SCHWYZ

DIGITAL MEASURING PROJECTOR
VERTICAL VIDEO PROJECTOR
MANUAL VISION MEASURING MACHINE
AUTO VISION MEASURING MACHINE
STEREO MICROSCOPE
VIDEO MICROSCOPE
PORTABLE MEASURING MICROSCOPE
SURFACE MICROSCOPE
SCALE LOUPE
USB DIGITAL MICROSCOPE
LED MAGNIFYING LAMP
LINEN TESTER
DIAMOND LOUPE
FOUR ZONE MICROSCOPE RING LIGHT
TOOLMAKER MICROSCOPE
ONE-BUTTON QUICK MEASURING SYSTEM
COORDINATE MEASURING MACHINE



Ø300 DIGITAL MEASURING PROJECTOR PJ-350

FEATURES

- Use circular arc profile design, beautiful in appearance and easy to operate
- Use linear guide and non-interference nut on the up and down system, more stable and comfortable to use.
- Patent coating proces on the reflective mirror, better anti-dust performance .
- The light intensity is adjustable in high or low mode.to suit measuring requirements of different workpieces.
- Imported long-life halogen tungsten lamps are adopted to satisfy the requirement of long-time uses of the projector.
- Equipped with excellent optical system, the objectives are clear in imaging and accurate in magnification.
- With axial flow blower fans, the bilateral heat radiation provide super radiating power.



TECHNICAL SPECIFICATION

Projection Screen

■Screen diameter (mm) :Φ300
■Rotating range : 0° ~ 360°
■Resolution of the rotary angle : 1'
■Accuracy of the rotary angle : 6'

Illumination source

■Transmission illumination 12V 100W
■Reflecting illumination 24V 150W
■Dimension: 694 x 380x 1065(Lx Wx H)
■Environment requirements
Room temperature:20°C± 5°C
Relative humidity: 40%~70%
■Power Supply: AC 220V 50HZ
■Instrument weight:1 80kg



Objective

Magnification Power	10x (Standard)	20x (Optional)	50x (Optional)	100x (Optional)
Object Visual Field	Ø30mm	Ø15mm	Ø6mm	Ø3mm
Object Working Distance	75mm	69mm	44 mm	26mm
Errors of magnifying power	0.08%			

Worktable

Type	Small	L arge
Size of worktable	350x 202	400x 225
X and Y travel (mm)	150x 100	200x 100
Z- axis(Focusing)(mm)	0~90	
Resolution	1 um	
Accuracy of X and Y coordinate value	(3+L/75) um, of which,L=length of the work piece measured (unit:mm)	
Load capacity of the worktable	5kg	

Ø300 DIGITAL MEASURING PROJECTOR PJ-300

APPLICATION

Profile Projector PJ300 are precise and excellent non-contact optical measuring instrument integrated with the technology of optic, mechanic, electricity and computer. It is widely used at the field of mechanism, meter, electronic, rubber industry for quality control, it can inspect all kinds of surface and outline of complicated work-pieces, such as, cam, screw thread, gear, perform milling cutter and so on, and it is an effective metrical and analytic system for education, research institute and lab.

FEATURES

- 300mm diameter screen with digital protractor;
- Four size of precision movement stages;
- Double steel guide for stage lifting focus system;
- Halogen profile and surface illumination;
- Geometric multifunctional data processing system ;
- Available rotary table, edge detecting sensor, etc.



Reverse Image	**PJ-300**	**PJ-310**	**PJ-320**	**PJ-330**
Obverse Image	**PV-300**	**PV-310**	**PV-320**	**PV-330**
Metal Stage Dimension	340x152mm	230x230mm	350x170mm	350x170mm
Glass Stage Dimension	196x96mm	145x145mm	246x120mm	246x120mm
Stage Travel: X-axis	150mm	100mm	150mm	200mm
Stage Travel: Y-axis	50mm	100mm	100mm	100mm
Stage Travel: Z-axis	100mm(for focusing)	100mm(for focusing)	100mm(for focusing)	100mm(for focusing)
Accuracy	≤(3+L/75)um	≤(3+L/75)um	≤(3+L/75)um	≤(3+L/75)um
Screen	Screen Diameter :Ø312mm, Effective Range≥ Ø300(with" * "Reticle)			
	Rotary Range of Screen: 0~ 360°			
	Resolution Rotary Indicator: 1'or 0.01°			
Digital readout	DR 200 Multifunctional Data Processing System			
Resolution of X and Y-scale	0.0005mm			
Illumination	Surface and Contour Illumination:24V/150W halogen lamp			
Power	AC110V/60Hz; 220V/50Hz, 400W			
Cooling	Forced Cooling (3-axis-fans)			
Gross/Net Weight	200/150Kg	210/155Kg	225/165Kg	220/170Kg

Ø400 DIGITAL MEASURING PROJECTOR PH-460

APPLICATION

PH-460 profile projector can test effectively profile, section and surface shapes of various complicated work-pieces, such as templates, punching pieces, cams, gears, forming cutters, mercerizes etc. it is widely used in workshops and measuring stations of those industries: machinery, instrument & meter, watch-making, mould and electron etc.



FEATURES

- It is a horizontal structure, so it is convenient to measure axial work-pieces, and it has a long working distance.
- The up and down movement system and work table transmission both adopt the imported V-style straight-line guide, so transmission is very smooth and comfortable.
- Two kinds of illumination systems (high and low levels) can meet Various illumination requirements of different work-pieces and materials.
- Reflecting illumination adopts fiber-optic transmission, so it has the characteristics of small volume, high-brightness and convenient operation.
- Worktable is made of aluminum alloy material, so it is very light.
- Image is clear and symmetrical.
- It is convenient to trim and file the templates, mould and axial work pieces on the worktable.
- Powerful built-out digital displayer is convenient for operation.
- Workable can deflect ± 15°, so it is available to measure screw angle work-pieces.

TECHNICAL SPECIFICATION

Projection Screen

■Screen diameter(mm): Ø400
■Rotary range: 0°-360°
■Rotary angle resolution: 1'
■Rotary angle accuracy: 4'

"L": measuring length ofwork-piece (Unit: M)

Worktable

■Size ofworktable(mm): 450 x 150
■X axis travel (mm): 0 ~ 250 Resolution: 0.001mm
■Z axis travel (mm): 0~150 Resolution: 0.001mm
■Y axis travel (mm): 0~80 (focusing)
■Load capacity:5kg
■Accuracy of X.Y axis: (3+L/75) μm
of which, L = length of the workpiece measured (unit: mm)

Lighting source

Transmission lighting: 24V/150W
Indirect lighting: 24V/150W (with reflection cup)

Room temperature: 20°C±5°C
Relative humidity: 40~70%
Power:AC 220V 50HZ 110V 60HZ
Dimension:687×443×942(LXWXH)
Weight: 1350 kg

Objective

Magnification	10X (Standard)	20X (Optional)	30X (Optional)	100X (Optional)
View-field on object	Ø40mm	Ø20mm	Ø8mm	Ø4mm
Working distance	88mm	81mm	54mm	45mm
Magnification error	0.08%			

VERTICAL VIDEO PROJECTOR PV-500

FEATURES

- Solid framework, large LCD touch screen and advanced software
- High quality optics for crisp and clear images
- Excellent repeatibilty
- Adjustable LED illumination
- High resolution industrial CCD camera
- Lens changeable within the range of 20-120x magnification
- Easy to operate user interface
- Accuracy 0.0005mm
- Advanced functionallity such as quick measuring of correlative
- parameters of gear tapers
- Extended function of priniting ,saving and exporting data
- Excel or txt report ooutput, DXF inpput or output.



STANDARD DELIVERY

- Measuring Software QM2.0
- Calibration Block
- CCD Camera MC1
- Capture Card
- Zoom lems 0.7~4.5x
- LED Lightsource

Optional accessory

- CCD Camera MC3
- Pomeas detent zoom lens
- Working Cupboard

TECHNICAL SPECIFICATION

Model No.	PV-500	PV-520
(X/Y/Z)Measuring range(mm)	250x150x150	300X200X150
Machine dimension(mm)	650x800x1600	
Operation mode	Manual(with auto edge detection)	
Video device	1/3" color CCD camera,0.7-4.5x zoom lens	
Magnification	20-120X(it can extend to 240x)	
Screen dimension	19'' LCD touch-screen monitor	
Lens work range	95mm	
X,Y-axis resolution	0.0005	
Accuracy	≤(3+L/200)um	
Repeatability	5um	
Measuring software	QuickMeasuring 2.0	
Color CCD Camera	MC1	
Suitable environment	Workshop and Metrology room	
Stage load capacity	10Kg	
Power supply	110V/60Hz;220/50Hz	
Gross/Net Weight	220KG/150KG	

Accessories:

	1XCCD adapter(standard)		0.5XCCD adapter (option)		Working distance
Zoom lens	0.7 ~ 4.5X		0.7 ~ 4.5X		
Zoom lens	Digital magnification	Visual field	Digital magnification	Visual field	
0.5X(option)	15 ~ 95X	20 ~ 3.2mm	7.5 ~ 48X	40 ~ 6.4mm	175mm
1X(standard)	301 ~ 90X	10.6 ~ 1.6mm	15 ~ 96X	20 ~ 3.2mm	96mm
2X(option)	60 ~ 380X	5 ~ 0.8mm	30 ~ 190X	10.6 ~ 1.6mm	32mm

HIGH ACCURACY MANUAL VISION MEASURING MACHINE

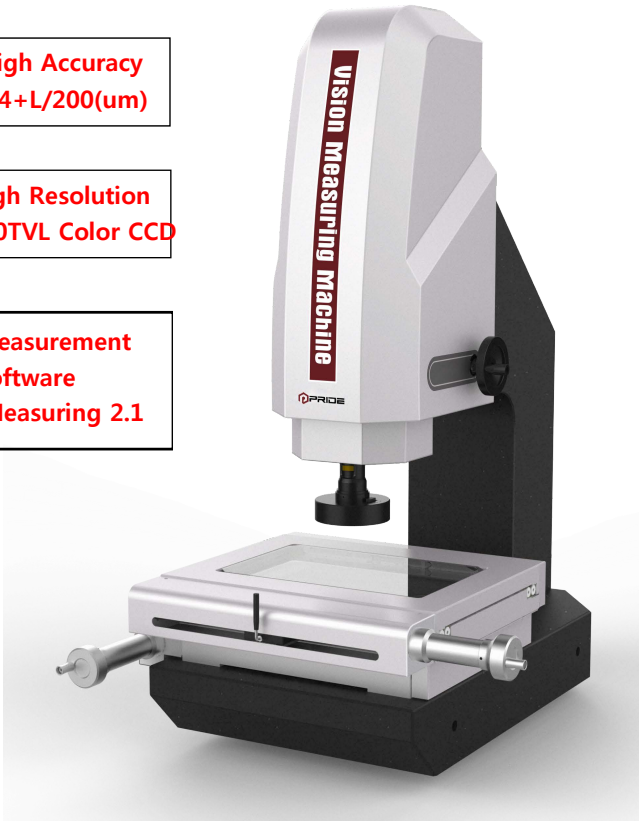
FEATURES

- High precision granite plate base and pillar, to ensure high stability and accuracy;
- High precision toothless rod and fast moving locking device, to ensure hysterisis erroris within 2um;
- High accuracy A grade optical linear scale with precision working stage, to ensure the accuracy is within 3+L/200um;
- High definitive detented zoom lens and high resolution color digital camera, to ensure clear image without distortion;
- With programmable surface 4-ring 8-division LED Cold Illumination and contour LED parallel illumination and internal intelligent light adjustment, it can automatic control the brightness in the 4-ring 8-division;
- Powerful function iMeasuring2.1 measuring software highly enhance the quality control situation;
- Optional imported contact probe and 3D measuring software which can update it to 3D Measuring machine;

High Accuracy
2.4+L/200(um)

High Resolution
700TVL Color CCD

Measurement Software
iMeasuring 2.1



TECHNICAL SPECIFICATION

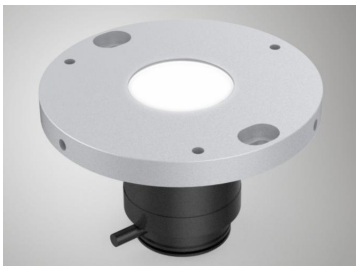
Model No.	VMM-200	VMM-250	VMM-300	VMM-400	VMM-500
Metal Table	408x308mm	408x308mm	458x358mm	608x470mm	708x470mm
Glass Table	306x198mm	306x198mm	356x248mm	456x348mm	556x348mm
X/Y-axis Travel	200x100mm	250x150mm	300x200mm	400x300mm	500x400mm
Z-axis Travel	High-precision linear guide , working travel 200mm				
X/Y/Z-axis Travel	0.0005mm				
X/Y-axis Accuracy	**≤2.4+L/200(um)**				
Repeatability	2um				
Base and Pillar	High Accuracy Granite Plate				
Illumination System(Software Adjustment)	Surface: Stepless Adjustable 4-ring 8-division LED Cold Illumination				
	Contour: LED Parallel Illumination				
	LED Laser Navigation Lights [Optional]				
CCD Camera	High Resolution 700TVL Color CCD Camera				
Zoom lens	6.5X High Resolution Detented Zoom Lens				
	Magnification : 0.7X~4.5X ; Video Magnification : 26X~172X				
Working Environment	Temperature : 20℃±2℃, change range < 2℃/hr				
	Humidity : 30% ~80%RH				
	Vibration<0.002g , <15Hz				
Measuring Software	iMeasuring 2.1				
Operation System	Support XP , WIN7 , WIN8.1 , WIN 10, 32/64 operating system				
Language	English, Simplified Chinese, Traditional Chinese, other language versions can be added				
Dimension(W*D*H)	790x617x1000mm	790x617x1000mm		1002x817x1043mm	1002x867x1043mm
Net Weight	175Kg	175Kg	185Kg	350Kg	380Kg

STANDARD DELIVERY

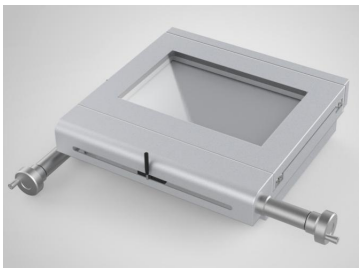
Product Name	Model No.	Product Name	Model No.
2.5D Measuring Software	PIM2.1	Video Capture Card	P527-130
Contour LED Parallel Illumination	P425-100	DELL PC System	P581-960
Surface 4R/8D LED Illumination	P425-130	AV Video Cable	P581-940
Detented Zoom Lens	P421-100	RS232 Data Cable	P581-930
HD700TVL Color Camera	P484-130	Optical Calibration Block	P581-800

Optional Accessories

Product Name	Model No.	Product Name	Model No.
Electronic Zoom Lens	P421-140	Rotary Tables RT 2	P581-520
12.5X Detented Zoom Lens	P421-100	Rotary Tables RT 3	P581-530
Coaxial Detented Zoom Lens	P421-120	Working Cupboard ST 05	P581-650
0.5X Auxiliary Objective	P423-050	Swivel Center Support	P581-850
2X Auxiliary Objective	P423-200	Foot Switch	P581-350
Laser Positioning System	P581-330		



LED Illumination



Working Stage

HIGH ACCURACY 3D MANUAL VISION MEASURING MACHINE

FEATURES

- High precision Granite Plate base and pillar, to ensure high stability and accuracy;
- High precision toothless rod and fast moving locking device, to ensure hysterisis error is within 2um;
- High accuracy A grade optical linear scale with precision working stage, to ensure the accuracy is within 3+L/200um;
- High definitive detented zoom lens and high resolution color digital camera, to ensure clear image without distortion;
- With programmable surface 4-ring 8-division LED Cold Illumination and contour LED parallel illumination and built-in intelligent light adjustment, it can automatic control the brightness in the 4-ring 8-division;
- Imported contact probe and powerful function iMeasuring3.1 3D Measuring Software, highly enhance the quality control;

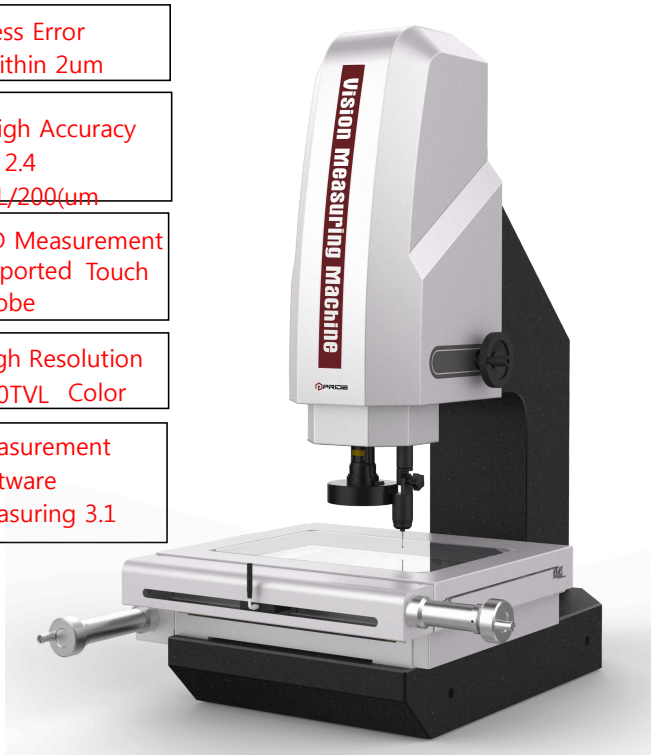
Less Error Within 2um

High Accuracy ≤ 2.4 +L/200(um

3D Measurement Imported Touch Probe

High Resolution 700TVL Color

Measurement Software Measuring 3.1



TECHNICAL SPECIFICATION

Model No.	VMM3D-200	VMM3D-250	VMM3D-300	VMM3D-400	VMM3D-500
Metal Table	408x308mm	408x308mm	458x358mm	608x470mm	708x470mm
Glass Table	306x198mm	306x198mm	356x248mm	456x348mm	556x348mm
X/Y-axis Travel	200x100mm	250x150mm	300x200mm	400x300mm	500x400mm
Z-axis Travel	High-precision linear guide, working travel 200mm				
X/Y/Z-axis Travel	0.0005mm				
X/Y-axis Accuracy	≤2.4+L/200(um)				
Hysterisis Error Repeatability	2um				
Base and Pillar	High Accuracy Granite Plate				
Illumination System(Software Adjustment)	Surface: Adjustable 0~255 grade 4-ring 8-division LED Cold Illumination, every division can be adjust independently				
	Contour: LED Parallel Illumination				
	LED Laser Navigation Lights [Optional]				
CCD Camera	High Resolution 700TV Color CCD Camera				
Zoom lens	6.5X High Resolution Detented Zoom Lens				
	Magnification : 0.7X~4.5X ; Video Magnification : 26X~172X				
Working Environment	Temperature : 20℃±2℃, change range < 2℃/hr				
	Humidity : 30% ~80%RH				
	Vibration<0.002g , <15Hz				
Measuring Software	IMeasuring3.1				
Operation System	Support XP , WIN7 , WIN8.1 , WIN 10,32/64 operating system				
Language	English, Simplified Chinese, Traditional Chinese, other language versions can be added				
Dimension(W*D*H)	790x617x1000mm	790x617x1000mm	838x667x1000mm	1002x817x1043mm	1002x867x1043mm
Net Weight	175Kg	175Kg	185Kg	350Kg	380Kg

STANDARD DELIVERY

Product Name	Model No.	Product Name	Model No.
3D Measuring Software	PIM3.1	Video Capture Card	P527-130
Contour LED Parallel Illumination	P425-100	DELL PC System	P581-960
Surface 4R/8D LED Illumination	P425-130	AV Video Cable	P581-940
6.5X Detented Zoom Lens	P421-100	RS232 Data Cable	P581-930
HD700TVL Color Camera	P484-130	Optical Calibration Block	P581-800

Optional Accessories :

Product Name	Model No.	Product Name	Model No.
Electronic Zoom Lens	P421-140	Rotary Tables RT 2	P581-520
12.5X Detented Zoom Lens	P421-100	Rotary Tables RT 3	P581-530
Coaxial Detented Zoom Lens	P421-120	Working Cupboard ST 05	P581-650
0.5X Auxiliary Objective	P423-050	Swivel Center Support	P581-850
2X Auxiliary Objective	P423-200	Foot Switch	P581-350
Laser Positioning System	P581-330		

VISION MEASURING MACHINE

FEATURES

- Adopt granite stone base and column to ensure the stability and precision of the machine;
- Adopt toothless polished rod and fast-moving locking device to ensure that the return error of the table is within 2um;
- Adopt high-precision instrument optical ruler and precision worktable to ensure the accuracy of the machine is within ≤3.0+L/200um;
- Adopt zoom lens and high-resolution color digital camera to ensure clear picture quality without distortion;
- Using the program-controlled surface 4-ring 8-area LED cold illumination and Contour LED Parallel Illumination as well as a built-in intelligent light adjustment module, the area brightness of the light in the 4-ring 8-area can be freely controlled;
- iMeasuring Vision measurement software improves quality control to a new level;
- Optional contact probe and three-dimensional measurement software can be used to upgrade the machine to a contact three-dimensional measuring machine.
- It can be upgraded to install an autofocus function module to achieve accurate semi-automatic measurement.

Less Error
Within 2um

High Accuracy
≤3.0+L/200um

High Resolution
1.3M 1/3 " digital camera

Measurement Software
iMeasuring



TECHNICAL SPECIFICATION

Model No.	EVM-200	EVM-250	EVM-300	EVM-400	EVM-500
Marble Table	408x308mm	408x308mm	458x358mm	608x470mm	708x470mm
Glass Table	306x198mm	306x198mm	356x248mm	456x348mm	556x348mm
X/Y-axis Travel	200x150mm	250x150mm	300x200mm	400x300mm	500x400mm
Z-axis Travel	High-precision linear guide, working travel 200mm				
X/Y/Z-axis resolution	0.0005mm				
Measurement Accuracy* (um)	XY axis: ≤3.0+L/200 ; Zais : ≤5+L/200				
Hysterisis Error Repeatability	2um				
Base and Pillar	High Accuracy Granite Plate				
Illumination System(Software Adjustment)	Surface 4 rings and 8 zones infinitely adjustable LED cold Illumination				
	Contour: LED Parallel Illumination				
	Optional Coaxial Light				
Digital Camera	1/3"/1.3Mpixel High Resolution Digital Camera				
Zoom lens	6.5X High-Resolution Zoom lens;				
	Optical Magnification: 0.7X~4.5X times; Video Magnification: 26X~172X(21.5" Monitor)				
Working Environment	Temperature : 20℃±2℃, change range < 2℃/hr				
	Humidity : 30% ~80%RH				
	Vibration<0.002g , <15Hz				
Measuring Software	IMeasuring				
Operation System	Support XP , WIN7 , WIN8.1 , WIN 10,32/64 operating system				
Language	English, other language versions can be added				
Dimension(W*D*H)	790x617x1000mm	790x617x1000mm	740x630x1075mm	1002x817x1043mm	1002x867x1043mm
Net Weight	175Kg	175Kg	208Kg	350Kg	380Kg

Note:

- L represents the measurement length, in millimeters, the mechanical accuracy of the Z axis, and the focusing accuracy have a great relationship with the surface of the workpiece.
- ** Magnification is approximate and depends on monitor size and resolution.
- It can be attached additional mirrors 0.5X or 2X according to their needs to achieve image magnification: 13X~86X or 52X~344X.

Optional Accessories



MCP/Star Touch Probes



Additional Objective 0.5X/2X

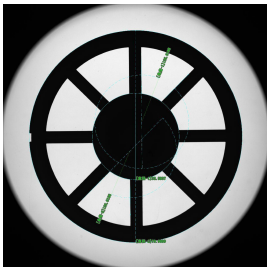


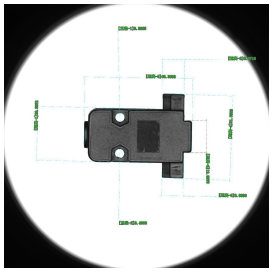
Foot Switch

APPLICATION

Plastic and Rubber

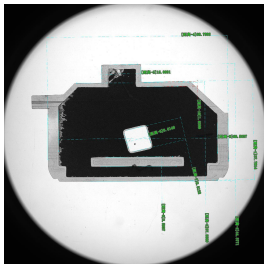
Including electronics, automobile industry, aerospace, medical products, daily chemicals, instrumentation, wire and cable, construction equipment and other rubber products manufacturing and other rubber products

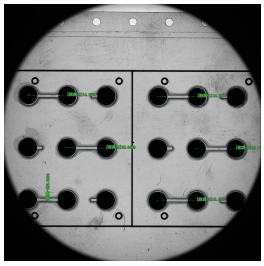




Die Cutting

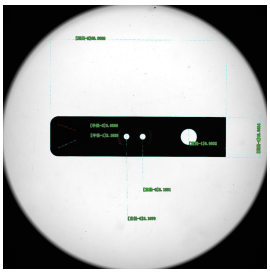
Including watch strap, screen protective film, touch screen, display screen, circuit board, backlight components, dust filter, battery interface, nameplate and other soft board components, etc.

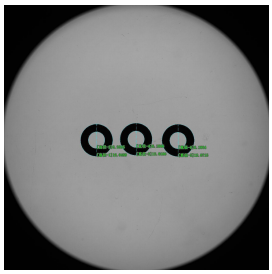




Stamping

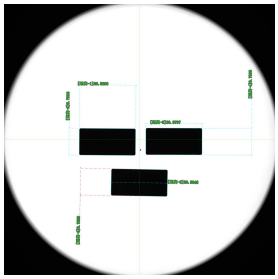
Including electrical components, shrapnel, springs, mobile phone parts, watch case accessories, daily necessities, auto parts, etc.

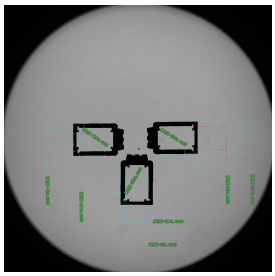




3C (Computer, Communications, Consumer Electronics)

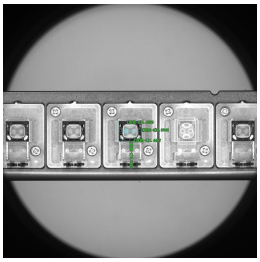
Including glass covers, spare parts, chips, circuit boards, touch screens, etc. of mobile phones, IPADs and other electronic products, as well as peripheral accessories.

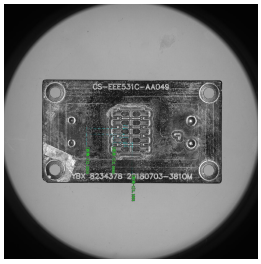




Mold industry

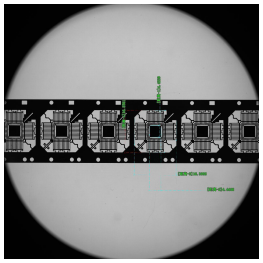
Including mold products, mold parts, mold inserts, mold bases, mold bases, mold cores, etc.

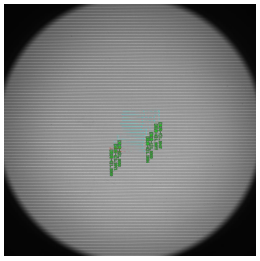




Semiconductor

Including wafers, front-end, back-end, components, boards, packages, etc.





Hardware Precision Processing Industry

Including hardware parts, die-casting, screws, springs, profiles, gears and other mechanical processing, powder metallurgy injection molding.

IT Industry

Including connectors, terminals, chips, switches, circuit hardware, integrated circuits, wires and cables, electronic components, etc.

3D FULLY AUTO VISION MEASURING MACHINE

FEATURES

- 3D full Auto Visioin is a classical Fully Auto Vision Measuring Machine, it is equipped with four-axis motorized control and auto zoom lens and probe, powerful function, simple operation, widely application.
- Four-axis CNC fully auto close loop control, auto measurement;
- "00" grade Granite Plate base and pillar, stable and reliable;
- Precision linear guide, grinding ball screw and AC servo motor, ensure accuracy stability of system position;
- High precision linear scale, resolution is 0.5um, high accuracy, great stability;
- Imported high definition color industry digital camera, ensure clear observation and stable measurement requirement;
- 6.5X continue auto zoom lens, precision auto zoom, only need to make pixel calibration once time;
- Programmable 5-ring 8-division LED surface illumination, contour parallel LED illumination, can realize 256 grade brightness adjustment intelligently;
- With proprietary powerful function fully auto measuring software iMeasuring 4.2;
- With imported touch probe, realize 3D measurement;
- Can set auto measurement, and finish batch measurement with high efficient;
- Laser, coaxial illumination and other parts are optional;



Four-axis Motorized

Auto Light

Auto Zoom

Auto Measurement

Auto Focus

MCP Probe

TECHNICAL SPECIFICATION

Model No.		VMA3D-300A		VMA3D-400A		VMA3D-500A	
X/Y-axis Travel (mm)		300x200		400x300		500x400	
Z-axis Travel (mm)		200					
X/Y/Z 3-axis Linear Scale (mm)		High precision linear scale , resolution : 0.0005mm					
Guidance Mode		Precision P-grade linear guide , double-track double slider guide					
Operation Mode		Joystick controller, Mouse operation, automatic detection program					
Measurement Accuracy		XY-axis : ≤2.2+L/200um					
		Z-axis : ≤4+L/200um					
Repeatability		2um					
Video System		High definition 1/3" Color CCD Camera,					
		6.5X continue click zoom lens; optical magnification: 0.7X-4.5X; video magnification:126X~172X(21.5"monitor)					
Field of View(mm) (Diagonal * Horizontal* Vertical)	Lens Magnification	0.7x	1x	2.0x	3.0x	4x	4.5x
	1/3"CCD	8.57x6.86x5.14	6.00x4.80x3.60	3.00x2.40x1.80	2.00x1.60x1.20	1.50x1.20x0.90	1.33x1.07x0.80
Illumination	Contour	LED Parallel Contour Illumination					
	Surface	5-ring 8-division 0~255 grade continue adjustable					
Software System		iMeasuring 4.2 Fully Auto Measuring Software					
Load Capacity (Kg)		25		25		20	
Working Environment		Temperature 20℃±2℃ , Humidity Range<2℃/hr,Humidity 30~80%,Vibration<0.002g,<15Hz					
Power		220V/50Hz/10A					
Dimension(mm)		1200x780x1650		1350x880x1650		1420x980x1650	
Weight(Kg)		580		650		780	

* L is measuring length ,unit is mm, the mechanical accuracy of Z-axis and focus accuracy is greatly related to the surface of the workpiece.
* Magnification is approximate value, it is related to the dimension of monitor and resolution.
* Customers can choose 0.5X or 2X optional objective, and realize image magnification: 13X~86X or 52X~344X.

ZOOM STEREO MICROSCOPE SM-500

FEATURES:

- Sharp stereo erect image over a wide field of view
- 45°inclined and 360°rotatable binocular head
- The interpupillary distance is between55mm-75mm,The left ocular-tube with diopter adjustment±5dp
- Inside incident light,brightness adjustable,various illumination for selection
- Power supply 110V/60HZ or 220V/50HZ
- Product has CE approval .



SM-520



SM-510



SM-500

TECHNICAL SPECIFICATION

Model No.	Eyepiece	Objective	Base/ working stage	Up & down mechanism	Incident illumination	Transmitted illumination
SM-500	HWF10X	ZOOM 0.75X-5X	Φ95mm Frosted glass	Pillar style	Bowl halogen lamp 12V 10W	Halogen lamp 12V 10W
SM-510	HWF10X	ZOOM 0.75X-5X	Φ95mm Frosted glass	Arm curved	Bowl halogen lamp 12V 10W	Halogen lamp 12V 10W
SM-520	HWF10X	ZOOM 0.75X-5X	Φ95mm Frosted glass	Arm curved	Bult-in LED ring light	1W LED lamp
SM-530	HWF10X	ZOOM 0.75X-5X	Φ95mm Frosted glass	Pillar style	Natural illumination	Natural illumination
Optional accessories: 0.5X、1.5X、2X(Auxiliary Objective);HWF5X、HWF10X、HWF20X、HWF25X(Eyepiece); Ring light						

OPTICAL DATA:

Eyepiece \ Objective		Main body	With 0.5x auxi objective	With 1.5x auxi objective	With 2x auxi objective
		0.75x ~ 5x	0.375x ~ 2.5x	1.125x ~ 7.5x	1.5x ~ 10x
HWF5x	Total magnification	3.75x ~ 25x	1.875x ~ 12.5x	5.625x ~ 37.5x	7.5x ~ 50x
	Field of View	Φ31 ~ Φ4.6	Φ61.3 ~ Φ9.2	Φ22 ~ Φ3.3	Φ16 ~ Φ2.5
HWF10x	Total magnification	7.5x ~ 50x	3.75x ~ 25x	11.25x ~ 75x	15x ~ 100x
	Field of View	Φ33 ~ Φ5	Φ65 ~ Φ10	Φ22 ~ Φ3.3	Φ16 ~ Φ2.5
HWF15x	Total magnification	11.25x ~ 75x	5.625x ~ 37.5x	16.875x ~ 112.5x	22.5x ~ 150x
	Field of View	Φ24 ~ Φ4.2	Φ48 ~ Φ8.5	Φ16 ~ Φ2.8	Φ12 ~ Φ2
HWF20x	Total magnification	15x ~ 100x	7.5x ~ 50x	22.5x ~ 150x	30x ~ 200x
	Field of View	Φ20 ~ Φ3.5	Φ40 ~ Φ7	Φ13.3 ~ Φ2.3	Φ10 ~ Φ1.8
HWF25x	Total magnification	18.75x ~ 125x	9.375x ~ 62.5x	28.125x ~ 187.5x	37.5x ~ 255x
	Field of View	Φ15.8 ~ Φ2.4	Φ31.5 ~ Φ4.8	Φ10.5 ~ Φ1.6	Φ7.9 ~ Φ1.2
	working distance	113mm	220mm	50mm	35mm

ZOOM STEREO MICROSCOPE SM-900

FEATURES

- Sharp stereo erect image over a wide field of view.
- 45° inclined and 360° rotational binocular head with locked-in eyepiece.The left ocular-tube with diopter adjustment ±5dp , The interpupillary distance is between 55-75mm
- Products CE approved
- Power supply 110V/60Hz or 220V/50Hz
- Illumination: L1. Incident reflected halogen lamp 12V/10W; Transmitted halogen lamp 12V/10W
  L2. Incident reflected halogen lamp 12V/10W; Transmitted halogen lamp 12V/10W. Brightness isadjustable.
  L3. Halogen lamp 12V/10WW for incident lamp and fluorescent lamp 5W for transmitted lamp
  L4. Halogen lamp 12V/10WW for incident lamp and fluorescent lamp 5W for transmitted lamp Brightness is adjustable L5. Both incident and transmitted light with LED。
- Each set packed in styrofoam and in an inner box. Two sets in one carton, The outer measurement is 41X35X41.50cm (SM-900), 50X37X48cm (SM-910,SM-920).


SM-910


SM-970


SM-950


SM-920

Model No.	Standard eyepiece	Objective	Viewing head	Up & Down Mechanism	Base /Working stage
SM-900	SWF10X	ZOOM1X-4X	Binocular	Pillar style	Φ95mm Frosted glass
SM-910	SWF10X	ZOOM1X-4X	Binocular	Arm curved style	Φ95mm Frosted glass
SM-920	SWF10X	ZOOM1X-4X	Trinocular	Pillar style	Φ95mm Frosted glass
SM-930	SWF10X	ZOOM1X-4X	Trinocular	Arm curved style	Φ95mm White/Black Working stage
SM-940	SWF10X	ZOOM1X-4X	Binocular	Pillar style	Φ95mm Frosted glass
SM-950	SWF10X	ZOOM1X-4X	Binocular	Pillar style	Φ95mm Frosted glass
SM-960	SWF10X	ZOOM0.75X-3.6X	Binocular	Pillar style	Φ95mm Frosted glass
SM-970	SWF10X	ZOOM0.75X-3.6X	Binocular	Arm curved style	Φ95mm Frosted glass
SM-980	SWF10X	ZOOM0.75X-3.6X	Binocular	Pillar style	Φ95mm Frosted glass

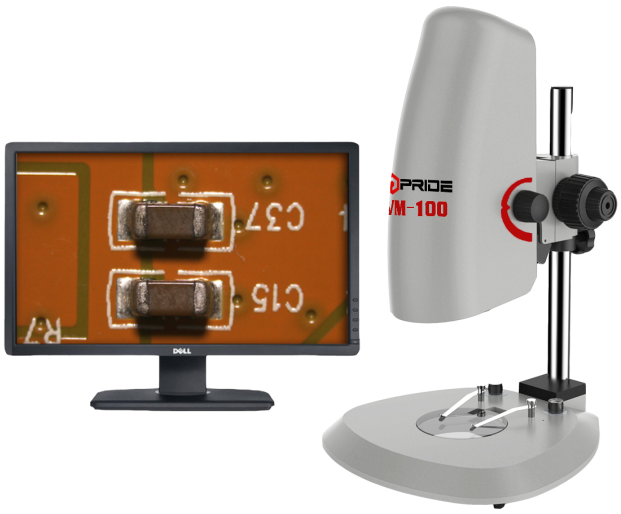
Optional accessories: 0.5X、7.5X、1.5X、2X(Auxiliary Objective);WF5X、SWF10X、WF15X、WF20X(Eyepiece);
Ring light ; White/Black working stage.

Model No.	Eyepiece	Standard Objective			Auxiliary Objective							
					0.5X		0.5X		0.5X		0.5X	
		Objective	Field of View	Working Distance	Field of View	Working Distance	Field of View	Working Distance	Field of View	Working Distance	Field of View	Working Distance
SM-900~950	WF5X	1-4X	20-5	91	40-11	170	25-6.5	100	13-3.5	42	10-2.5	28
	SWF10X	1-4X	23-5.5	91	52-12	170	30-7	100	15-4.8	42	11.5-3	28
	WF15X	1-4X	15.5-4	91	36-8.5	170	21-5	100	10.5-2.5	42	8-2	28
	WF20X	1-4X	10.5-3	91	25-5.8	170	14-3.5	100	7-1.8	42	5.5-1.5	28
SM-960~980	WF5X	0.75-3.6X	26-6	86	60-13	178	32-7	96	16-4	42.5	12.5-3	25.5
	SWF10X	0.75-3.6X	28-6	86	63-14	178	35-8	96	18-4	42.5	14-3	25.5
	WF15X	0.75-3.6X	19-4.5	86	43-9.5	178	24-5.5	96	12-3	42.5	9.5-2	25.5
	WF20X	0.75-3.6X	12.5-3	86	28-6	178	16-3.5	96	8-2	42.5	6-1.5	25.25

VIDEO MICROSCOPE VM-100

APPLICATION

Video Microscope is widely used in the inspection of electronic industry production line, printed circuit board, weld detects (such as wrong printing, edge collapse,etc)during printed circuit component, PC Board, VFD, and the identification of printing grid and painting, etc. It can display the zoom out image on the screen and save, magnify and print.



FEATURES

- With high definition 0.7~4.5X parallel continue zoom lens, it it more convenient and fast to switch objective magnification;
- With precision coarse and fine lifting system, ensure perfect focus and clear image;
- With adjustable LED bottom and surface illumination, it can control brightness independently;
- Built-in FULL HD sensor and VGA integrated camera, can directly connect with the monitor to realize video image and can also use SD card to take picture or record video, which integrate video observation and image storage;
- Simple external interface: 12V power supply input and USB/ VGA video output, SD card hole to make installation simpler;
- Multiple optional mobile control platform, ensure precision position measurement.

TECHNICAL SPECIFICATION

unit:mm

Electronic Magnification	8X~206X (16:9 21"Monitor)
Optical Objective	0.7X~4.5X horizontal zoom lens Zoom ratio 6.5 : 1 0.5X C-mount Camera Adapter
Camera Parameter	2 million pixel (1920*1080) Image Size:1/2.86"
Camera Function	Frames Per Second : 30fps White Balance; Brightness Control; Digital Noise Reduction Photograph and Video Record VGA/USB Output, SD Card Storage OSD: Comprehensive digital UI design, Wireless USB 2.0 Mouse Operation Cross Line Picture Frozen,10X Digital Magnification
Measuring Function	Optional PC System and measuring software can measure image in the field of view
Illumination	Bottom: Adjustable LED Illumination Surface: Adjustable LED Illumination
Microscope Stand	Z-axis Travel: 150mm Coarse/Fine Lifting System
Electrical Parameters	AC90~240V ; 50~60HZ
Dimension	290*280*400 mm
Gross/Net Weight	7.0/4.7Kg

STANDARD DELIVERY

unit:mm

Microscope Main Body	VM-100
Power Adapter	DC12V
Mouse	Wireless
SD Card	8G
Operation Manual/Warranty Card/ Certificate/Packing list	VM-100

PORTABLE MEASURING MICROSCOPE

FEATURES

- The protable measuring microscope is used for measuring or viewing purposes in production or labortory. 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.



TECHNICAL SPECIFICATION

Model No. (no light)	XL-20	XL-50	XL-100
Model No. (with light)	XL-20L	XL-50L	XL-100L
Total Magnification	20X	50X	100X
Mechanical Tube Length	160mm		
Power of Objective	2X	5X	10X
Power of Eyepiece: 10X			
Focus Range: 30mm			
Diameter of Viewing field in Eyepiece: Φ18mm			
Reticule of Eyepiece : 0.1 Micrometer			
Diameter of Bearing Plane: Φ63mm			
Height of Microscope: 210mm			
Mass of Microscope:0.65kg			

PORTABLE MEASURING MICROSCOPE

FEATURES

- Compact and light weight with a wide field of view.
- It allows not only to provide magnified view of fine pattern and contour of objects, but also to measure length and compare dimensions by using a scale included in the eyepiece.
- It is useful not only for the general observation but also for improving accuracy in precision machining and securing uniform quality in the inspection process.
- The pen illumination system provides a high intensity source but is removable if not needed.



Model No.	KT 293-1	KT 293-2	KT 293-3	KT 293-4
Magnification	20X	40X	60X	100X
Eyepiece	10x	10x	10x	10x
Objective	2x	4x	6x	10x
Field of View	8.3°	8.5°	8.4°	5.2°
Exit pupil	1.8mm	1.4mm	1.2mm	0.6mm
Working Distance	20mm	21mm	13.5mm	7mm
Accuracy	0.005" / 0.1mm	0.002" / 0.05mm	0.001" / 0.0.2mm	0.0005" / 0.01mm
Measuring Range	6mm	3mm	2mm	1mm
Focus range	±18mm	±18mm	±18mm	±18mm
Size (mm)	41.5øx122	41.5øx122	41.5øx122	41.5øx122
Net Weight	83 g	83 g	83 g	88 g

KDC RS@MC LD@RTQHMF LHBQNRBNOD 25x to 100x

FEATURES

■ Stand Microscope is a small size, lightweight and conveniently portable microscope. It is designed to cover the range in between the high-grade, heavily equipped microscopes and the various magnifiers 3x-30x). It can easily, speedily and accurately catch the subject to be examined with its bright and superior resolving power and smooth-working mechanism. This microscope is convenient for measuring the thickness, height or depth of subjects having different levels and for measuring the depth of items like print cylinders, printing plates and other similar applications.
The precision made focusing ring, simplifies operation, and the attachable/detachable rubber eyepiece increases the ease in operation.
A scale is built into the scale chamber above the focusing ring
The lens barrel of the eyepiece is the visibility adjustment ring.
First turn this ring and set it at the position where the scale can be seen clearly.
Then turn the focusing ring refocus on the next level.
By reading the scale engraved on the focusing ring and the main needle of the lens barrel, depths can be measured with the accuracy of 0.1mm (.004").
This scale can be easily interchanged according to use. Three kinds of scales-standard, for tooling, for printing are available.
Stand Microscope is ideal for use in factories, inspection rooms and research laboratories.



LED Microscope

Model No.	P2008-20	P2008-40	P2008-60	P2008-100
Magnification	20X	40X	60X	100X
Field of View	3.30 mmø	2.00mmø	1.09mmø	0.84mmø
Min. Scale Div.	No. 24 = 0.05mm No. 26 = 0.002"	No. 13 = 0.02mm No. 15 = 0.001"	No. 34 = 0.01mm No. 36 = 0.0005"	No. 44 = 0.005mm No. 46 = 0.0005"
Measuring Range	3.0mm	1.6mm	1.0mm	0.8mm
Working Distance	17.0mm	11.7mm	11.7mm	11.6mm
Numerical Aperture	0.11	0.18	0.22	0.22
Focal Distance	19.8mm	14.9mm	9.9mm	9.9mm
Size (mm)	41.5øx122	41.5øx122	41.5øx122	41.5øx122
Net Weight	83 g	83 g	83 g	88 g

POCKET MEASURING MICROSCOPE

FEATURES

■ Pocket measuring microscope with reticle. The Reticle is cross hair with horizontal scale. To focus the microscope, hold it so that the notch at the tip of the acrylic cylinder of the microscope faces towards you, place the center of the object lens above the specimen and while tilting the cylinder forward and backward with your eye on the eye-piece lens, fix the cylinder and adjust to the best angle which can give the sharpest image.



P2036S P2036

Model 2036 without scales

Model No.	P2036-20	P2036-50	P2036-100
Magnification	25X	50X	100X
Field of View	8°	6°	5.7°
Measuring Length	3 mm	2 mm	1 mm
Size (mm)	12.4 x 127	12.4 x 127	12.4 x 127
Net Weight	12 g	13 g	16 g

Model 2036S with scales

Model No.	P2036S-20	P2036S-50
Magnification	25X	50X
Field of View	8°	6°
Measuring Length	3 mm 0.05mm(0-3mm) 0.002"(0-0.12")	2 mm 0.02mm(0-1.6mm) 0.001"(0-0.0.6")
Size (mm)	12.4 x 127	12.4 x 127
Net Weight	12 g	13 g

SURFACE MICROSCOPE KT-295

FEATURES

- Pocket size microscope in hard leather case. Ideal for inspecting, tracking, and measuring small cracks etc. Can be placed directly on the surface, with adjustable focus and scale division in the lens.
- KT 295-1
  Surface Microscope: magnification 10x 21mm; scale division 0.1mm
- KT 295-3
  Surface Microscope: magnification 10x25mm; scale division 0.1mm



LED SURFACE MICROSCOPE PM7173L

FEATURES

- Graduated Surface microscope with built-in LED ring light and measuring scale in pocket size complete with hard leather case.
- Ideal for inspecting, tracking, and measuring coating defects such as crack-width, pinholes, scratches, inclusions and other surface imperfections.
- Can be placed directly on the surface, with adjustable focus and scale division / reticle build in the lens.
- Height: 50 mm
- Diameter: 43 mm
- Magnification: 10X
- PM7173L
  Surface Microscope: magnification 10x; scale division 0.1mm





SCALE LOUPE 10X SET P2004

FEATURES

- Scale Loupe 10X has precision-constructed achromatic lenses (coated 4 elements, 2 groups), a photo-printed scale and focusing ring.
- Magnification: 10X
- Field of View: 32 mm (1.24 inch)
- Scale Length: 30 mm (1.17 inch
- Minimum Scale Division: 0.1 mm
- Eye-piece: 20 mm
- Size: 46 x 44 mm
- The contradiction between high resolving power and wide visual field has been completely eliminated from this product so it can provide efficient inspection.
- The P2004 Scale Loupe 10x set combines the KT 295-1 with five of the widely used reticles. The five different kinds of scales, #s 2, 3, 7, 8, & 10 are contained in a plastic box together with a magnifier as a set.





USB DIGITAL MICROSCOPE DM-100



FEATURES

- This high tech while easy to use digital microscope comes with 2Mega true resolution (true and up to 5M by digital), outputs stunning video image, useful for students, collectors, collectors, testers etc to explore the microscopic world.Other outstanding features include 20x-200x magnification (adjustable), measurement function, compatible with Windows and Mac, video and photo capture.
- Image Sensor: 2 Mega Pixels (interpolated to 5M)
- Still capture resolution: 2560x2048 (5M), 2000x1600, 1600x1280 (2M), 1280x1024, 1024x960, 1024x768, 800x600, 640x480
- Video capture resolution: 2560x2048 (5M), 2000x1600, 1600x1280 (2M), 1280x1024, 1024x960, 1024x768, 800x600, 640x480
- FocusRange: Manual focus from 10mm to 500mm
- Frame Rate: Max 30f/s under 600 Lus Brightness
- Magnification Ratio: 20x to 200x
- Video format: AVI
- Photo format: JPEG or BMP
- Light source: 8 LED (adjustable by control wheel)
- PC interface: USB2.0
- Operation system: Windows XP/Vista/Win7/8, Mac OS X 10.6 or later
- OSD language: English, German, Spanish, French, Russian
- Bundle software: MicroCapture with measurement

STANDARD DELIVERY

- Digital Microscope with USB cable
- Stand
- Micro Capture Pro software
- Instruction manual

LED MAGNIFYING LAMP



Model No.:SK-A

FEATURES

- Lens material: glass
- Lens size: 5"
- Diopter: 5X /8X /10X / 15X /20X
- Voltage: 110V-120V / 220V-240V
- Light source: T9 22W energy saving circular
- LED lamp
- Standard mount: desktop clamp
- Optional mount: table base,floorstand
- Colour available: white, black, light grey
- ESD safety is available by request

LED MAGNIFYING LAMP



Model No.:SK-B

FEATURES

- Lens material: glass
- Lens size: 5"
- Diopter: 3X /5X /8X /10X
- Voltage: 110V-120V / 220V-240V
- Light source: T9 22W energy saving
- LED clamp
- Standard mount: desktop clamp
- Optional mount: table base,floorstand
- Colour available: white, black, light grey
- ESD safety is available by request

LINEN TESTER PG7144/PG7141

FEATURES

- Linen Testers are convenient folding type magnifying glasses for inspecting cloths. They are widely used as portable magnifiers and are available in various models.
- PG7144
  Base Size: 14mm
  Magnification: 10x
- PG7141
  Base Size: 30mm
  Magnification: 6x
  Packaged in White box, Wax paper wrapped, No inner pouch

Model No.:
PG7144
PG7141



DIAMOND LOUPES

FEATURES

- PG7014A
- Field of view: 21mm
- Magnification: 10x
- Silver, black, gold is acceptable.



Model No.:PG7014A

FEATURES

- PG7802
- Field of view: 21mm
- Magnification: 10x
- UV+LED
- Silver, black, gold is acceptable



Model No.:PG7802

144 LED FOUR-ZONE MICROSCOPE RING LIGHT

FEATURES

- This is a 144-LED intensity direction adjustable ring light with mounting size up to 2-1/2" (64mm) in diameter. The light ring is consisted of 4 individual portions (4 lighting zones) that can be turned on/off separately. You may use the feature to change lighting directions and obtain the best illumination for your application. The ring light has 2-1/2" (64mm) inside and 4" (100mm) outside diameters. It works with power supplies from a 110-220V and comes with a 1-7/8" (48 mm in diameter) ring adapter. With variable intensity control, it provides cool, even, intense and focused shadow-free illumination. It is an ideal durable cool light source for all stereo microscopes, especially for gemological, coin and gem/jewelry microscopes. This kit comes with one year warranty against manufacturing defects

Features & Specifications :

- 144 bright white LED bulbs
- Lighting direction changeable
- Variable intensity control
- Intense and focused shadow-free illumination
- 100,000 hours of life
- Power input: 110-240V, 50-60HZ, auto switching
- Fits up to 2-1/2" (64mm) mount rings
- Inside diameter of the ring light: 2-1/2" (64mm)
- Outside diameter of the ring light: 4" (100mm)

Packing List :

- One 144-LED Ring Light (B)
- One Control Box
- One Power Cable
- One 48mm Ring Adapte



Model No.:LED-144

72 LED COMPACT FOUR-ZONE MICROSCOPE RING LIGHT

FEATURES

- This is a 72-LED intensity direction adjustable ring light with mounting size up to 2.3" (60mm) in diameter. The light ring consists of 4 individual portions (4 lighting zones) that can be turned on/off separately. You may use the feature to change lighting directions and obtain the best illumination for your application. The ring light has 2.3" (60mm) inside and 4" (102mm) outside diameters. It works with power supplies from a 110-220V and comes with a 1-7/8" (48 mm in diameter) ring adapter. With variable intensity control, it provides cool, even, intense and focused shadow-free illumination. It is an ideal durable cool light source for all stereo microscopes, especially for gemological, coin and gem/ jewelry microscopes. This kit comes with one year warranty against manufacturing defects

Features & Specifications :

- 72 bright white LED bulbs
- Lighting direction changeable
- Variable intensity control
- Intense and focused shadow-free illumination
- 100,000 hours of life
- Power input: 110-240V, 50-60HZ, auto switching
- Fits up to 2-1/2" (64mm) mount rings
- Inside diameter of the ring light: 2.3" (60mm)
- Outside diameter of the ring light: 4" (102mm)

Packing List :

- One 72-LED Ring Light (B)
- One Power Cable
- One 48mm Ring Adapter
- Shipping Weight: 3 lbs



Model No.:LED-72

TOOLMAKER MICROSCOPE TM-500

FEATURES

- The Toolmaker's microscope is the perfect microscope for measuring dimensions and angles of various machined metals.
- **Objective Lens:** Includes 2x objective, NA 0.07, WD 0.67. Alternative 5x and 10x objectives are available below.
- **Eyepiece:** Monocular 15x eyepiece, FOV 13mm, inclined 30 degrees with built-in cross-line reticle. Erect image, diopter adjustable. Eyepiece protractor graduation: 360° protractor range. Minimum reading by vernier is 6. Alternative 10x eyepiece available below.
- **Total Magnification:** 30x (Available magnification = 20x, 30x, 50x, 75x, 100x, 150x).
- **Specimen Stage:** 50mm x 50mm (2" x 2") X-Y Travel Stage.Top of X-Y dimensions are 150mm x 150mm. Accuracy: 0.005mm or above per 5mm. Glass window: 83x83mm.
- **Micrometer Heads:** Includes two manual micrometer heads 1mm or 0.025" precision +/-2um, outer diameter of brushing is 18mm / 0.709". Digimatic micrometer heads are available below.
- **Illumination:** LED Transmitted light source, 120v, with adjustable intensity. Reflected illumination with oblique twin-spot LED illuminator, with adjustable intensity.
- **Stand:** Track stand with coarse focusing.

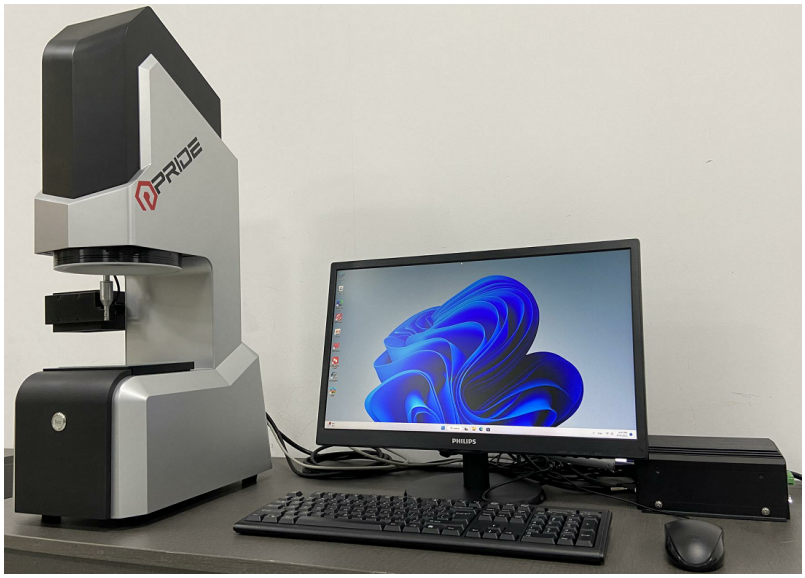


Model No.:TM-500

ONE-BUTTON QUICK MEASURING SYSTEM QMI-100

INSTRODUCTION

QMI-100 one-button measuring instrument adopts dual telecentric high-resolution optical lens, combined with high-precision image analysis algorithm, and incorporates one-button flash measuring principle. According to the shape of the workpiece, the instrument can automatically locate the measurement object, match the template, measurement evaluation, report generation, just touch the start button, truly achieve one-button fast and accurate measurement.



TECHNICAL SPECIFICATION

Image sensor	HD CCD 2000 million 1.1 "	
Measuring range	100mm*80mm	
Magnifying power	0.088X	
Display unit	0.1μm	
Measurement accuracy	±3+ L/100 μm	
Camera interface	Gige Gigabit Ethernet (transmission rate: 1G/S)	
Camera lens	Bilateral telecentric lens	
Software release	CX-VISION V1.0 One-button Special Software	
illuminating system	Transmission system	Telecentric transparent irradiation (color: green)
	Dropping system	Programmable LED (color: white)
Auxiliary light source (optional)	Coaxial light source	Coaxial light incidence (color: white)
	Low angle light source	Movable light source up and down (color: white)
Power supply voltage	AC100~240V 50/60Hz	
Camera voltage	Output/rated load DC24V0.6A or less	
Measurement software system	CX-VISION V1.0 One-button Special Software USB dongle	

SOFTWARE INSTRUCTIONS

Basic measurement function	Point, line, circle, multi-point line, multi-point circle, automatic circle, spline curve, arc, multi-segment circle, automatic R angle, contour scanning.
Labeling function	Alignment dimension, vertical dimension, angle dimension, radius/diameter dimension, area dimension, thread pitch diameter.
Geometric tolerance	Straightness, roundness, symmetry, profile, etc.
Virtual structure	Center line, bisector, tangent point, tangent point of circle line, center of circle, center of line, highest point and lowest point.
Parameter setting	Font, color, recognition mode, tolerance size, operation authority
Report function	SPC analysis report (CPK, CA, PPK, CP, PP value, process capability analysis, X control chart, R control chart)
Software customization	CAD import automatic default programming, contour curve analysis, automatic management link, APP management application.
Detection quantity	999 data/sec
Number of templates	Unlimited
Driving mode	Programmable motor

STANDARD DELIVERY

Main body	QMI-100
Table	objective table
Carrying device	Machine glass
Light source control system	Programmable digital light source system (built-in)
Computer	Brand Computer +19 "LCD Monitor"
Camera lens	Bilateral telecentric lens
Video camera	High-definition CCD2000 million pixels
Software	CX-VISION V1.0 Professional Software (encryption dog)
Other configurations	Optical grid glass
User manual	User manual (CD)
Upper light source	Ring light source
Lower light source	Parallel telecentric light source
Auxiliary light source	Coaxial light emission (color: subject to customer products)
Packing box	High quality Aluminum box

MANUAL VISION MEASURING MACHINE VME

FEATURES

- Manual operation machine, with high cost-effectiveness, affordable price and powerful functions.
- Z-axis plus grating ruler to realize image height measurement function.
- British RENISHAW contact probe.



TECHNICAL SPECIFICATION

Model No.	VME-2010	VME-3020	VME-4030
X Y Z Measuring range mm	200×100×150	300×200×150	400×300×200
Glass table size mm	260×160	360×260	460×360
Working table size mm	366×266	456×366	556×466
Out dimension L×W×H mm	650×530×730	750×580×730	950×680×1200
Machine weight（KG)	80	120	250
CCD Camera	High resolution color CCD(1/3inch ,700TVL)		
Optical lens	0.7-4.5X Manual zoom fixed frame lens		
Optical image	Working distance: 90mm; Video magnification: 26~172X; Field of view: 8.1~1.3mm (with 1X additional lens as standard)		
Illumination	White LED ring surface light source + bottom contour light source		
Drive mode	Manual operation		
Optical scale resolution	Resolution：0.001mm (optional:0.0005mm)；		
Accuracy(μm)	X-Y≤（3+L/200μm		
Power	220v±10% / 110v±10%（AC） 50Hz		

FULL AUTOMATIC VISION MEASURING MACHINE VMM-CNC

FEATURES

- XYZ full automatic machine, integrated, all-granite structure, stable, accurate and efficient;
- The instrument has a built-in computer and control system, easy to install and disassemble, and efficient and convenient training and after-sales.
- British Renishaw probe contact measurement



TECHNICAL SPECIFICATION

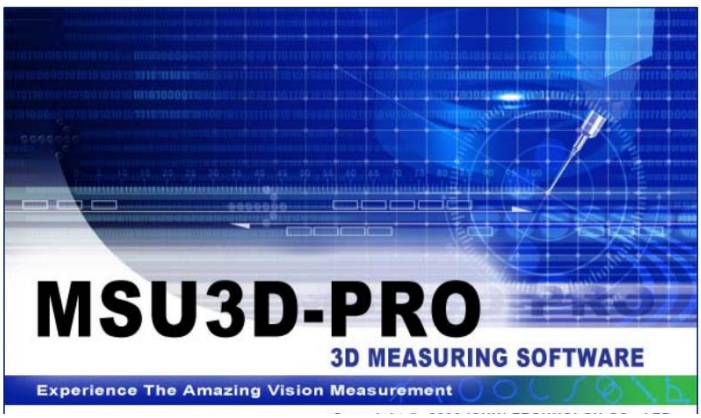
Model No.	VMM-2020CNC	VMM-3020CNC	VMM-4030CNC
X Y Z Measuring range mm	200×200×150	300×200×150	400×300×200
Glass table size mm	260×260	360×260	460×360
Working table size mm	366×366	466×366	640×540
Out dimension L×W×H mm	850×550×900	850×600×900	1050×750×1100
Machine weight（KG)	125	150	250
Structural design	Cantilever structure, the whole machine is made of high-precision granite material, CNC motion control circuit and PC host are placed inside the machine cover		
CCD Camera	1/3 inch high-definition color digital camera (1.3 million pixels) / 0.7~4.5X continuous zoom fixed-frame lens (automatic zoom lens optional)		
Optical image	Working distance: 90mm; Video magnification: 26~172X; Field of view: 8.1~1.3mm (1X additional lens as standard, 2X and 0.5X additional lenses optional)		
Illumination	Program control adjustment, LED four-ring eight-zone surface ring light + bottom parallel contour light (coaxial incident light optional)		
Drive mode	Integrated servo motor fully closed loop CNC control system		
Optical scale resolution	0.001mm		
Accuracy(μm)	X-Y≤（3+L/200）μm Z≤（4+L/200）μm		
Power	220v±10% / 110v±10%（AC） 50Hz (Note: A grounding wire with a resistance of ≤4Ω is required)		
Woking environment	Temperature: 18~24℃, relative humidity: 30~75%, away from vibration sources		

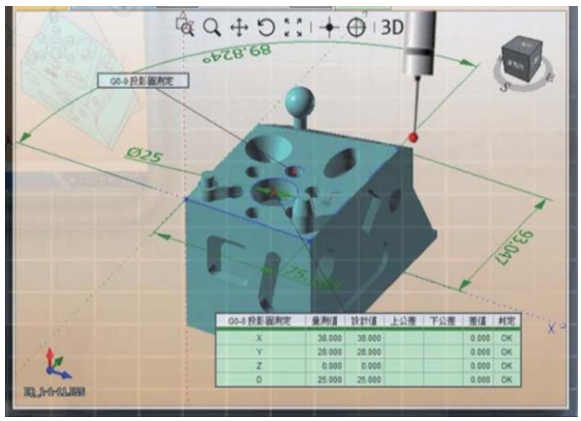
MINI BRIDGE COORDINATE MEASURING MACHINE CMM-M544





Working table	500 X 400 X 400 mm
Dimension	1000×900×1800 mm
Gross weight	100kg
Accessory	CMM,probe,software,PC.(not include PC table)





1. Main Features

■ The CMM coordinate measuring machine adopts the precision beam technology designed by the international advanced finite element analysis method, which makes it have the advantages of strong mechanical structure rigidity, small geometric error, high precision, high performance and high stability.

■ The design adopts a fully enclosed frame bridge structure with good rigidity and light weight. Its structure is simple, compact, large bearing capacity and good motion performance.

■ The Y-direction guide adopts a precision P-level linear guide with high positioning accuracy and good stability.

■ The three axes are made of high-quality granite with a small thermal expansion coefficient. The three axes have the same temperature characteristics, so they have good temperature stability, anti-effective deformation ability, good rigidity and small dynamic geometric error deformation.

■ The beam adopts precision track transmission design technology, which is light in weight, low in center of gravity, strong in rigidity and small in dynamic error, ensuring the stability of the machine.

■ The reflective metal belt grating measurement system is adopted, which has a similar thermal expansion coefficient to most workpieces, ensuring good repeatability.

- The drive system adopts professional-grade high-performance DC servo motors and toothed belt transmission devices to ensure faster, more accurate and better motion performance.
- The system uses a high-performance three-coordinate dedicated control system and professional 3D three-coordinate measurement software (MSU3D PRO), which greatly improves the system's reliability and anti-interference ability and reduces maintenance costs.
- The software uses the powerful MSU3D PRO measurement software package with independent intellectual property rights. Its complete measurement function and online function provide users with a perfect measurement solution.

2. Technical Specification

A. Probe system:

MT8 manual fixed probe + RA20 + RA13 probe
Including standard force measurement module.
Technical parameters: Sensing direction ±X ±Y +Z
Probe interface M2
Probe Weight 22 g
Length measurement system: Reflective metal tape grating scale
Indication error: E≤3+L/300 m
Detection error: R≤2.2 m;

B.Working environment

Temperature: 20±2
Humidity: 40%-70%
Power supply: 220V10%, 50HZ-60HZ
Gas source: ≥0.55MP

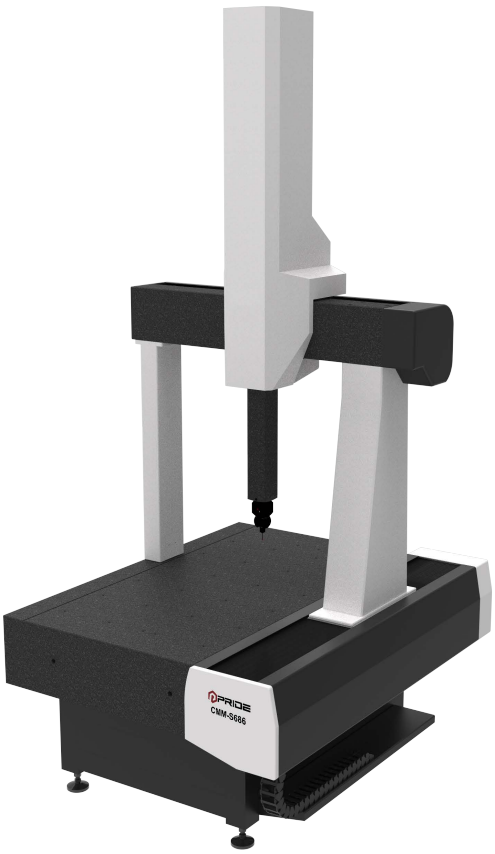
3. Software system MSU3D PRO software

- With a full set of independent intellectual property rights and powerful functions, MSU3D PRO software package combines modern coordinate measurement technology with modern industrial processing technology's geometric dimensions,tolerance assessment and other testing requirements in the best way. Whether it is a simple box-type workpiece or a complex contour surface workpiece, MSU3D PRO software provides a perfect measurement solution for it.
- Configuration of measurement environment parameters and motion parameters;
- Configuration and calibration of probe system;
- Acquisition of measurement points;
- Basic geometric elements;
- Construction, conversion, reproduction, projection, storage/calling and related calculations of elements;
- Establishment, storage/calling and conversion of coordinate system and workpiece coordinate system;
- Evaluation of dimensional tolerance and form and position tolerance;
- Saving and importing of measurement result files;
- CAD import and conversion;
- Unification of model coordinate system and workpiece coordinate system;
- Creation and measurement of section lines;
- Automatic measurement and deviation output;
- Offline programming of workpieces;
- Display of measurement paths and simulated measurement operation;
- Visualization of measurement results and output of graphical reports;
- Output of multiple data files;
- Measurement result report templates in word and excel formats;
- Parametric automatic measurement of characteristic elements;
- Compilation of measurement programs and program-controlled measurement;
- Intelligent self-learning measurement.

STANDARD BRIDGE COORDINATE MEASURING MACHINE

INTRODUCTION

The standard bridge CMM features a traditional bridge structure with high-rigidity, fully enclosed air bearing guide rails that ensure optimal dynamic performance. The design has been optimized for weight reduction, maintaining structural rigidity while enabling high-speed, precise measurements.Our measurement range up to 1500x3000x1200mm.



FEATURES

- **Rapid Measurement Speeds**
  This classic model achieves measurement acceleration up to 1000mm/S^2 and speeds reaching 700mm/s， ensuring fast and efficient data collection.
- **Lighter and More Robust Design**
  Building on the foundation of the high-precision moving bridge CMM, this model incorporates a modular design that balances high rigidity with a lighter structure， reducing operational costs without compromising performance.
- **High-Resolution Grating Technology**
  Equipped with high-resolution grating scales, the machine offers strong anti-interference capabilities and wear resistance， ensuring precise three coordinate positioning.
- **Three-Axis Transmission Module for Error-Free Precision**
  The three axes utilize a backlash-free flat belt transmission system, minimizing mechanical vibration and eliminating jitter during high-speed measurements, guaranteeing precise and accurate results

Measurement Range (mm) and Accuracy (μm)

Model No.	X-Axis Travel	Y-Axis Travel	Z-Axis Travel	MPEe	MPEp
CMM-S686	600	800	600	2.0 + L / From 300	2.2
CMM-S8100	800	1000	600	2.2 + L / From 300	2.5

OPTIONAL ACCESSORIES

			
TP10 High-Speed Indexing Automatic Probe Head	TD20 Semi- Automatic Probe Head	TD22 Vibration Isolation System	TD23 Temperature Compensation System

HIGH-PRECISION BRIDGE COORDINATE MEASURING MACHINE

INTRODUCTION

The high-precision bridge CMM masterfully meets the demands of industries like precision hardware, mold making, and digital electronics,offering exceptional accuracy down to 0.9 μm. Its ingeniously designed four-sided air-bearing guideway marries robustness with dynamic excellence, creating a seamless union of efficiency and precision.Our measurement range up to 1500x3000x1200mm.



FEATURES

- **Elegance in Lightness and Dynamics**
  The moving bridge architecture,refined through advanced finite element analysis, embbodies the perfect synthesis of strength and lightness, elevating the machine's dynamic rigidity to new heights.
- **Granite: The Pillar of Enduring Stability**
  In pursuit of unwavering stability and resilience, our Pride selects the finest, densely structured granite to craft the workbench and Y-axis.The X-axis and Z-axis, meticulously optimized， for rigidity, offer the disceming user a choice between the precision of ceramics or the steadfastness of granite beams.
- **Effortless Workpiece Handling**
  The ergonomic, open-frame design of the workbench invites effortless loading and unloading of workpieces, enhancing both ease and efficiency.
- **Precision in Motion: The Air-Bearing Guideway**
  The high-rigidity, four-sided air-bearing guideway is the comerstone of this machine's unwavering accuracy and long-term stability, ensuring every measurement is a testament to precision.
- **Responsive and Refined Transmission**
  Driven by a high-performance DC servo motor and a toothless mesh transmission system, the machine delivers an experience of unmatched agility, precision, and stability in operation.

Measurement Range (mm) and Accuracy (μm)

Model No.	X-Axis Travel	Y-Axis Travel	Z-Axis Travel	MPEe	MPEp
CMM Pro-566	500	600	500	0.9 + L / From 300	1.0

OPTIONAL ACCESSORIES

						
PS60 Scanning Probe	TP10 High-Speed Indexing Automatic Probe Head	TP11 High Speed Indexing Automatic Probe Head	TD20 Semi-Automatic Probe Head	SC30 Compact Scanning Probe	TD22 Vibration Isolation System	TD23 Temperature Compensation System