compound bright and dark field objective lens 45MM visible light metallographic objective lens 5X NA0.15 WD20.0mm	●	●	●
	Infinity fluorite semi-compound bright and dark field objective lens 45MM visible light metallographic objective lens 10X NA0.30 WD11.0mm	●	●	●
	Infinity fluorite semi-compound bright and dark field objective lens 45MM visible light metallographic objective lens 20X NA0.45 WD3.0mm	●	●	●
	Infinity fluorite semi-compound bright and dark field objective lens 45MM visible light metallographic objective lens 50X NA0.8 WD1.0mm	●	●	●
	Infinity fluorite semi-compound bright and dark field objective lens 45MM visible light metallographic objective lens 100X NA0.9 WD1.0mm	○	○	○
Object Lens Converter	5-hole bright-field and dark-field objective lens revolving lens (with DIC slot).	●	●	
	5-hole bright and dark field motorized objective lens revolver (motorized/with DIC slot).	○	○	●
Rack mounted light source	Reflection rack, low hand position coarse and fine coaxial focusing mechanism. Coarse adjustment stroke 35mm, fine adjustment accuracy 0.001mm. With anti-slip adjustment tension device and random upper limit device. Built-in 100-240V wide voltage system, digital dimming, with light intensity setting and reset function	●	●	●
Stage	4-inch stage, platform area 310*240mm, moving stroke: 100mmX100mm mechanical stage, coaxial adjustment in X and Y directions;	●	●	●
Condenser	Swing-out achromatic condenser (N. A. 0.9)	●	●	●
Reflector Illuminator	Bright and dark field reflected illuminator with variable aperture diaphragm, field diaphragm, center adjustable, filter slot, polarizer/analyzer slot,	●	●	●
Light Room	10W adjustable LED lamp house, universal for transmission and reflection, predetermined center	●	●	●
Camera interface	Photographic accessories: 0.65X, C-mount, adjustable focus (optional 0.5X/1X)	●	●	●
Polarized components	Polarizer plate, 360° rotatable analyzer plate	●	●	●
PC	Brand computers and monitors	○	○	○
Measurement software	Measurement software OMT-1.5D, software-controlled electric objective turntable, photo taking, video recording, measurement, real-time image stitching, depth of field fusion	○	○	●
Ruler	High precision micrometer, scale value 0.01mm	○	○	●

Microscope Dimensions:



Unit:mm

