

TMTECK

Metallurgical Microscope



Trinocular-type inverted metallographic microscope

4XC



Product Description

Applications & features:

The instrument can be used for identification and analysis of metal surface structures. It is an important tool for metal physics, examining metallurgical structures. It is a crucial piece of equipment for appraising the quality of iron and steel, boilers, machinery, automobiles, shipping, bearings, diesel engines, farm implements, and industry, etc.

The instrument can be equipped with a photo attachment and a CCD video camera to photograph metallurgical structures. Metal pictures can be taken, analyzed, measured, edited, output, saved, and managed.

Features

- Inverted Trinocular Metallurgical Microscope
- Integrated 6V/30W vert. Koehler Halogen illumination with variable intensity control
- Automatic voltage sensing power supply
- Quintuple nosepiece
- Infinity corrected Planachromat objectives
- 5x, 10x, 20x and 50x
- Front mounted camera port for optional adapters

- Well suited for many applications
- Examination of mounted metallurgical specimens
- Routine quality inspections
- Microstructure analysis
- Material testing
- QA and QC examinations
- Photomicrography

Technical Specification:

1. Achromatic Objective:

Magnification	10X	20X	40X	100X(Oil)
Numerical	0.25N.A	0.40N.A	0.65N.A	1.25N.A
Working distance	8.9mm	0.76mm	0.69mm	0.44 mm

2. Plan Eyepiece:

10X (Diameter field Ø 22mm)

12.5X (Diameter field Ø 15mm) (pick out part)

3. Dividing Eyepiece: 10X (Diameter field Ø20mm) (0.1mm/div.)

4. Moving stage: Working stage size: 200mm×152mm

Moving range: 15mm×15mm

5. Coarse and Fine focusing adjusting device:

Coaxial limited position, Fine focusing scale value: 0.002mm

6. Magnification:

Objective Eyepiece	10X	20X	40X	100X
10X	100X	200X	400X	1000X
12.5X	125X	250X	600X	1250X

7. Photo Magnification

Objective Eyepiece	10X	20X	40X	100X
4X	40X	80X	160X	400X
4X And additional 2.5X-10X	100X	200X	400X	1000X

Metallurgical Microscope 4XB



Applications & features:

1. Used to identify and analyze the organizational structure of all kinds of metals and alloy materials.
can be widely used in factories and laboratories to verify the quality of casting, to inspect the raw material and analyze the metallographic organization of material after treatment, and to do some research work for surface spraying etc.
2. It is a binocular-type inverted metallographic microscope
3. It can be equipped with photographic device to proceed photomicrography.
4. Due to the surface of specimen to be observed coinciding with the table surface, it has no limit to the height of specimen.
5. The equipment base has large supporting area and the arm bend is strong which makes the gravity of equipment lower, thus it can be placed stably and reliably.
6. There is a 45 ° tilt angle between the eyepiece and supporting surface, and this make it comfortable to observe.
7. It features convenient operation, compact structure and elegant appearance.

Technical Specification:

2.1. Eyepiece

Category	magnification	view diameter (mm)
Flat-field eyepiece	10X	18
	12.5X	15

2.2. Objective

Category	magnification	numerical	system	working

		aperture (NA)		distance (mm)
Achromatic objective lens	10X	0.25	Dry	7.31
Semi-flat-field achromatic objective lens	40X	0.65	Dry	0.66
Achromatic lens	100X	1.25	Oil	0.37

2.3. The total optical magnification: 100X-1250X

2.4. Mechanical tube length: 160 mm

2.5. Rough focusing fretting institutions: Focus Range: 7 mm
Lattice-valued scale: 0.002 mm

2.6. Rough dynamic focusing range: 7 mm

2.7. Machinery table: 75 * 50 mm

2.8. Lighting bulb: 6v 12w bromine tungsten lamp

2.9. Containing object (diameter): 10,20,42

2.10. Instrument Weight: 5 kg

2.11. Packing box size: 360 * 246 * 360 millimeters

Configuration:

- 3.1. The main microscope: one
- 3.2. Eyepiece 10X, 12.5X: 2 pcs. each
- 3.3. objective lens 10X, 40X (flat-field), 100 (oil): 1 pc. Each
- 3.4. binocular tube: one
- 3.5. 10 X eyepiece micrometer : one
- 3.6. micrometer-foot (0.01) : one
- 3.7. contents pressure spring: one
- 3.8. slide ϕ 10, ϕ 20, ϕ 42 : per one
- 3.9. filter (yellow, green, gray and frosted glass):per one
- 3.10. fir oil : one bottle
- 3.11. light bulb (bromine tungsten lamp) (standby): two
- 3.12. fuse: one

Polarizing Light Microscope Handheld Diagnost Equipment Portable Metallographic Microscope with Magnetic Base Polarizer



Specification

1. Eyepiece: 10X/18mm, mounting size: 23.2mm
2. Objective: 10X 40X
3. Working Distance: 0.5mm 7.3mm
4. Magnification: 100X-400X
5. Microscope Tube Length: 160mm
6. Focusing Distance: 36mm
7. Light Source: Adjustable LED Lights with 3.6V

Application

Portable metallographic microscopes can be widely used in identifying the structure of various metals and alloys when sample can not be made. It also can be used in identifying casting quality, testing raw materials and gold tissue research in factory and lab. It also can be used in observing an antique gemstone surface.

Packing Lists

- 1 x Microscope Body
- 1 x 10X Objective
- 1 x 40X Objective

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- 1 x WF10X/18mm Eyepiece(Mounting:23.2mm)
- 1 x Power Supply
- 1 x Magnetic Base
- 1 x Charger
- 1x polariser + analyser**
- 1x C-mount Adapter**

Features

TMX portable metallographic microscope (also known as hand-held metallographic microscope) is convenient for field materials can not be produced when the sample to identify the various metal and alloy structure of the site identification, can be widely used in factories Metallographic laboratory for metal materials, microstructure analysis and identification, and after the material treatment of the metallographic structure of the analysis. Can also be used for jade, ceramic, bronze surface structure observation and analysis.

Portable metallographic microscope with LED vertical lighting, do not use 220V AC power, easy to use, the real portable features, so that users want to observe how to observe, observe the freedom of large, lightweight and convenient. Portable metallographic microscope lighting can be used for a continuous forty hours or so, use a long time, power, LED lights the biggest feature temperature is very small, not much heat, the use of safety. High-quality portable metallographic microscope can be configured CCD, digital camera, can be easily collected, stored, input the scene of the image analysis.

Metallurgical Microscope TMM-8000 Series



Product Description

Laboratory metallurgical microscope, including bright field, dark field and polarization observation system.

Powerful transmitted and reflected system with Kohler illumination.

Ideal instrument for industry inspection and science research.

Product introduction

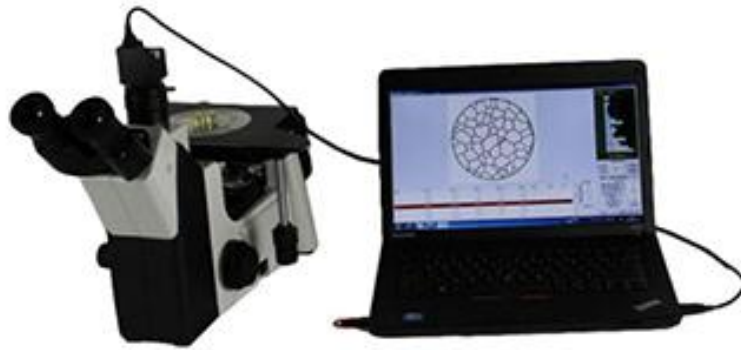
TMM-8000NRF Technical specifications		
Optical System	Infinite optical system	
Eyepiece	Extra wide field eyepiece EW10X/22	
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF)	WD 15.5mm
	10X/0.25/∞/-(BF/DF)	WD 10.0mm
	20X/0.4/∞/0(BF/DF)	WD 4.30mm

	50X/0.75/∞/0(BF)	WD 0.32mm
	100X/0.8/∞/0(BF)	WD 2mm
	2.5X/0.08/∞/-(BF)	WD 11.7mm
	2.5X/0.08/∞/-(BF)	WD 10.7mm
	5X/0.12/∞/-(BF/DF)	WD 12mm
	40X/0.6/∞/0(BF/DF)	WD 2.90mm
	50X/0.75/∞/0(BF/DF)	WD 0.32mm
	100X/0.8/∞/0(BF/DF)	WD 2mm
	50mm	
Viewing Head	Siedentopf trinocular viewing head, inclined at 30°, interpupillary 48mm-75mm	
Incident Light	24V/100W Halogen light, lightness adjustable	
	Kohler illumination and aspherical condenser	
	Polarizer and analyzer	
	An integrate device foe polarizer and analyzer	
	Blue, Green, Yellow and Ground glass	
Filter	ND25、ND6	
Focusing	Coaxial coarse and fine adjustment, fine division 1μm, moving range 30mm	
Nosepiece	Backward quintuple nosepiece	
Stage	Non-porous double layer mechanical stage 186X138mm/74mmX50mm	
	Glass specimen preparation plate	
Specimen Presser		
Photo Attachment		

Video Attachmen	C Mount 1X, 0.5X	
NMM-800TRF Technical specifications		
Optical System	Infinite optical system	
Eyepiece	Extra wide field eyepiece EW10X/22	
Infinite Plan Achromatic Objective	5X/0.12/∞/-(BF)	WD 15.5mm
	10X/0.25/∞/-(BF/DF)	WD 10.0mm
	20X/0.4/∞/0(BF/DF)	WD 4.30mm
	50X/0.75/∞/0(BF)	WD 0.32mm
	100X/0.8/∞/0(BF)	WD 2mm
	40X/0.65/∞/0.17	WD 0.54mm
	100X/1.25/∞/0.17	WD 0.13mm
	2.5X/0.08/∞/-(BF)	WD 11.7mm
	2.5X/0.08/∞/-(BF)	WD 10.7mm
	5X/0.12/∞/-(BF/DF)	WD 12mm
	40X/0.6/∞/0(BF/DF)	WD 2.90mm
	50X/0.75/∞/0(BF/DF)	WD 0.32mm
100X/0.8/∞/0(BF/DF)	WD 2mm	
Maximum Sample Height	30mm	
Viewing Head	Siedentopf trinocular viewing head, inclined at 30°, interpupillary 48mm-75mm	
Incident Light	24V/100W Halogen light, lightness adjustable	
	Kohler illumination and aspherical condenser	
	Polarizer and analyzer	

	An integrate device foe polarizer and analyzer
	Blue, Green, Yellow and Ground glass
Transmitted Light	Swing-out condenser NA0.9/0.25
	Halogen light and aspherical condenser
	Blue filter
Filter	ND25、 ND6
Focusing	Coaxial coarse and fine adjustment, fine division 1 μ m, moving range 30mm
Nosepiece	Backward quintuple nosepiece
Stage	Double layer mechanical stage 186X138mm/74mmX50mm
	Glass specimen preparation plate
	Specimen preparation plate
	Slide glass
Specimen Presser	
Photo Attachment	
Video Attachment	C Mount 1X, 0.5X

TM-MC5 inverted metallographic microscope



The TM-MC5 inverted metallographic microscope is an economical and practical microscope, which is cost-effective and widely used at home and abroad.

Product Details

- Use professional metallographic objective and flat field eyepiece for good image quality, high resolution and comfortable viewing;
- Long-distance flat-field achromatic objective lens, the distance between the objective lens and the sample is long, and does not interfere with the sample;
- Maximum magnification: 1000 times (dry lens);
- Low-handed coarse and fine-tuning coaxial focusing mechanism with coarse adjustment elastic adjustment device;
- Unique super large mechanical mobile platform;
- Lighting system: epi-illuminated Corolla illuminator, variable aperture diaphragm and central adjustable field diaphragm;
- Halogen illumination, high brightness, long life;
- Complete photographic camera accessories, collect and store the observed images, and perform metallographic image analysis with alloy phase analysis software;
- Easy operation and complete accessories.

Technical specifications

Product Name and model	Aluminum microscope TM-MC5 (halogen lamp)	
Part configuration and specifications	Specifications	Quantity
	High eye point large field of view flat field eyepiece PL10X/18mm	1 pair
	Low-handed coarse-tuning coaxial focusing mechanism, 38mm per revolution stroke; fine-tuning accuracy 0.002mm; hinged trinocular, 45° tilt, adjustable visibility, fixed 8:2 split, pitch adjustment Range: 54mm ~ 75mm	1 set
	Long working distance flat field achromatic metallographic objective lens 5XLMPL5X/0.13WD15.5mm	1 only
	Long working distance flat field achromatic metallographic objective lens 10XLMPL10X/0.25 WD8.7mm	1 only
	Long working distance flat field achromatic metallographic objective lens 20XLMPL20X/0.40 WD8.8mm	1 only
	Long working distance flat field achromatic metallographic objective 50XLMPL50X/0.60WD5.1mm	1 only
	Long working distance flat field achromatic metallographic objective lens 100XLMPL100X/0.80 WD2.0mm (optional)	Without

	Internal positioning 4-hole converter	1 only
	Ejection Corolla illumination system with aperture stop and center adjustable field diaphragm, adaptive wide voltage 100V-240V, 6V30W halogen lamp, continuous adjustable light intensity.	1 set
	Three-layer mechanical moving platform, area 180mm×155mm, right hand low hand position control, stroke: 76mm×42mm.	1 set
	Metal carrier plate (center hole diameter 12)	1 block
	Color filters (blue, green, yellow)	1 block
	0.5XCTV, C interface, adjustable focus	1 only
Magnification	50X, 100X, 200X, 500X adjustable (standard configuration 10X eyepiece)	
Light source	Aerial lighting system (halogen), adjustable brightness	

Optional accessories

A. Eyepieces and objectives: various magnifications	B. Metallographic image analysis and measurement software
C. Metallographic Automatic Rating Software	D. Computers and Printers

Portable Measuring Microscope TMPC Series White Industrial microscope with LED light



The portable measuring microscope is used for measuring or viewing purposes in production or laboratory. It is particularly suitable for spot examination of machinery Industry, paper making, print and textile etc. The product features small size, light weight, nice design and easy operation. It is also suitable to be used by students.

	TMPC-100(L)	TMPC-50(L)	TMPC-40(L)	TMPC-20(L)
Total Magnification	100×	50×	40×	20×
Mechanical Tube Length	160mm			
Eyepiece	10×			
Objective	10×	5×	4×	2×
Numerical Aperture	0.25	0.12	0.1	0.05
Diameter of Viewing field in Eyepiece	Φ18mm			
Reticule of Eyepiece	0.1mm			
Minimum Readable Division	0.01mm	0.02mm	0.025mm	0.05mm
Working Distance	6.93mm	17.6mm	18mm	17.2mm
Focus Range	30mm			
Diameter of Bearing Plane	Φ63mm			



TMTECK INSTRUMENT CO.,LTD.

Height of Microscope	210mm
Mass of Microscope	650g
Illumination	Pen light, No 2 battery

Optical Inverted Metallurgical Microscope / Portable Metallurgical Microscope



MR-2000/2000B Inverted metallurgical microscope
 Metallurgical microscope price, china supplier, high quality inverted metallographic microscope

Features and Applications:

1. Equipped with excellent UIS optical system and modularization function design. Users can update system conveniently to achieve polarization and dark field observation.
2. Compact and steady main frame body to resist shock and vibration
3. Ideal ergonomic design, easy operation and wider space.
4. Suitable for research in metallography, mineralogy, precision engineering, etc. It's an ideal optical instrument for micro observation in metallographic structure and surface morphology.

Specification:

Eyepiece	10X wide field plan eyepiece and field of view number is $\Phi 22$ mm, the eyepiece interface is $\Phi 30$ mm	
Infinity plan achromatic objectives	MR-2000 (Equipped bright field objective)	PL L10X/0.25 working distance:20.2 mm
		PL L20X/0.40 working distance:8.80 mm
		PL L50X/0.70 working distance:3.68 mm
		PL L100X/0.85(dry) working distance:0.40 mm
	MR-2000B(Equipped with dark / bright field objective)	PL L5X/0.12 working distance:9.70 mm
		PL L10X/0.25 working distance:9.30 mm
		PL L20X/0.40 working distance:7.23mm
		PL L50X/0.70 working distance:2.50 mm
Eyepiece tube	Hinged binocular tube, with an observation angle of 45°, and a pupil distance of 53-75mm	

Focusing system	Coaxial coarse/fine focus, with tension adjustable and up stop minimum division of fine focusing is 2 μ m.		
Nosepiece	Quintuple (Backward ball bearing inner locating)		
Stage	Mechanical stage overall size: 242mmX200mm and moving range 30mmX30mm.		
	Rotundity and rotatable stage size: maximal measurement is Φ 130mm and minimal clear aperture is less than Φ 12mm.		
Illumination system	MR-2000	6V30W halogen and brightness enable control.	
	MR-2000B	12V50W halogen and brightness enable control.	
	Integrated field diaphragm , aperture diaphragm and puller type polarizer.		
	Equipped with frosted glass and yellow ,green and blue filters		