

ASEL - Machine production
Bakic 33, 33520 Slatina - CROATIA
tel: +385 33 400 570 Fax: +86 851 5822114

ASEL

Catalog 2011



Content

Φ400mm Digital Vertical Profile Projector VP16-2515.....	01
Φ400mm Digital Vertical Profile Projector VB16-2010.....	02
Φ300mm Digital Vertical Profile Projector VP12-2515.....	03
Φ300mm Digital Vertical Profile Projector Vexus VB12 Series	04
Φ300mm Digital Vertical Profile Projector VT12 Series.....	06
Φ300mm Digital Horizontal Profile Projector HB12-2010.....	08
Φ400mm Digital Horizontal Profile Projector HB16 Series.....	09
Φ600mm Digital Horizontal Profile Projector HB24 Series.....	10
2D Manual Video Measuring Machine VMM Series.....	11
3D Manual Video Measuring Machine Pomeas VMM-P Series.....	12
2D NC Video Measuring Machine VMM-NC Series.....	13
2.5D Manual Video Measuring System Vexus VM Series.....	14
3D Manual Video Measuring System Vexus VMP Series.....	15
2D CNC Video Measuring Machine Vexus VMC Series	16
3D CNC Video Measuring Machine Vexus VMCP Series.....	17
2.5D Manual Large Video Measuring Machine VML Series	18
2.5D CNC Video Measuring Machine VML-CNC Series.....	19
Vertical Video Projector VTC Series.....	20
Horizontal Video Projector HTV Series.....	21
Measuring Microscope STM505 Series.....	22
Digital Measuring Microscope STM Series.....	23
Measuring Microscope SVM505 Series	24
Digital Measuring Microscope SVM Series	25
Stereo Magnifier ST430	26
Scale Transfer U3.....	27
Linear Scale.....	28
Digital Readout DP100 & DP300	30
Measuring Software QuickMeasuring 1.0 Version	32
Measuring Software QuickMeasuring 2.0-4.2 Version	34
Objectives	37
Vision Captuer Card	38
CCD Camera	38
Zoom Lens	39
Working Cupboard	40
Rotary Table	40
Renishaw Touch Probe MCP Series	40
LED Lightsource	41
Universal Accessories.....	41

Φ400mm Digital Vertical Profile Projector VP16-2515



VP16-2515(511-421)



VP16-2515Z(511-421)



VP16-2515 Characteristics:

- 400mm diameter screen with digital protractor;
- Projector body lifting system to focus;
- 250x150mm precision movement workstage;
- Halogen profile and surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, rotary table, foot-switch, etc

Technical Specifications	VP16-2515 (Order#: 511-421)
Screen Diameter	Φ412mm, effective range ≥ Φ400mm (with "*" reticle)
Digital Readout	DP100 (561-101)
Stage Travel: X and Y-axis	250x150 mm
Metal Stage Dimension	450x280 mm
Glass Stage Dimension	306x196 mm
Resolution of X and Y-scale	0.0005 mm
Z-axis Travel:	90 mm (for focusing)
Rotary Range of Screen	0~360°
Resolution of Rotary Indicator	1'/0.01°
Accuracy	≤3+L/75 (um)
Power Supply	AC110V/60Hz; 220V/50Hz; 400W
Instrument Illumination	24V/150W halogen lamp
Dimension (DxW xH)	760x530x100 mm
Instrument Gross/Net Weight	260/220Kg
Packing Dimension(LxWxH)	1540x790x1500mm

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	VX16-5x Objective	511*W01	Holder Clamp	582-101
Digital Readout DP300	561-301	VX16-20x Objective	511*W21	V-shape Clamp	582-102
Foot-Switch ST150	581-541	VX16-50x Objective	511*W31	Swivel center support	582-103
Working Cupboard ST02	581-621	VX16-100x Objective	511*W41	Printer Paper	581-911

Standard Delivery	Order #	Quantity	Standard Delivery	Order #	Quantity
Digital Readout DP100	561-101	1SET	VX16-10X Objective	511*W11	1SET
Power Cable	581-101	1PC	Built-in Mini-printer	581-901	1PC

Φ400mm Digital Vertical Profile Projector VB16-2010



VB16-2010(511-411)



VB16-2010 Characteristics

- 400mm diameter screen with digital protractor;
- Working stage lifting system to focus;
- 200x100mm precision movement workstage;
- Halogen profile and surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, rotary table, foot-switch, etc

Technical Specifications	VB16-2010 (Order#: 511-411)
Screen Diameter	Φ412mm, effective range ≥ Φ400mm (with "※" reticle)
Stage Travel: X and Y-axis	200X100 mm
Metal Stage Dimension	350x170mm
Glass Stage Dimension	246x120mm
Resolution of X and Y-scale	0.0005 mm
Z-axis Travel:	90 mm (for focusing)
Rotary Range of Screen	0~360°
Resolution of Rotary Indicator	1'0.01°
Accuracy	≤3+L/75 (um)
Digital Readout	DP100(561-101)
Instrument Illumination	24V/150W halogen lamp
Power Supply	AC110V/60Hz; 220V/50Hz; 400W
Dimension (DXWX H)	760X530X1100 mm
Instrument Gross/Net Weight	220/200Kg
Packing Dimension(LxWxH)	1540x790x1500mm

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	VX16-5x Objective	511*W01	Holder Clamp	582-101
Digital Readout DP300	561-301	VX16-20x Objective	511*W21	V-shape Clamp	582-102
Foot-Switch ST150	581-541	VX16-50x Objective	511*W31	Swivel center support	582-103
Working Cupboard ST02	581-621	VX16-100x Objective	511*W41	Printer Paper	581-911

Standard Delivery	Order #	Quantity	Standard Delivery	Order #	Quantity
Digital Readout DP100	561-101	1SET	VX16-10X Objective	511*W11	1SET
Power Cable	581-101	1PC	Built-in Mini-printer	581-901	1PC

Φ300mm Digital Vertical Profile Projector VP12-2515 Series



VP12-2515Z(511@311)



VP12-2515(511@301)



VP12-2515 Characteristics:

- 300mm diameter screen with digital protractor;
- Projector body lifting system to focus;
- 250x150mm precision movement workstage;
- Halogen profile and surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, rotary table, foot-switch, etc

VP12-2515 Specifications:

Model	Reverse Image	VP12-2515(Orde#:511@301)
	Obverse Image	VP12-2515Z(Orde#:511@311)
Screen Diameter		Φ412mm, effective range ≥ Φ400mm (with "*" reticle)
Digital Readout		DP100 (561-101)
Stage Travel: X and Y-axis		250x150 mm
Metal Stage Dimension		450x280 mm
Glass Stage Dimension		306x196 mm
Resolution of X and Y-scale		0.0005 mm
Z-axis Travel:		90 mm (for focusing)
Rotary Range of Screen		0~360°
Resolution of Rotary Indicator		1'/0.01°
Accuracy		≤3+L/75 (um)
Power Supply		AC110V/60Hz; 220V/50Hz; 400W
Instrument Illumination		24V/150W halogen lamp
Dimension (DxW xH)		760x530x100 mm
Instrument Gross/Net Weight		260/220Kg
Packing Dimension(LxWxH)		1540x790x1500mm

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	Digital Readout DP300	561-301	VX12-20x Objective	511-W21
Foot-Switch ST150	581-541	Edge Detector SED-300	563-301	VX12-50x Objective	511-W31
Rotary Table RT3	581-531	Over-Chart ST140	581-311	VX12-100x Objective	511-W41
Printer Paper	581-911	Working Cupboard ST02	581-621	Working Cupboard ST03	581-631

Φ300mm Digital Vertical Profile Projector Vexus VB12 Series



Vexus VB12-1550 (511*311)

Vexus VB12 Brief Introduction:

Profile Projector VB12 series 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.

Vexus VB12 Characteristics:

- Fashionable design with accurate optical path;
- 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.

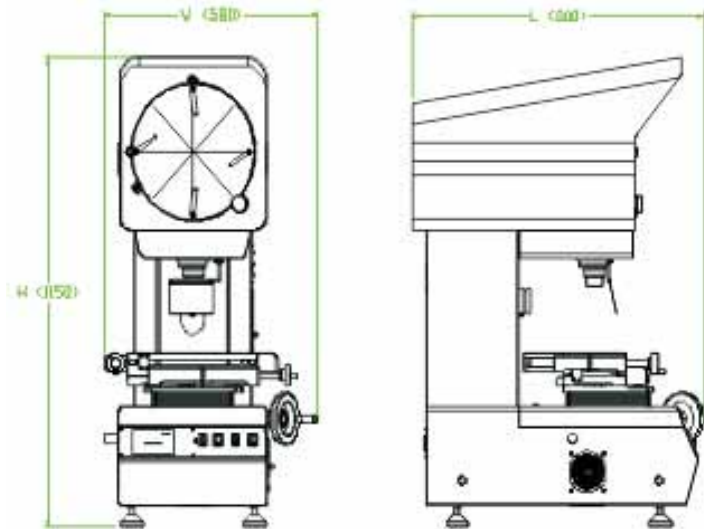
Vexus VB12 Technical Specification

Reverse Image	VB12-1550 (511*311)	VB12-1010 (511*331)	VB 12-1510 (511*351)	VB12-2010(511*371)
Obverse Image	VB12-1550Z(511*321)	VB12-1010Z(511*341)	VB12-1510Z(511*361)	VB12-2010Z(511*381)
Metal Stage Dimension	340x152mm	230x230mm	354x228mm	350x170mm
Glass Stage Dimension	196x96mm	145x145mm	210x160mm	246x120mm
Stage Travel: X-axis	150mm	100mm	150mm	200mm
Stage Travel: Y-axis	50mm	100mm	100mm	100mm
Stage Travel: Z-axis	90mm(for focusing)	90mm(for focusing)	90mm(for focusing)	90mm(for focusing)
Accuracy	≤3+L/75(um)	≤3+L/75(um)	≤3+L/75(um)	≤3+L/75(um)
Screen	Screen Diameter: Φ312mm, Effective Range> Φ300(with * Reticle)			
	Rotary Range of Screen: 0~360°			
	Resolution of Rotary Indication: 1' or 0.01°			
Digital Readout	DP300 (561-301) Multifunctional Data Processing System			
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	215/165Kg	220/170Kg
Dimension(LxWxH)	800x580x1150mm	800x580x1150mm	800x580x1150mm	800x580x1150mm
Packing /Dimension(LxWxH)	990x765x1340mm	990x765x1340mm	990x765x1340mm	990x765x1340mm

Φ300mm Digital Vertical Profile Projector Vexus VB12 Series



Vexus VB12-2010 (511*371)



Vexus VB12-2010Z (511*381)

Standard Delivery	Order #	Quantity	Standard Delivery	Order #	Quantity
Digital Readout DP300	561-301	1SET	VX12-10X Objective	511-W11	1SET
Screen Clamp	581-301	4PCS	Built-in Mini-printer	581-901	1PC
Power Cable	581-101	1PC	Halogen Lamps	581-151	2PCS
DRO Operation Manual	DP300	1COPY	Instrument Manual	Vexus VB12	1COPY

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	VX12-20x Objective	511-W21	Rotary Table RT1	581-511
Foot-Switch ST150	581-541	VX12-50x Objective	511-W31	Rotary Table RT2	581-521
Printer Paper	581-911	VX12-100x Objective	511-W41	Working Cupboard ST02	581-621
Edge Detector SED-300	563-301	Over-Chart ST140	581-311	Working Cupboard ST03	581-631
Holder Clamp	582-101	V-shape Clamp	582-102	Swivel center support	582-103

Φ300mm Digital Vertical Profile Projector VT12 Series



VT12-1550(511-311)

VT12 Brief Introduction:

Profile Projector VT12 series 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.

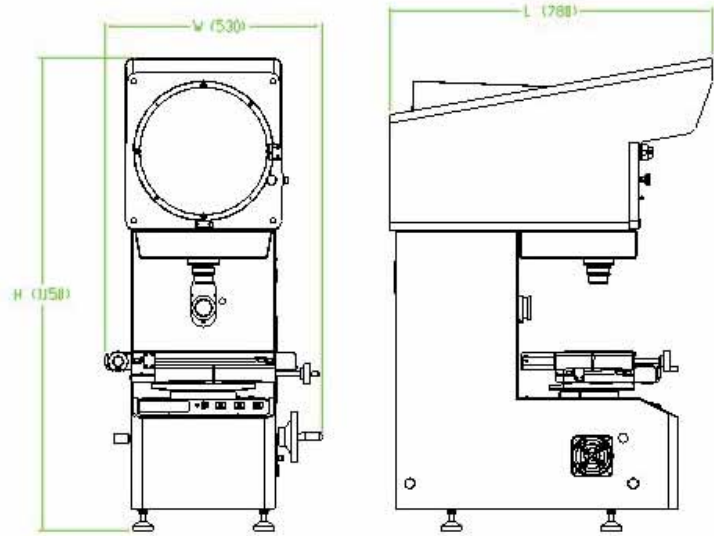
VT12 Characteristics:

- 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.

VT12 Technical Specification:

Reverse Image	VT12-1550(511-311)	VT12-1010(511-331)	VT12-1510(511-351)	VT12-2010(511-371)
Obverse Image	VT12-1550Z(511-321)	VT12-1010Z(511-341)	VT12-1510Z(511-361)	VT12-2010 Z(511-381)
Metal Stage Dimension	340x152mm	230x230mm	354x228mm	350x170mm
Glass Stage Dimension	196x96mm	145x145mm	210x160mm	246x120mm
Stage Travel: X-axis	150mm	100mm	150mm	200mm
Stage Travel: Y-axis	50mm	100mm	100mm	100mm
Stage Travel: Z-axis	90mm(for focusing)	90mm(for focusing)	90mm(for focusing)	90mm(for focusing)
Accuracy	≤3+L/75(um)	≤3+L/75(um)	≤3+L/75(um)	≤3+L/75(um)
Screen	Screen Diameter: Φ312mm, Effective Range> Φ300(with * Reticle)			
	Rotary Range of Screen: 0~360°			
	Resolution of Rotary Indication: 1' or 0.01°			
Digital Readout	DP300 (561-301) Multifunctional Data Processing System			
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	215/165Kg	220/170Kg
Dimension(LxWxH)	780x530x1150mm	780x530x1150mm	780x530x1150mm	780x530x1150mm
Packing /Dimension(LxWxH)	990x765x1340mm	990x765x1340mm	990x765x1340mm	990x765x1340mm

Φ300mm Digital Vertical Profile Projector VT12 Series



VT12-2010Z(511-581)

Standard Delivery	Order #	Quantity	Standard Delivery	Order #	Quantity
Digital Readout DP100	561-101	1SET	VX12-10X Objective	511-W11	1SET
Screen Clamp	581-301	4PCS	Built-in Mini-printer	581-901	1PC
Power Cable	581-101	1PC	Halogen Lamps	581-151	2PCS
DRO Operation Manual	DP100	1COPY	Instrument Manual	JT-3000	1COPY

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	VX12-20x Objective	511-W21	Rotary Table RT1	581-511
Foot-Switch ST150	581-541	VX12-50x Objective	511-W31	Rotary Table RT2	581-521
Digital Readout DP300	561-301	VX12-100x Objective	511-W41	Working Cupboard ST02	581-621
Edge Detector SED-300	563-301	Over-Chart ST140	581-311	Printer Paper	581-911
Holder Clamp	582-101	V-shape Clamp	582-102	Swivel center support	582-103

Φ300mm Digital Horizontal Profile Projector HB12-2010



HB12-2010(512-301)



HB12-2010(512-301)

HB12-2010 Characteristics:

- 300mm diameter screen with digital protractor;
- 200x100mm precision movement workstage;
- Workstage sway range between $\pm 15^\circ$;
- Halogen profile and fiber surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, overchart and foot-switch

Specifications	Model	HB12-2010(512-301)
Worktable	Metal table size	408 x 126mm
	X-axis travel	200mm
	Z-axis travel	100mm
	Y-axis travel	90mm (For Focusing)
	X, Z linear resolution	0.0005mm
	Sway range	$\pm 15^\circ$
	Accuracy	$\leq (4+L/25)\mu\text{m}$
Screen	Screen Diameter	Φ308mm
	Rotary range	0~360°
	Resolution of encoder	1' or 0.01°
Digital readout	DP100 multifunction data processing system	
Illumination	Contour illumination: 24V/150W (Halogen Lamp)	
	Surface illumination: 21V/150W(Optical Fiber)	
Power supply	AC110V/60Hz; 220V/50Hz, 400W	
Gross/Net Weight	200/160Kg	
Dimension(LxWxH)	1160 x 600 x960mm	
Packing dimension	1300 x 880 x1250mm	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	HB12-20x Objective	512-W21	Holder Clamp	582-101
Foot-Switch ST150	581-541	HB12-50x Objective	512-W31	V-shape Clamp	582-102
Digital Readout DP300	561-301	HB12-100x Objective	512-W41	Swivel center support	582-103
Edge Detector SED300	563-301	Over-Chart ST140	581-311	Working Cupboard ST02	581-621

Φ400mm Digital Horizontal Profile Projector HB16 Series



HB16-3015(512-401)



HB16-3020(512-411)

HB16 Characteristics :

- 400mm diameter screen with digital protractor;
- Maximum 300x200mm movement workstage;
- Workstage sway range between $\pm 15^\circ$;
- Halogen profile and fiber surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, foot-switch, etc

Specifications	HB16-3015 (512-401)	HB16-3020 (512-411)
Metal table size	400 x 150mm	400 x 150mm
X-axis travel	300mm	300mm
Z-axis travel	150mm	200mm
Y-axis travel	100mm	100mm
X, Z linear resolution	0.0005mm	0.0005mm
Sway range	$\pm 15^\circ$	$\pm 15^\circ$
Accuracy	$\leq (3+L/75)\mu\text{m}$	$\leq (3+L/75)\mu\text{m}$
Screen Diameter	Φ400mm	Φ400mm
Rotary range	0~360°	0~360°
Resolution of encoder	1' or 0.01°	1' or 0.01°
Digital readout	DP300 multifunction data processing system	
Illumination	Transmission illumination: 24V/150W, Reverberation illumination: 21V/150W halogen lamp	
Power supply	AC110V/60Hz; 220V/50Hz, 400W	
Gross/Net Weight	260/210Kg	270/220Kg
Dimension(LxWxH)	1300 x 590 x 1100mm	1350 x 640 x 1150mm
Packing dimension	1540 x 790 x 1500mm	1540 x 790 x 1500mm

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	HB16-5x Objective	512*W01	Holder Clamp	582-101
Foot-Switch ST150	581-541	HB16-20x Objective	512*W21	V-shape Clamp	582-102
Working Cupboard ST02	581-621	HB16-50x Objective	512*W31	Swivel center support	582-103
Working Cupboard ST03	581-631	HB16-100x Objective	512*W41	Printer Paper	581-911

Φ600mm Digital Horizontal Profile Projector HB24 Series



HB24-3015(512-601)



HB24-3020(512-611)



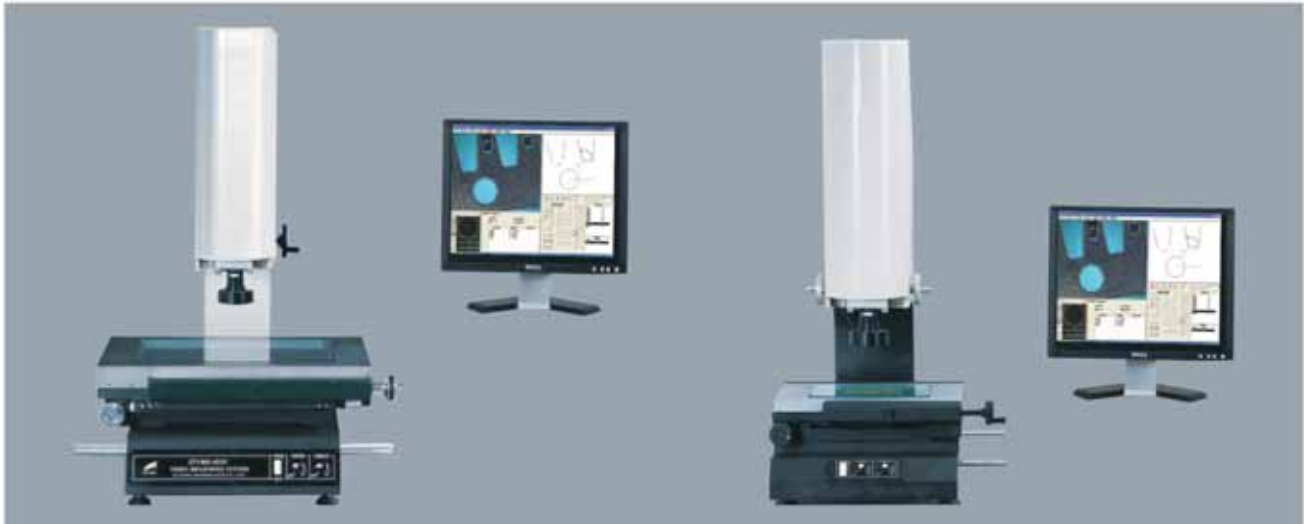
HB24 Characteristics :

- 600mm diameter screen with digital protractor;
- Maximum 300x200mm movement workstage;
- Workstage sway range between $\pm 15^\circ$;
- Halogen profile and fiber surface illumination;
- Geometric multifunction data processing system;
- Available mini-printer, foot-switch, etc

Specifications	HB24-3015 (512-601)	HB24-3020 (512-611)
Metal table size	455 x 126mm	455 x 126mm
X-axis travel	300mm	300mm
Z-axis travel	150mm	200mm
Y-axis travel	100mm(for focusing)	100mm(for focusing)
X, Z linear resolution	0.0005mm	0.0005mm
Sway range	$\pm 15^\circ$	$\pm 15^\circ$
Accuracy	$\leq (3+L/75)\mu\text{m}$	$\leq (3+L/75)\mu\text{m}$
Screen Diameter	Φ600mm	Φ600mm
Rotary range	0~360°	0~360°
Resolution of encoder	1' or 0.01°	1' or 0.01°
Digital readout	DP300 multifunction data processing system	
Illumination	Transmission illumination: 24V/150W,	
	Reverberation illumination: 21V/150W halogen lamp	
Power supply	AC110V/60Hz; 220V/50Hz, 400W	
Gross/Net Weight	400Kg	420Kg
Dimension(LxWxH)	1500 x 790 x 1300mm	1550 x 840 x 1350mm
Packing dimension	1540 x 790 x 1500mm	1540 x 790 x 1500mm

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Measuring Software	QM1.0	HB24-5x Objective	512@W01	Holder Clamp	582-101
Foot-Switch ST150	581-541	HB24-20x Objective	512@W21	V-shape Clamp	582-102
Printer Paper	581-911	HB24-50x Objective	512@W31	Swivel center support	582-103
Working Cupboard ST04	581-641	HB24-100x Objective	512@W41		

2D Manual Video Measuring Machine VMM series



VMM-4030(521*401)

VMM-2515 (521*251)

Specifications	VMM-1510	VMM-2010	VMM-2515	VMM-3020	VMM-4030	VMM-5030
Order #	521*151	521*201	521*251	521*301	521*401	521*501
Metal table size	354 x 228mm	404 x 228mm	450 x 280mm	510 x 290mm	606 x 466mm	700 x 450mm
Glass table size	210 x 160mm	260 x 160mm	306 x 196mm	350 x 280mm	450 x 350mm	550 x 350mm
X,Y-axis travel	150 x 100mm	200 x 100mm	250 x 150mm	300 x 200mm	400 x 300mm	500 x 300mm
Z-axis travel	150mm	150mm	150mm	150mm	150mm	150mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$
Measuring software	QM2.0	QM2.0	QM2.0	QM2.0	QM2.0	QM2.0
Net Weight	100kg	110kg	120kg	200kg	240kg	500kg
Dimension(mm)	700 x 600 x 900	700x600x900	760x600x900	770x590x1000	950 x700x1100	1600x800x1660

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM2.0	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	435-010
Power, AV, RS232 Cable		Scale Transfer U3	564-301	Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Digital Readout DP300	561-301	Navitar Click zoom lens	421-101	Rotary Table RT1	581-511
Digital Readout DP100	561-101	Navitar Coaxial Zoom Lens	421*001	Rotary Table RT2	581-521
Foot-Switch ST150	581-541	Sony CCD camera MC3	484-123	Working Cupboard ST03	581-631

3D Manual Video Measuring Machine Pomeas VMM-P series



VMM-1510P(521*151)

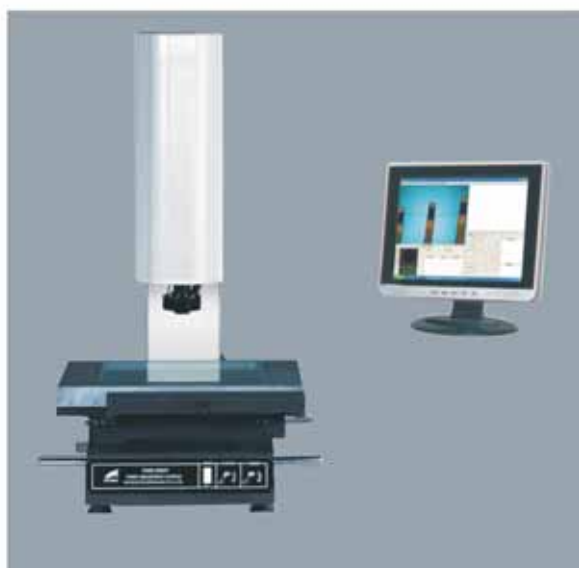
VMM-4030 P(521*401)

Specifications	VMM-1510P	VMM-2010P	VMM-2515P	VMM-3020P	VMM-4030P	VMM-5030P
Order #	521*151	524*201	524*251	524*301	524*401	524*501
Metal table size	354 x 228mm	404 x 228mm	450 x 280mm	510 x 290mm	606 x 466mm	700 x 450mm
Glass table size	210 x 160mm	260 x 160mm	306 x 196mm	350 x 280mm	450 x 350mm	550 x 350mm
X,Y-axis travel	150 x 100mm	200 x 100mm	250 x 150mm	300 x 200mm	400 x 300mm	500 x 300mm
Z-axis travel	150mm	150mm	150mm	150mm	150mm	150mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm
Renishaw touch probe	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)
X,Y-axis accuracy	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$
Measuring software	QM3.0	QM3.0	QM3.0	QM3.0	QM3.0	QM3.0
Net Weight	100kg	110kg	120kg	200kg	240kg	500kg
Dimension(mm)	700 x 600 x 900	700x600x900	760x600x900	770x590x1000	950 x 700x1100	1600x800x1660

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM3.0	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	435-010
Renishaw MCP probe K1	581-723	Anti-dust Cover	581-201	Scale Transfer U3	564-301
Length Block SGR100	581-831	Renishaw Probe MCP-K2	581-721	Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Renishaw Probe MCP-K1	581-711	Navitar Click zoom lens	421-101	Rotary Table RT1	581-511
Renishaw Probe MCP-K3	581-731	Navitar Coaxial Zoom Lens	421*001	Rotary Table RT2	581-521
Foot-Switch ST150	581-541	Sony CCD camera MC3	484-123	Working Cupboard ST03	581-631

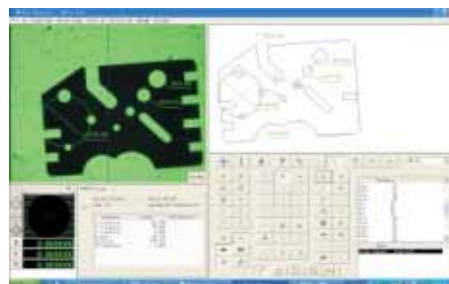
2D NC Video Measuring Machine VMM-NC series



VMM-3020NC(522*301)

VMM-NC Characteristic:

- X, Y-axis automatic motor driven movement;
- Z-axis automatic focus;
- 40-division adjustable LED illuminator;
- Measuring software QuickMeasuring 4.0;



Measuring software QM 4.0

Specifications	VMM-2515NC	VMM-3020NC	VMM-4030NC	VMM-5030NC
Order #	522*251	522*301	522*401	522*501
Metal table size	450 x 280mm	510 x 290mm	606 x 466mm	700x 450mm
Glass table size	306x 196mm	350x 280mm	450x 350mm	550 x 350mm
Travel: X,Y	250 x 150mm	300 x 200mm	400 x 300mm	500 x 300mm
Z-axis travel	150mm	150mm	150mm	150mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$
Measuring software	QM4.0	QM4.0	QM4.0	QM4.0
Net Weight	120kg	200kg	240kg	500kg
Dimension	700 x 600 x 900	700 x 600 x 1000	950 x 700 x 1100	1600 x 800 x 1660

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM4.0	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	435-010
Power, AV, RS232 Cable		Scale Transfer U3	564-301	Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Digital Readout DP300	561-301	Navitar Click zoom lens	421-101	Rotary Table RT1	581-511
Digital Readout DP100	561-101	Navitar Coaxial Zoom Lens	421*001	Rotary Table RT2	581-521
Operation Joystick	581-542	Sony CCD camera Mc3	484-123	Working Cupboard St03	581-631

2.5D Manual Video Measuring System Vexus VM Series



Vexus VM-2010(521-201)

Vexus VM-2515(521-251)

Vexus VM Characteristic:

- Fashionable shape with stable ark pillar granite design;
- Adjustable 4-division LED illuminator controlled by panel or software;
- Obviously assistant laser position system;
- Powerful measuring software QuickMeasuring 2.1 version;

Technical Specifications	Vexus VM-2010	Vexus VM -2515	Vexus VM -3020	Vexus VM -4030	Vexus VM -5030
Order #	521-201	521-251	521-301	521-401	521-501
Metal table size	404 x 228mm	450 x 280mm	510 x 290mm	606 x 466mm	700 x 450mm
Glass table size	260 x 160mm	306 x 196mm	350 x 280mm	450 x 350mm	550 x 350mm
Travel: X,Y	200 x 100mm	250 x 150mm	300 x 200mm	400 x 300mm	500 x 300mm
Z-axis travel	200mm	200mm	200mm	200mm	200mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$
Measuring software	QM2.1	QM2.1	QM2.1	QM2.1	QM2.1
Net Weight	300kg	320kg	460kg	540kg	600kg
Dimension(mm)	700x600x900	760x600x900	770x590x1000	950 x700x1100	1600x800x1660

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM2.1	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-101	Capture Card 7130	527-130	LED Lightsource	425-040
Laser positing sensor	591-001	Working Cupboard ST03	581-631	Scale Transfer U3	564-301
Power, AV, RS232 Cable		17" quadrate LCD monitor		Dell PC host	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Digital Readout DP300	561-301	Navitar Click zoom lens	421-101	Rotary Table RT1	581-511
Sony CCD camera MC3	484-123	Navitar Coaxial Zoom Lens	421*001	Rotary Table RT2	581-521

3D Manual Video Measuring System Vexus VMP Series



Vexus VMP-2010(521-201)

Vexus VMP-2515(521-251)

Vexus VMP Characteristic:

- Fashionable shape with stable granite ark pillar granite design;
- Adjustable 4-division LED illuminator controlled by panel or software;
- Renishaw touch probe 3D measuring functions;
- Obviously assistant laser position system;
- Powerful measuring software QuickMeasuring 3.1 version;

Technical Specifications	Vexus VM-2010P	Vexus VM-2515P	Vexus VM-3020P	Vexus VM-4030P	Vexus VM-5030P
Order #	524-201	524-251	524-301	524-401	524-501
Metal table size	404 x 228mm	450 x 280mm	510 x 290mm	606 x 466mm	700 x 450mm
Glass table size	260 x 160mm	306 x 196mm	350 x 280mm	450 x 350mm	550 x 350mm
Travel: X,Y	200 x 100mm	250 x 150mm	300 x 200mm	400 x 300mm	500 x 300mm
Z-axis travel	200mm	200mm	200mm	200mm	200mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.0005mm
Renishaw touch probe	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)
X,Y-axis accuracy	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$
Measuring software	QM3.1	QM3.1	QM3.1	QM3.1	QM3.1
Net Weight	300kg	320kg	460kg	540kg	600kg
Dimension(mm)	700x600x900	760x600x900	770x590x1000	950 x700x1100	1600x800x1660

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM3.1	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-101	Capture Card 7130	527-130	LED Lightsource	425-040
Laser positing sensor	591-001	Working Cupboard St03	581-631	Scale Transfer U3	564-301
Length Block SGR100	581-831	Renishaw Probe MCP-K2	581-721	Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Renishaw Probe MCP-K1	581-711	Navitar Click zoom lens	421-101	Rotary Table RT1	581-511
Renishaw Probe MCP-K3	581-731	Navitar Coaxial Zoom Lens	421*001	Rotary Table RT2	581-521
Foot-Switch St150	581-541	Sony CCD camera MC3	484-123		

2D CNC Video Measuring Machine Vexus VMC Series



Vexus VMC3020(523-301)

Vexus VMC Characteristic

- Creative modern-shape-design;
- Fashionable auto-painting-craftwork ;
- Steady granite base;
- Stable imported V-shape guide;
- Precise metal and glass worktable;
- High-speed 3-axis CNC driven motor;
- Adjustable USB 40-division ring LED illumination;
- Advanced Navitar 0.7 ~ 4.5X Zoom lens;
- Wonderful SONY 1/2`` Color CCD camera;
- Powerful 2.5D measuring software QuickMeasuring 4.1 version.

Vexus VMC Applications:

Vexus 2D VMC series video measuring machine is high-power non-contact optical measuring instrument. It is mainly applicable for the quick and batch measurement of PCB, precise mould; rubber and plastic and other industries.

Technical Specification	Vexus VMC3020	Vexus VMC3030	Vexus VMC4030	Vexus VMC5030
Order #	523-301	523-331	523-401	523-501
Metal table size	450 x 350mm	450 x 450mm	550 x 450mm	650x 450mm
Glass table size	350x 250mm	350x 350mm	450x 350mm	550 x 350mm
Travel: X,Y	300x 200mm	300 x 300mm	400 x 300mm	500 x 300mm
Z-axis travel	200mm	200mm	200mm	200mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$	$\leq (3+L/200)\mu\text{m}$
Measuring software	QM4.1	QM4.1	QM4.1	QM4.1
Net Weight	300kg	320kg	460kg	540kg
Dimension(mm)	700x600x900	760x600x900	770x590x1000	950 x700x1100

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM4.1	CCD Camera MC3	484-123	Navitar Clickzoom lens	421-101
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-400
Scale Transfer U3	564-301	Power, AV, RS232 Cable		Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Working Cupboard ST03	581-631	Navitar motor zomm lens	422-001	Operation Joystick	581-542
Navitar Coaxial Zoom Lens	421*001				

3D CNC Video Measuring Machine Vexus VMCP Series



Vexus VMCP3020P (526-301)

Vexus VMCP Characteristic

- Creative modern-shape-design;
- Fashionable auto-painting-craftwork ;
- Steady granite base;
- Stable imported V-shape guide;
- Precise metal and glass worktable;
- High-speed 3-axis CNC driven motor;
- Adjustable USB 40-division ring LED illumination;
- Advanced Navitar 0.7 ~ 4.5X Zoom lens;
- Wonderful SONY 1/2`` Color CCD camera;
- Powerful 3D measuring software QuickMeasuring 4.2 version.

Vexus VMCP Applications

Vexus 3D VMCP series video measuring machine is high-power contact optical measuring instrument. It is mainly applicable for the quick and batch measurement of PCB, precise mould, rubber and plastic and other industries.

Technical Specification	Vexus VMCP3020P	Vexus VMCP3030P	Vexus VMCP4030P	Vexus VMCP5030P
Order #	526-301	526-331	526-401	526-501
Metal table size	450 x 350mm	450 x 450mm	550 x 450mm	650x 450mm
Glass table size	350x 250mm	350x 350mm	450x 350mm	550 x 350mm
Travel: X,Y	300x 200mm	300 x 300mm	400 x 300mm	500 x 300mm
Z-axis travel	200mm	200mm	200mm	200mm
Resolution	0.0005mm	0.0005mm	0.0005mm	0.0005mm
Renishaw touch probe	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)	MCP-K2(581-721)
X,Y-axis accuracy	≤(3+L/200)um	≤(3+L/200)um	≤(3+L/200)um	≤(3+L/200)um
Measuring software	QM4.2	QM4.2	QM4.2	QM4.2
Net Weight	300kg	320kg	460kg	540kg
Dimension(mm)	700x600x900	760x600x900	770x590x1000	950 x700x1100

Standard Delivery	Order #	Standard Item	Order #	Standard Item	Order #
Measuring Software	QM4.2	CCD Camera MC3	484-123	Navitar Clickzoom lens	421-101
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-400
Scale Transfer U3	564-301	Renishaw Probe MCP-K2	581-721	Dell PC System	

Optional Accessories	Order #	Optional item	Order #	Optional item	Order #
Renishaw Probe MCP-K1	581-711	Navitar motor zoom lens	422-001	Operation Joystick	581-542
Renishaw Probe MCP-K3	581-731	Navitar Coaxial Zoom Lens	421*001	Working Cupboard ST03	581-631

2.5D Manual Large Video Measuring Machine VML Series



VML-5030(521-531)

VML Characteristic

- Steady granite base;
- Stable imported V-shape guide;
- Precise metal and glass worktable;
- Adjustable USB 4-division ring LED illumination;
- Advanced Navitar 0.7 ~ 4.5X Zoom lens;
- Wonderful SONY 1/2" Color CCD camera;
- Powerful 2.5D measuring software QuickMeasuring 2.1 version.

VML Applications:

VML manual series video measuring machine is high-power non-contact optical measuring instrument with large working travel, and it is mainly applicable for the measurement of large PCB, LCD and other big parts.

Technical Specification	VML-5030	VML-6040	VML-6060
Order #	521-531	521-641	521-661
Metal table size	760 x 640mm	800 x 550mm	800x 800mm
Glass table size	550x 350mm	650x 450mm	650 x 650mm
Travel: X,Y	500 x 300mm	600 x 400mm	600 x 600mm
Z-axis travel	150mm	150mm	150mm
Resolution	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$
Measuring software	QM2.1	QM2.1	QM2.1

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM2.1	CCD Camera MC3	484-123	Navitar Clickzoom lens	421-101
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-400
Scale Transfer U3	564-301	Power, AV, RS232 Cable		Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #
Navitar motor zoom lens	422-001	Operation Joystick	581-542
Navitar Coaxial Zoom Lens	421*001	Working Cupboard ST03	581-631

2.5D CNC Video Measuring Machine VML-CNC Series



VML-6060CNC(523-661)

VML-CNC Characteristic

- Modern shape design;
- Fashionable auto-painting-craftwork ;
- Steady granite base;
- Stable imported V-shape guide;
- Precise metal and glass worktable;
- High-speed 3-axis CNC driven motor;
- Adjustable USB 4division ring LED illumination;
- Advanced Navitar 0.7 ~ 4.5X Zoom lens;
- Wonderful SONY 1/2`` Color CCD camera;
- Powerful 2.5D measuring software QuickMeasuring 4.1 version.

VML-CNC Applications:

VML-CNC video measuring machine is high-power non-contact optical measuring instrument with large working travel, and it is mainly applicable for the measurement of large PCB,LCD and other big parts.

Technical Specification	VML-6060CNC	VML-1080CNC	VML-1210CNC
Order #	523-661	523-181	523-121
Metal table size	1140 x 1000mm	1140x 1360mm	800x 800mm
Glass table size	1050x 850mm	1050 x 1250mm	650 x 650mm
Travel: X,Y	1000 x 800mm	1000 x 1200mm	600 x 600mm
Z-axis travel	200mm	200mm	200mm
Resolution	0.0005mm	0.0005mm	0.0005mm
X,Y-axis accuracy	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$	$\leq (3+L/200)\mu m$
Measuring software	QM4.1	QM4.1	QM4.1

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM4.1	CCD Camera MC3	484-123	Navitar Clickzoom lens	421-101
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-400
Scale Transfer U3	564-301	Power, AV, RS232 Cable		Dell PC System	

Optional Accessories	Order #	Optional Accessories	Order #
Navitar motor zomm lens	422-001	Operation Joystick	581-542
Navitar Coaxial Zoom Lens	421*001	Working Cupboard ST03	581-631

Vertical Video Projector VTC Series



VTC 2010 (541-201)



VTC2515 (541-251)

VTC Characteristic

- Solid framework, large LCD touch screen and advanced software
- High quality optics for crisp and clear images
- Excellent repeatability
- Adjustable LED illumination
- High resolution industrial CCD camera
- Lens changeable within the range of 20-120X magnification
- Easy to operate user interface
- Accuracy 0.005mm
- Advanced functionality such as quick measuring of correlative parameters of gear tapers
- Extended function of printing, saving and exporting data
- Excel or TXT report output, DXF input or output

Technical Specification	VTC2010	VTC2510	VTC3020
Order #	541-201	541-251	541-301
(X/Y/Z)Measuring range(mm)	200x100x150	250x150x150	300x200x150
Machine dimension(mm)	650x800x1600		
Operation mode	Manual		
Magnification	20-120X		
Screen dimension	19" touch-screen LCD monitor		
Lens work range	95mm		
X,Y-axis resolution	0.0005mm		
Accuracy	$\leq (3+L/200) \mu m$		
Repeatability	5 μm		
Measuring software	QuickMeasuring 2.0		
Color CCD Camera	MC1(484-131)		
Suitable environment	Workshop and Metrology room		
Stage load capacity	10Kg		
Power supply	AC110V/60Hz; 220V/50Hz		

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM2.0	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-010

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
CCD Camera MC3	484-123	Navitar Click zoom lens	421-101	Working Cupboard ST04	581-641

Horizontal Video Projector HTV Series



HTV30515 (542-311)



HTV3020 (542-321)

HTV Characteristic:

- Solid framework, large LCD touch screen and advanced software
- High quality optics for crisp and clear images
- Excellent repeatability
- Adjustable LED illumination
- High resolution industrial CCD camera
- Lens changeable within the range of 20-120X magnification
- Easy to operate user interface
- Accuracy 0.005mm
- Advanced functionality such as quick measuring of correlative parameters of gear tapers
- Extended function of printing, saving and exporting data
- Excel or TXT report output, DXF input or output

Technical Specification	HTV3015	HTV3020
Order #	542-311	542-321
(X/Y/Z)Measuring range(mm)	300x150x150	300x125x200
Machine dimension(mm)	650x800x1600	
Operation mode	Manual	
Magnification	20-120X	
Screen dimension	19" monitor (HV) or 19" touch-type LED monitor (HTV)	
Lens work range	95mm	
X,Y-axis resolution	1um	
Accuracy	$\leq (3+L/200)\mu m$	
Repeatability	5um	
Measuring software	QuickMeasuring 2.0	
Color CCD Camera	430,000pixel	
Suitable environment	Workshop and Metrology room	
Stage load capacity	15Kg	
Power supply	AC110V/60Hz; 220V/50Hz	

Standard Delivery	Order #	Standard Delivery	Order #	Standard Delivery	Order #
Measuring Software	QM2.0	CCD Camera MC1	484-131	Zoom Lens 0.7~4.5x	421-000
Calibration Block	581-801	Capture Card 7130	527-130	LED Lightsource	425-010

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
CCD Camera MC3	484-123	Navitar Click zoom lens	421-101	Working Cupboard ST04	581-641

Measuring Microscope STM505 Series



STM505 (531-012)



STM505D (531-022)



5x objective (531-W52)
10x objective (531-W12)
10x eyepiece (531-M12)

Specification	STM505 (531-012)	STM505D (531-022)
Micrometer Heads	Measuring travel: 25x25mm; 50x50mm (531-H02)	Measuring travel: 50x50mm (164-162)
	25mm travel+25mm length gauge (581-842)	50mm measuring travel
	Mechanic Resolution: 0.002mm	Digimatic Resolution: 0.001mm
Working Stage	Metall stage size: 152x152mm (531-A12)	
	Glass stage size: 96x96mm (531-A02)	
	Measuring accuracy $\leq 5\mu\text{m}$	
	Maximum height of work-piece : 115mm	
	Maximum weight of work-piece: 2Kg	
Optical System	Maximum Magification: 150x Visual field: $\varnothing 0.13\text{mm}$ (15x eyepiece(531-M22)+ 10x objective(531-W12));	
	Minimum Magification: 20x Visual field: $\varnothing 6.5\text{mm}$ (10x eyepiece (531-M12)+ 2x objective(531-W02));	
	Standard Magnification: 30x Visual field: $\varnothing 6.5\text{mm}$ (15x eyepiece (531-M22)+ 2x objective (531-W02));	
	Standard Working distance: 67mm	
	Eyepiece protractor range: 360°	
	Eyepiece protractor graduation: 1°	
	Vernier angle reading: 6'	
	Sighting device: cross-reticule	
Optional Accessories	Rotary table RT0: $\varnothing 66\text{mm}$ (581-501)	
	Mechanic microemter head(531-H02) Mitutoyo digimatic measuring head: (164-162)	
	5x objective (531-W52), 10x objective (531-W12); 10x eyepiece (531-M12)	
Power Supply	AC110V/60Hz; 220V/50Hz	
Packing/Instrument Dimension	Carton size: 415x315x420mm; Instument size: 210x333x391mm	
Gross/Net Weight	Approximate: 18Kg/14Kg	

Digital Measuring Microscopes STM Series



STM2010 (532-202)



STM2515 (532-252)



STM Brief Introduction:

High-power Metallurgical Measuring microscope STM2515 is widely used for crystal, integrated circuit(IC) examination and precision measurements.

Specification	STM2010 (532-202)	STM2515 (532-252)
Metal table size	404 x 228mm	450 x 280mm
Glass table size	260 x 160mm	306 x 196mm
X,Y, Z-axis travel	200 x 100x100mm	250 x 150x100mm
X, Y, Z-axis resolution	0.0005mm	0.0005mm
X, Y, Z-axis accuracy	≤3+L/200um	≤3+L/200um
Net Weight	110kg	120kg
Dimension	530x540x850mm	530x540x850mm
Eyepiece	High-eye-point and wide-field Eyepiece: SWF10/22 (532-M12);	
Objectives	Plan Apo Objectives: 2X/0.055 (532-W12)	
	Plan Apo Objectives: 5X/0.14 (532-W22)	
	Plan Apo Objectives: 10X/0.28 (532-W32)	
	Plan Apo Objectives: 50X/0.42 (532-W42)	
Microscope System	Infinitive optical system 50X-500X;	
	Tube lens focal length:200mm;	
	Trinocular microscope head, Inclined at 30°;	
	Interpupillary distance:55-75mm;	
	Long working distance;	
Digital Magnification System	Quintuple Nosepiece;	
	Coaxial optical fiber light-source;	
Digital Measuring System	Sony 1/2`' CCD camera MC3 (484-123)	
	1 x CCD adapter (532-C12)	
	Digital magnification :170X~1700 x	
	Dell PC with 17`` quadrate monitor;	
	Digital readout DP300 (561-301);	
	3D English software QuickMeasuring 3.0 Version (QM3.0)	

Optional Accessories	Order #	Optional Accessories	Order #	Optional Accessories	Order #
Working Cupboard ST03	581-631	Rotary Table RT2	581-521	Rotary Table RT3	581-531

Measuring Microscope SVM505 Series



SVM505 (531-033)



SVM505D (531-034)



Specification	SVM505 (531-033)	SVM505D (531-034)
Digital Micrometer Heads(164-162)	Measuring travel: 50x50mm	
	Digimatic Resolution: 0.001mm	
Working Stage	Metall stage size:152x152mm (531-A12)	
	Glass stage size: 96x96mm (531-A02)	
	Measuring accuracy $\leq 5\mu\text{m}$	
	Maximum height of work-piece :90mm	
	Maximum weight of work-piece: 2Kg	
Microscope Heads (411-003)	Maximum Magification: 270x, visual field: 6.4mm	
	Minimum Magification: 7x, Visual field: 46.9mm	
	30x eyepiece + 4.5x microscope objective +2x adjuvant objective #412-303+#411-003+#413-203	
	10x eyepiece + 0.7x microscope objective #411-003+#411-103	
	Standard Magnification:7~45x #411-003+#412-103	
Optional Accessories	Rotary table RT0: $\varnothing 66\text{mm}$ (581-501)	
	Mechanic microemter head(531-H02) Mitutoyo digimatic measuring head: (164-162)	
	4-Dvision LED lightsource: 413-136	
	2x objective (413-203), 20x eyepiece (412-203); 30x eyepiece (412-303)	
Power Supply	AC110V/60Hz; 220V/50Hz	
Packing/Instrument Dimension	Carton size:415x315x420mm; Instument size: 210x333x391mm	
Gross/Net Weight	Approximate: 18Kg/14Kg	

Digital Measuring Microscopes SVM Series

SVM Brief Introduction:

Measuring microscope SVM2010, SVM2010 is widely used for crystal, integrated circuit(IC) examination and precision measurements.



SVM2010(532*202)



Specifications	SVM2010 (532*202)	SVM2515 (532*252)
Metal table size	404 x 228mm	450 x 280mm
Glass table size	260 x 160mm	306 x 196mm
X,Y, Z-axis travel	200 x 100x100mm	250 x 150x100mm
X, Y Z-axis resolution	0.0005mm	0.0005mm
X, Y, Z-axis accuracy	3+L/200um	3+L/200um
Net Weight	110kg	120kg
Dimension	530x540x850mm	530x540x850mm
Optical Microscope System	Eyepiece: SWF10/23 (412-103; 412*103)	
	Zoom click stereo objectives: 0.7x ~ 4.5x (411*003)	
	Optical magnification: 3.5x ~ 270x	
Digital Magnification System	Sony 1/2`` CCD camera MC3 (484-123)	
	1x CCD adapter (411-C13)	
	Digital magnification: 15x~350x	
Digital Measuring System	Dell PC with 17" quadrature monitor;	
	Digital readout DP300 (561-301);	
	2.5D English software QuickMeasuring 2.0 Version (QM2.0)	

Optional Accessories	Order #	Optional Accessories	Order #	Option Accessories	Order #
Working Cupboard ST03	581-631	Rotary Table RT2	581-521	Rotary Table RT3	581-531
SVM-0.5X adjuvant lens	423*053	SVM-2X adjuvant lens	423*203	SVM-20x eyepiece	412-303

Stereo Magnifier ST430



ST430 (441-438)

ST430 Introduction:

ST430 improves operators' working efficiency and makes operators no longer suffer the strain of eye, neck or back due to the humanistic design. It can be applicable to the field of electronic industry, precision mold, plastic shop, medical diagnosis, public security system, and so on. ST430 with magnification 4-30x and stereo image; rotary turret can together fix three pieces of objective to work, wide-field view and long working distance make the observation more ease and joyful.



ST430 Specifications:

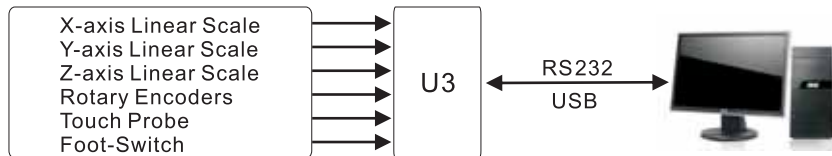
Outfit	Objective magnification	Order #	Total magnification	Working distance	Visual field
Standard	ST430-2X	441-W18	4x	208mm	68 mm
Standard	ST430-4X	441-W28	8x	98 mm	34 mm
Standard	ST430-6X	441-W38	12x	80 mm	22.7 mm
Optional	ST430-8X	441-W48	16x	58 mm	17 mm
Optional	ST430-10X	441-W58	20x	46 mm	13.6 mm
Optional	ST430-15X	441-W68	30x	50 mm	9.1 mm

Scale Transfer U3

Applications:

Scale Transfer U3 is a new linear scales reader and transfer. With the interface functions, the developers develop windows measuring software by connecting with the PC and Linear scales easily.

It is an excellent digital solution with our measuring software QucikMeasuring series for the updating of old profile projector, video measuring machine, measuring microscope and other vision measuring system.



Scale Transfer U3(564-301)

Functions:

- Isolated 3-axis linear scale interface, 24-bit counter is reversible;
- A set of external trigger can lock the value of the 1-axis and 3-axis simultaneous;
- The delay of external signal trigger can lock the value <20us;
- The computation direction (+ or -) is adjustable;
- The signal polarity can be chosen when searching The RI point and the RI signal;
- The digital filter can enhance the anti-jamming Capacity;
- Supply the DLL function library, support the VC++6.0, Borland C++, Builder 4.0/5.0 and other developing platform.

Specifications:

- Power supplied: +5V supplied by the USB interface without external power;
- Power: Max 150mA/5V when not connected with the linear scales, the typical is 100mA/5V;
- Dimension: 150mm x128mm x 51mm(without pad); 150mm x 128mm x 45mm(with pad);
- Parameter of the Linear scales connected with U3. A.B.RI single signal input, orthogonality TTL, frequency<1MHz.Signal Current>1mA.use<70mA/5V.

Configuration:

- Hardware:The manboard supports the USB1.1 interface and RS 232;
- Operating system: Windows XP, Windows Vista, etc.

Linear Scale

Applications:

Linear scale is an optical displacement sensor for position navigation, and it is the necessary parts for modern optical measuring machines and other manufacturing machines. We supply the linear scale with 0.5um, 1um, 5um resolution, and the effective sensor length reach 3m.



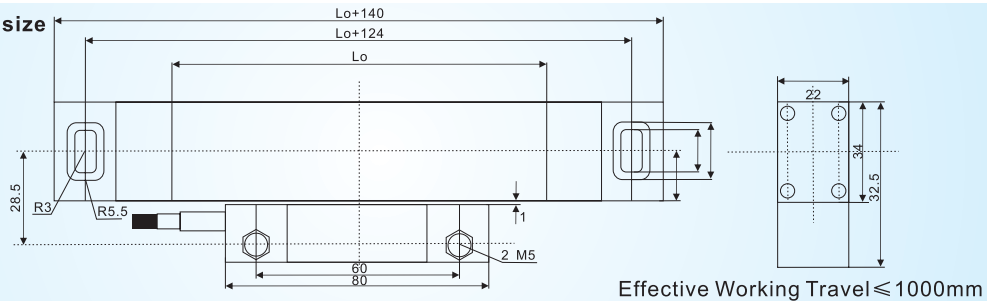
Specifications:

MSE series installation size

Dimensions shown in the diagram:

- Top view: 22 (width), 34 (height), 32.5 (height)
- Side view: 28.5 (height), R3, R5.5, 60, 80, 2 M5
- Length dimensions: L_o+140 , L_o+124 , L_o

Effective Working Travel $\leq 1000\text{mm}$



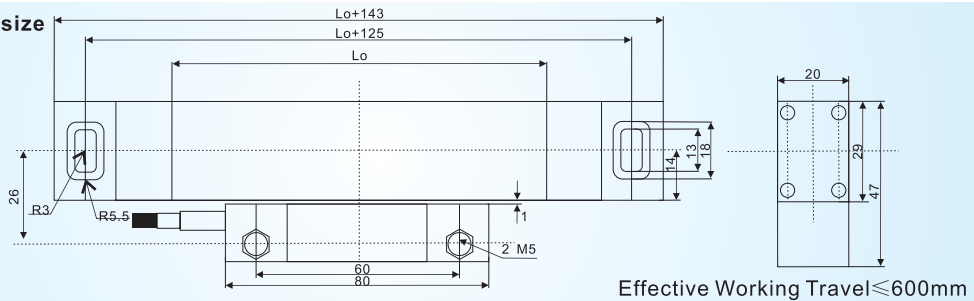
Model	Resolution	Effective Travel	Speed	Repeatability Accuracy	Accuracy			
					50mm~500mm		500mm~1000mm	
					Standard	High-Precision	Standard	High-Precision
MSE1	1um	50~1000mm	>20m/min	1um	±5um	±3um	±8um	±5um
MSE5	5um	50~1000mm	>60m/min	5um	±5um	±3um	±8um	±5um
MSE0.5	0.5um	50~1000mm	>10m/min	0.5um	±5um	±3um	±8um	±5um
MSE0.2	0.2um/0.1um	50~1000mm	>10m/min	0.2um	±5um	±3um	±8um	±5um

MSF series installation size

Dimensions shown in the diagram:

- Overall length: $L_o + 143$
- Mounting hole spacing: $L_o + 125$
- Mounting hole diameter: L_o
- Mounting hole diameter: $R3$
- Mounting hole offset: $R5.5$
- Mounting hole diameter: 1.4
- Mounting hole offset: 13
- Mounting hole diameter: 1.8
- Mounting hole diameter: 1
- Mounting hole diameter: 2 M5
- Mounting hole diameter: 60
- Mounting hole diameter: 80
- Mounting hole diameter: 20
- Mounting hole diameter: 29
- Mounting hole diameter: 47

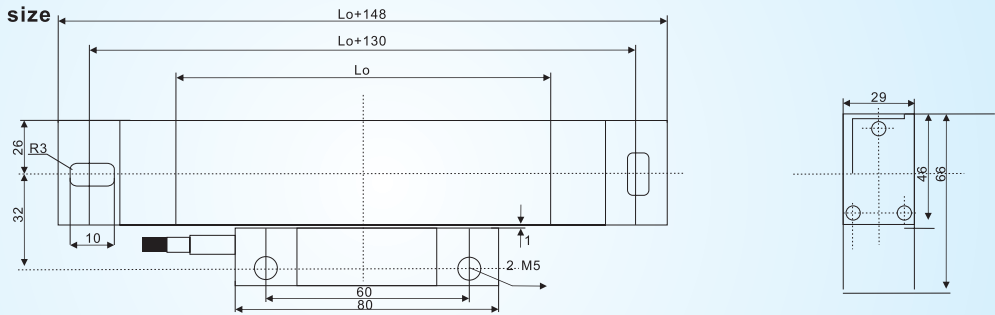
Effective Working Travel $\leq 600\text{mm}$



Model	Resolution	Effective Travel	Speed	Repeatability Accuracy	Accuracy			
					50mm~500mm		500mm~1000mm	
					Standard	High-Precision	Standard	High-Precision
MSF1	1um	50~600mm	>20m/min	1um	±5um	±3um	±8um	±5um
MSF5	5um	50~600mm	>60m/min	5um	±5um	±3um	±8um	±5um
MSF0.5	0.5um	50~600mm	>10m/min	0.5um	±5um	±3um	±8um	±5um
MSF0.2	0.2um/0.1um	50~600mm	>10m/min	0.2um	±5um	±3um	±8um	±5um

Linear Scale

MSG series installation size



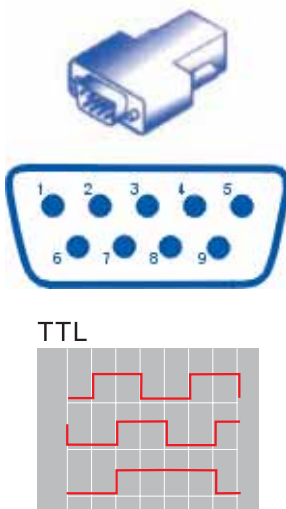
Effective Working Travel ≤ 3000 mm

Model	Resolution	Effective Travel	Speed	Repeatability Accuracy	Accuracy			
					50mm~500mm		500mm~1000mm	
					Standard	High-Precision	Standard	High-Precision
MSG1	1um	50~3000mm	>20m/min	1um	$\pm 5\mu m$	$\pm 3\mu m$	$\pm 8\mu m$	$\pm 5\mu m$
MSG5	5um	50~3000mm	>60m/min	5um	$\pm 5\mu m$	$\pm 3\mu m$	$\pm 8\mu m$	$\pm 5\mu m$
					1000mm~2000mm		2000mm~3000mm	
MSG1	1um	50~3000mm	>20m/min	1um	$\pm 35\mu m$	$\pm 24\mu m$	$\pm 50\mu m$	$\pm 34\mu m$
MSG5	5um	50~3000mm	>60m/min	5um	$\pm 35\mu m$	$\pm 24\mu m$	$\pm 50\mu m$	$\pm 34\mu m$

Model	MSF1	MSF5	MSE1	MSE5	MSG1	MSG5
Optical grating pitch	20um, 10um					
Measuring system	Transmission infrared optical measurement system, infrared way wavelength: 880mm					
Rolling system	Vertical five axle rolling system			45 five axle rolling system		
Output signal	TTL		EIA-422-A (RS-422)		~1VPP	
Power supply	5V±5%DC			12V±5%DC		
Environment	Temperature 0~50%			Humidity < 90%		

Connector Specification:

TTL Signal Pin Outs



Pin Number	Signal
1	A+
2	0V
3	B+
4	ABS+
5	+5V
6	—
7	—
8	—
9	—

Scale type	Model	Resolution	Effective length	Order # example
Slim scale	MSF0.5/50	0.5um	50mm	550-050
	MSF1/100	1um	100mm	551-010
	MSF5/150	5um	150mm	552-015
Ordinary scale	MSE0.5/200	0.5um	200mm	550*020
	MSE1/250	1um	250mm	551*025
	MSE5/300	5um	300mm	552*030
Thick scale	MSG5/1200	5um	1200mm	552@120
	MSG5/2000	5um	2000mm	552@200

Digital Readout DP100 & DP300

Applied-fields:

Digital readout DP100 & DP300 is a mature product designed for the 2D measurement field, it is applicable with the optical measuring instruments, such as profile projector, video measuring system, toolmaker microscope and other vision measuring System. It is especially used with profile projector, and it can measure complicated geometry graph. Measurement includes workpiece skew, establishment of coordinates system, and so on.



Digital Readout DP100(561-101)

Digital Readout DP300(561-301)

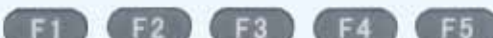
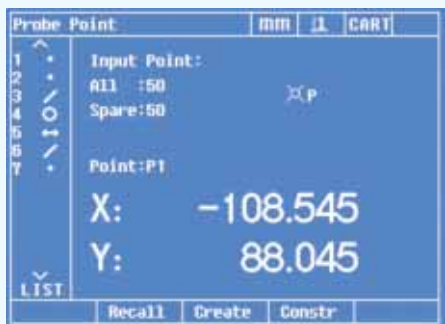
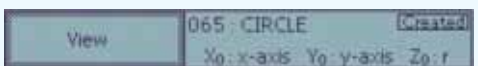
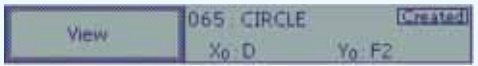
Main Function:

- Measurement of point, line, circle, angle, distance, rectangle and screw thread, preset and constructure, the sampling points up to 50;
- Coordinate skew and movement, it is more convenient that the operator can skew position of workpieces for measuring, which reduce adjust time obviously;
- Clearance function can delete list, adjustment, and all;
- Opposite direction counting function, according to user's requirement;
- Half function, rapidly determine to display 1/2 value, and confirm midpoint of section;
- Permission function: Advanced setup can be done after right password input.
- Call function: input record ID to use existing element;
- Communication port of foot-switch or REINSHAW probe available;
- Printing: print graphic elements and 3-axis displaying value;
- RS232 output function: convey current position of linear scale to PC;
- Multi-display, separately display polar coordinates and cartesian coordinates, and can display millimeter and inch value, and can shift it;
- Linear compensation and section compensation available;
- Z-axis can connect linear scale and rotate encoder;
- Save 100 permanent graphic elements.

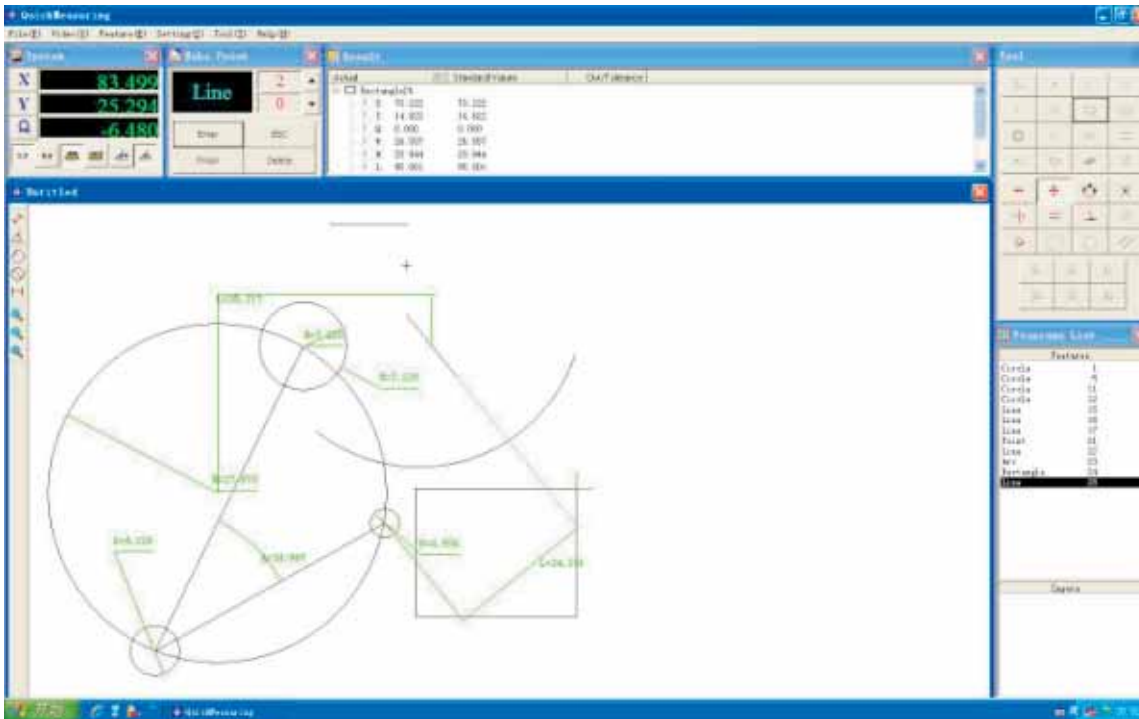
Difference between DP100 and Dp300

Items	DP100(561-101)	DP300(561-301)
Appearance	 DP100 equips with two LCD, the small one is 256x32 lattice single color LCD, it is used to display some simple text data. The big one is Segment-Code LCD, it is used to display "Segment-Code" number, coordinate and other information. From the side, you can see the lattice single color LCD is higher than panel.	 DP300 equips with a 320x240 lattice single color LCD, it can display more text data and graph than DP100, and the help reminder is more directly and easily to understand and operate. From the side, you can obviously see the difference between DP100 and Dp300.
Edge detecting function	Without edge detecting function	Support edge detector SED300

Difference between DP100 and DP300

Items	DP100(561-101)	DP300(561-301)
Key	 The functions of five keys silkscreen are different with opposite five keys of DP300  Key is different with DP300 silkscreen Except the above difference, the others silkscreen, shape and layout are the same.	 The functions of five keys silkscreen are different with opposite five keys of Dp100  Key is different with DP100 silkscreen
Display	 Example: Point Measurement From the above picture we get to know:lattice single color LCD display prompt message. Segment-Code LCD displays coordinate information. Prompt message and coordinate information is displayed in separately LCD.From the display content, Both DP100 and DP300 can display definite information, as "Measuring Type", "Points Number", "Unit", but DP300 is more visually.	 Example: Point Measurement From the above picture we get to know: Prompt message and coordinate information is displayed in one LCD.
Display more information	DP100 use Segment-Code LCD display data, for each screen can display three lines, if more information, please press page turning key.  Press  to see more information:  All the information are displayed in Segment-Code LCD 	In DP300, all the information is displayed in one LCD, and can generate a reference picture, By comparison with DP100. The display is more friendly and comfortable. 

Measuring Software QuickMeasuring 1.0 Version



Applications:

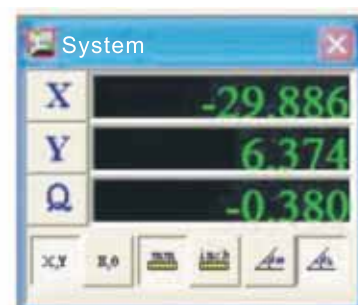
2D Measuring software QuickMeasuring 1.0 version is used with profile projector (optical comparator), it can collect the scale coordination in PC keyboard, DRO panel and foot switch. Using the input point, it can be measured the basic graph element and construct advanced PC communication easily. It deduces human error and improves the operators' working effectively.

PC Minimum Configuration:

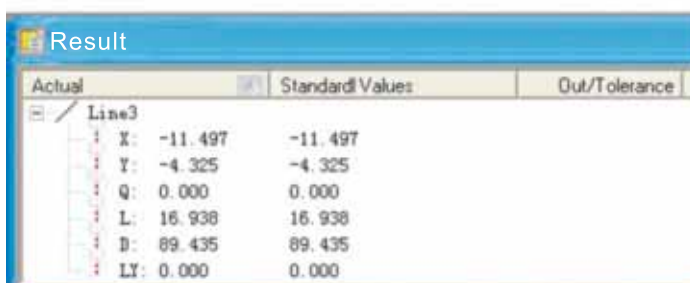
- Hardware: P4 1.7 G;
- Hard disk: 360 G
- CD/DVD driver;
- USB interface and RS232;
- Display resolution: 1024*768(best)
- Screen color quality: 32 digit;
- Operation system: Windows XP/Vista;
- Output: TXT, Auto CAD, Excel.

Accessories:

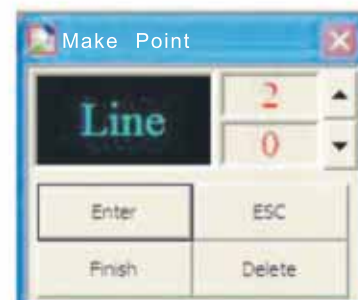
- DRO DP100 or DP300;
- Scale transfer box U3
- Footswitch



Coordinate display column



Measured result display column



Geometrical display column

Measuring Software QuickMeasuring 1.0 Version

Functions:

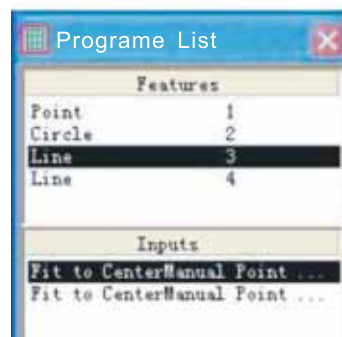
- Measurement of basic graph: Point, Line, Circle, Arc, Rectangle and Circle;
- Axis-skew and coordinate-shift;
- Element construction: Construct the Center, intersection, Midpoint, Line, Circle and Angle, etc;
- Save as * .dxf and edit in AutoCAD;
- Multi-point measurement;
- Excel and TXT report;
- English operation interface, other language available;
- Zoom in, Zoom out, Move, Print, Select, Cancel select, Delete;
- Tolerance setup;
- Size and angle label;
- Scale calibration;
- Q-axis record;
- SPC function;



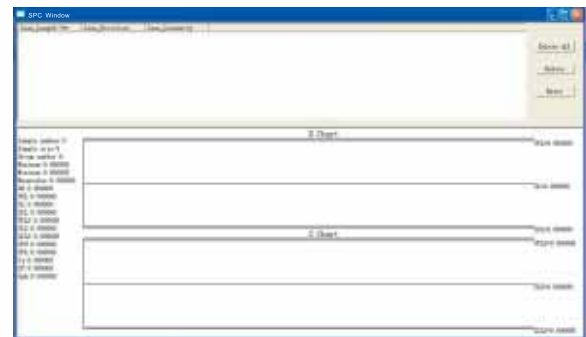
Measuring and construction tool column



Dimension label tool column



Program list column



SPC function column

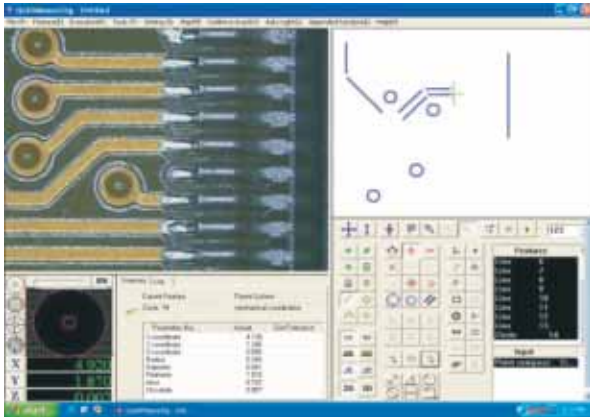
The different functions of different versions of measuring software QuickMeasuring:

Version	Image display	Auto-motor control	4-divisionLED illumination	40-division LED illumination	Probe measurement	Application
QuickMeasuring 1.0	without	without	without	without	without	2D: Profile projector
QuickMeasuring 1.5	with	without	without	without	without	2D: Stereo microscope
QuickMeasuring 2.0	with	without	without	without	without	2D:VMM,VMM-CI
QuickMeasuring 2.1	with	without	with	without	without	2D:Vexus VM
QuickMeasuring 3.0	with	without	without	without	with	3D: VMM-P
QuickMeasuring 3.1	with	without	with	without	with	3D:Vexus VMP
QuickMeasuring 4.0	with	with	with	without	without	2DNC:VMM-NC
QuickMeasuring 4.1	with	with	with	with	without	2DCNC:Vexus VMC
QuickMeasuring 4.2	with	with	with	with	with	3DCNC:VMCP

Applications:

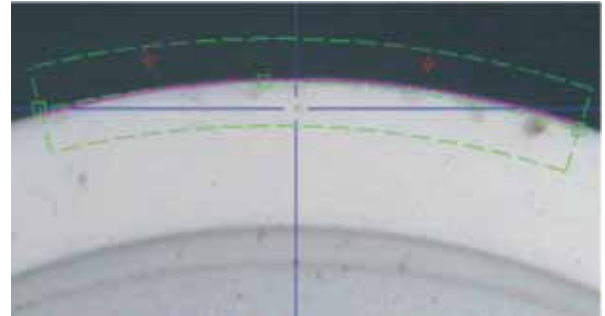
Video measuring machines, measuring microscopes and other vision measuring systems, etc.

Modern compact interface design:

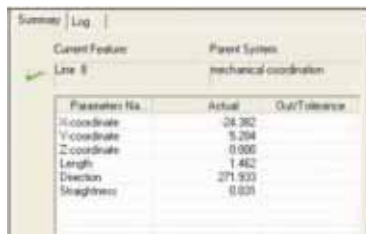


Automatic edge-detecting function:

High-speed, accurate and repeatable. While measurements, it can analyse and dispose the workpiece's characters and identify workpiece edge automatically.



Coordinate display column



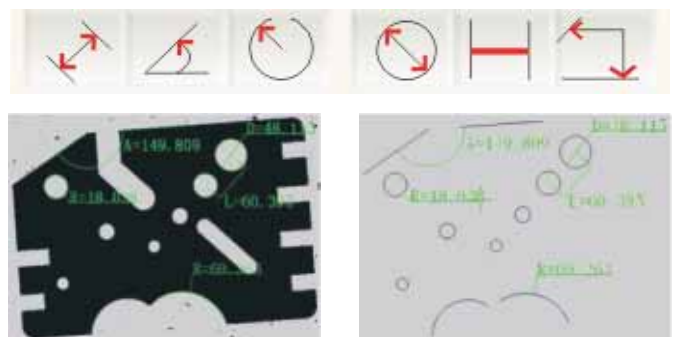
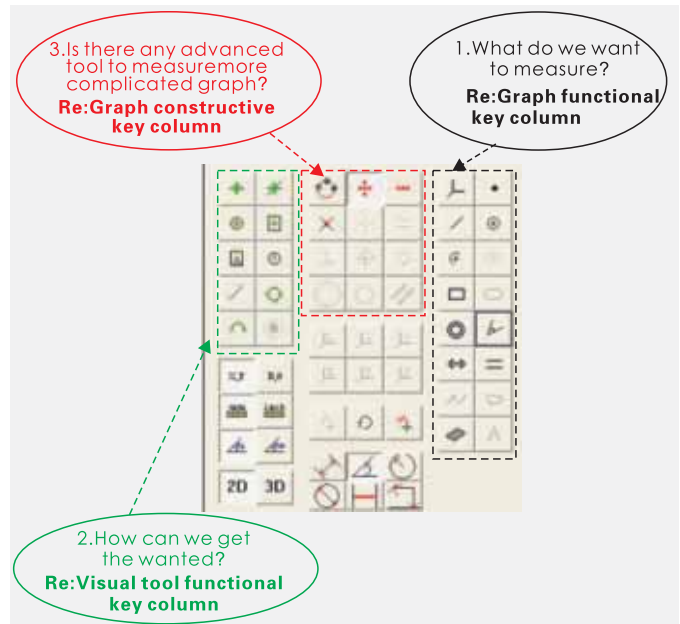
Measured result display column

Friendly compact functional key:

Graph functional key, graph constructiveFunctional key and visual tool functional key is separated by color and grouped tactically, it Makes the communication between Operator and instrument quickly and friendly, and it improves the speed of measurement efficiency obviously.

Dimension label function:

Quickmeasuring is able to label dimension With detail data On actual image freely, which reduces the measuring time and improves efficiency obviously. Now,the label is displayed with distance, angle, radius and diameter according, etc.

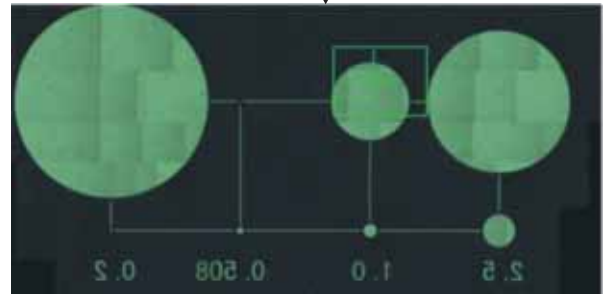


Map photo & measurement, and map navigation:

Quickmeasuring can take photos for the workpiece on work-stage, then automatically combines segments into a full map-photo, which can be saved and measured, the operator also can use this map-photo to make navigation. While clicking any position of picture, software will quickly move forward the Appointed zone, which largely improves the efficiency of measurement. Besides, the map-photo also can be input again and labeled directly.

Suggestion: It is better to use this function on NC or CNC machines.

This map provides navigation function, that is, pressing mouse right key on the map, then move it to here, software will move to target zone rapidly.



Modern simple interface design:

By the touch probe, Quickmeasuring can make 3D measurement, including sphere, cylinder, taper, height, distance of two plane, planeness and parallelism, etc.



3D touch probe function column

Program simply and directly:

Unlike the traditional measurement programming, Quickmeasuring adopt training style programming, it can record measurement program which can be carried out at any time (measuring order, illumination setup etc). It is more convenient and quick to measure the same workpiece repeatedly.

Multi-format output:

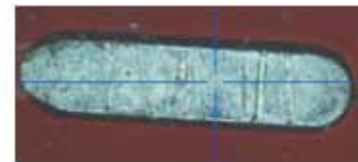
Measured results of Quickmeasuring can be output in multi-formats, such as TXT, Excel. Quickmeasuring also can input and output the Dxf file, which let the operator make CAD graphic processing easily.

Multi-magnification Zoom high-resolution CCD Camera:

High-quality 0.7-4.5x zoom lens select and magnify complicated parts within the visual widefield early and sharply. High resolution CCD camera, capture card and monitor ensure the output image without any aberration.



Super clear image



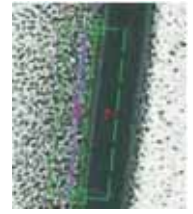
Min. ————— Magnification of Zoom lens (Low-High) —————> Max.

Image sharpening and auto-fringe function:

QuickMeasuring can contrast the image before and after sharpening, and the sharpening make measurement more convenient when check some complicated and uneasy workpieces. Auto-fringe function makes the whiteness and blackness of sharpened image clearer and edge-detect result accurater.

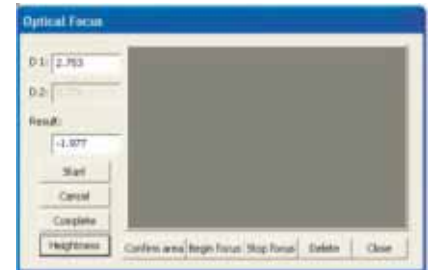
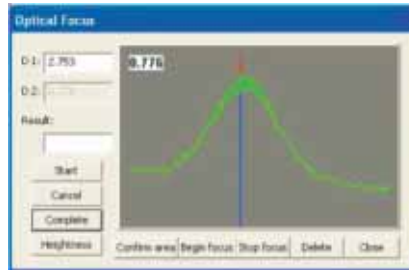


Before sharpening

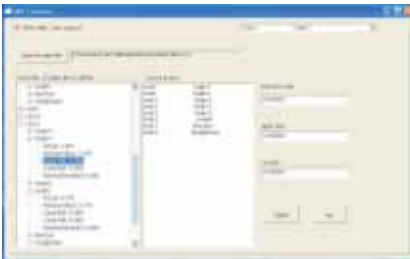


After sharpening

The step of optical video height measurement



SPC statistical function column



4-division and 40-division ring illumination make measurement clearer and accurater:

USB 5-ring, 8-direction and 40-division LED illumination provide multi-choice of illumination brightness, which makes the measurement of edge-detect and deeper hole easily. Besides, the illumination condition also can be saved simultaneously while programming in order to realize the auto-control of illumination. 4-division LED illumination is Low-version lightsource for the manual Video measuring machine.



All light contour illumination



Ring light illumination



Part light illumination



Division light illumination

Image auto-focus and Video height measurement:

QuickMeasuring realizes entire auto-focus, which reduces the visual error caused by eye-focus and improves the measuring efficiency and accuracy. Meanwhile, QuickMeasuring use auto-focus to achieve accurate height measurement of two plane on manual machine quickly.



Full auto focusing

Through two focusing for different layers of work piece, to obtain height value.



Superstratum



Bottom

Objectives Specification



VX12,VB12, VP12 Objective Specification:

Magnification	VX12-5X	VX12-10X(Std.)	VX12-20X(Opt.)	VX12-50X(Opt.)	VX12-100X(Opt.)
Order #	Without	511-W11	511-W21	511-W31	511-W41
Visual field	Without	Ø30 mm	Ø15 mm	Ø6 mm	Ø3 mm
Working Distance	Without	77.7 mm	44.3 mm	38.4 mm	25.3 mm
Transmitted lens	Without	10x(std.)	20x(opt.)	50x(opt.)	100x(opt.)
Order #	Without	511-T11	511-T21	511-T31	511-T41

HB12 Objective Specification:

Magnification	HB12-5X	HB12-10X(Std.)	HB12-20X(Opt.)	HB12-50X(Opt.)	HB12-100X(Opt.)
Order #	Without	512-W11	512-W21	512-W31	512-W41
Visual field	Without	Ø30 mm	Ø15 mm	Ø6 mm	Ø3 mm
Working Distance	Without	77.7 mm	44.3 mm	38.4 mm	25.3 mm

VX16 Objective Specification:

Magnification	VX16-5x(opt.)	VX16-10X(Std.)	VX16-20X(Opt.)	VX16-50X(Opt.)	VX16-100X(Opt.)
Order #	511*W01	511*W11	511*W21	511*W31	511*W41
Visual field	Ø80 mm	Ø40 mm	Ø20 mm	Ø8mm	Ø4 mm
Working Distance	93.7 mm	103.9 mm	95.1 mm	65.7 mm	35mm
Transmitted lens	5X(Opt.)	10x(std.)	20x(opt.)	50x(opt.)	100x(opt.)
Order #	511*T01	511*T11	511*T21	511*T31	511*T41

HB16 Objective Specification:

Magnification	HB16-5X(Opt.)	HB16-10X(Std.)	HB16-20X(Opt.)	HB16-50X(Opt.)	HB16-100X(Opt.)
Order #	512*W01	512*W11	512*W21	512*W31	512*W41
Visual field	Ø80 mm	Ø40 mm	Ø20 mm	Ø8mm	Ø4 mm
Working Distance	93.7 mm	103.9 mm	95.1 mm	65.7 mm	35mm

HB24 Objective Specification:

Magnification	HB24-5X(Opt.)	HB24-10X(Std.)	HB24-20X(Opt.)	HB24-50X(Opt.)	HB24-100X(Opt.)
Order #	512@W01	512@W11	512@W21	512@W31	512@W41
Visual field	Ø120 mm	Ø60 mm	Ø30 mm	Ø12mm	Ø6mm
Working Distance	93.7 mm	103.9 mm	95.1 mm	65.7 mm	35mm

CCD Camera

Vision Capture Card



Vision Capture card 7130 VC1
527-130

Vision Capture card VC2
527-131

Vision Capture card VC3
527-132

Technical Specification of CCD Camera



MC 1

MC 2

MC3

Model	MC 1	MC 2	MC3
Order #	484-131	484-132	484-123
Color type	Color	Color	Color
Pickup device	1/3"(6mm)	1/3"(6mm)	1/2"(8mm)
Horizontal Resolution TVL	540TV Line	480TV Line	480TV Line
Pixel HxV	752(H)x582(V)	752(H)x582(V)	752(H)x582(V)
Minimum illumination	0.5Lux/F1.2	0.1Lux/F1.2	0.2Lux/F1.2
Backlight compensation	ON/OFF(Switchable)	ON/OFF(Switchable)	ON/OFF(Switchable)
AGC	ON/OFF(Switchable)	ON/OFF(Switchable)	ON/OFF(Switchable)
White balance	ON/OFF(Switchable)	ON/OFF(Switchable)	ON/OFF(Switchable)
Electronic shutter	1/50(1/60)~1/100,000sec	1/60~1/100,000sec	1/50~1/100,000sec
Gamma correction	0.45(on)/1(off)	0.45(on)/1(off)	0.45(on)/1(off)
S/N ratio	> 52dB	> 50dB	> 57dB
Signal Mode	PAL	PAL	PAL
Lens mount	C/CS	C/CS	C/CS
Power Supply	AC24/DC12V	AC24/DC12V	AC24/DC12V
Dimension(WXHXL)mm	59x58x133	35.5x36x64	70x57x260
Net Weight	Approx. 370g	Approx. 90g	Approx. 550g
Operation Temperature	-10℃~+50℃	-10℃~+50℃	-10℃~+50℃
Storage Temperature	-40℃~+60℃	-40℃~+60℃	-40℃~+60℃

Zoom Lens

Technical Specification of Zoom lens



General Zoom lens

Click Zoom lens

Coaxial Zoom lens

Motorized Zoom lens

Item	General Zoom lens	Click Zoom lens	Coaxial Zoom lens	Motorized Zoom lens
Order #	421-000	421-101	421*001	422-001
Zoom range	0.7~4.5x	0.7~4.5x	0.7~4.5x	0.7~4.5x
Visual field(1/3)	8.08~1.18mm	8.58~1.33mm	8.58~1.33mm	8.58~1.33mm
Visual field(1/2)	10.6~1.6mm	11.42~1.77mm	11.42~1.77mm	11.42~1.77mm
Working distance	90mm	92mm	92mm	92mm
Optional objective	0.5x adjective objective	0.5x adjective objective	0.5x adjective objective	0.5x adjective objective
Order #	423-050	423-051	423-051	423-051
Optional objective	2x adjective objective	2x adjective objective	2x adjective objective	2x adjective objective
Order #	423-200	423-201	423-201	423-201
Optional CCD adapter	0.5x CCD adapter	0.5x CCD adapter	0.5x CCD adapter	0.5x CCD adapter
Order #	424-050	424-051	424-051	424-051
Optional CCD adapter	2x CCD adapter	2x CCD adapter	2x CCD adapter	2x CCD adapter
Order #	424-200	424-201	424-201	424-201
Illuminator	LED lightsource	LED lightsource	Point LED lightsource	4-Division LED lightsource
Order #	425-010	425-100	425-401	425-040
Illuminator	4-Division LED lightsource	4-Division LED lightsource	Point fiber lightsource	40-Division LED lightsource
Order #	425-040	425-040	425*100	425-400

Ultrazoom Objective of zoom lens

Magnification	5x	10x	20x	50x
Order #	426-050	426-100	426-200	426-500
Working distance	34mm	33mm	20mm	13mm
Visual field (1/2)	4.05~0.70mm	2.10~0.35mm	1.0~0.17mm	0.31~0.07mm

Accessories

Working Cupboards



Working Cupboard ST01

Working Cupboard ST02

Working Cupboard ST03

Model	Working Cupboard ST01	Working Cupboard ST02	Working Cupboard ST03
Order #	581-611	581-621	581-631
Dimension	780x550x430	1120x730x780	1000x900x635
Loading Weight	250Kg	400Kg	400Kg

Rotary Tables



RT0

RT1

RT2

RT3

Model	Rotary tables RT0	Rotary tables RT1	Rotary tables RT2	Rotary tables RT3
Order #	581-501	581-511	581-521	581-531
Diameter of glass	64mm	100mm	134mm	206mm
Net Weight	1.25Kg	3.78Kg	4.66Kg	8.70Kg
Suitable Instrument	STM505, STM505D	VT12-1550, VB12-2010	VT12-2010, VB12-2010, VMM-1510, VMM-2010	VP12-2515, VB16-2515, VMM-2515, VMM-3020



Renishaw touch probe MCP series	Order #	Software Version
Renishaw MCP touch probe K1 (1mm)	581-711	QuickMeasuring 3.0;3.1;4.2
Renishaw MCP touch probe K2 (2mm)	581-721	QuickMeasuring 3.0;3.1;4.2
Renishaw MCP touch probe K3 (3mm)	581-731	QuickMeasuring3.0; 3.1;4.2

Accessories

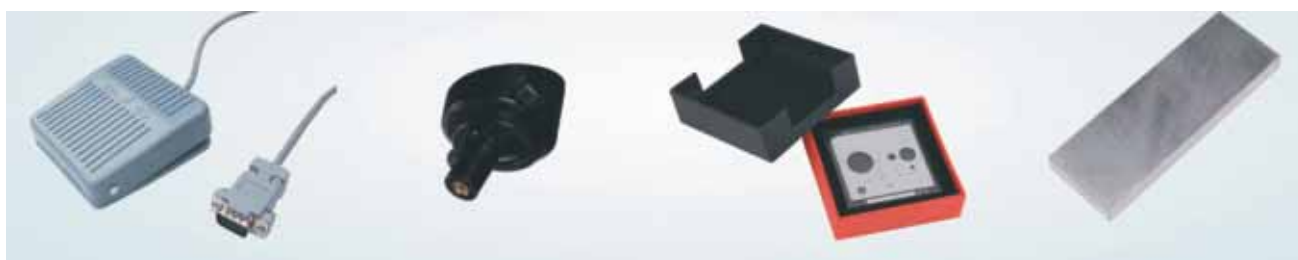
The Lightsource Of Zoom Lens



Ring LED Lightsource 4-Division LED Lightsource 40-Division LED Lightsource Point Fiber lightsource

Item	Ring LED Lightsource	4-Division LED Lightsource	40-Division LED Lightsource	Point Fiber Lightsource
Order #	425-010	425-040	425-400	425*100
Voltage	DC5V	DC5V	DC5V	AC220V/110V
Power supply	Power Cable	USB	USB	Power Cable

Universal Accessories



Foot-Switch ST150

Laser Position Sensor

Standard Calibration
Block ST-120

100mm Length
Block SGR-100

Item	Foot-Switch ST150	Laser Position Sensor	Standard Calibration Block ST-120	100mm Length Block SGR-100
Order #	581-411	591-001	581-801	581-831
Suitable Product	Profile Projector	Vexus VM Series	Video Measuring System	3D Video Measuring System



Screen Clamp Device

Angle & Radius
Over-Chart ST140

Angle Zero Line

Edge Detector SED-300

Item	Screen Clamp Device	Angle & Radius Over-Chart ST140	Angle Zero Line	Edge Detector SED-300
Order #	581-301	581-311	581-300	563-301
Suitable Product	Profile Projector	Ø300mm Profile Projector	VB12,VB16,H16,HB12,HB24	Ø300mm Profile Projector



Many thanks for your kind reading!

ASEL - machine production

Bakic 33, 33520 Slatina - CROATIA

tel: +385 33 400 570 Fax: +86 851 5822114

www.asel.hr

asel@asel.hr

