



## Company Profile



Founded in 2010, we Sinowon Innovation Metrology Manufacture Limited is National Authorized Hi-Tech Manufacturer (Certificate No.: GR201544000821), ISO9001:2015 Certified company, Guangdong Province Enterprise of Observing Contract and Valuing Credit, Shenzhen Qianhai Equity Trading Center(SEC Registration Number:666354).

So far as founded in 2010 years, Sinowon always consider customer as the starting point, manage corporation with motto "Satisfaction, Innovation, Norm, Obligation, Worth, Openness, Nimble". Constantly improve the management system, increase technology research and development, strengthen the company's ability to integrate production, dedicated to provide users with high-quality testing equipment and one-stop pre-sale, sale and after-sales service.

SINOWON is mainly produce, develop, integrate and sell measuring data software system, optical inspection instrument such as One Key Instant Vision Measuring System, Fully Auto Video Measuring System, Tool Microscope, Video Measuring Microscope and hardness tester such as Automatically Vickers Hardness Tester, Rockwell Hardness Tester, Brinell Hardness Tester, Micro Hardness Tester, Portable Ultrasonic Hardness Tester, Leeb Hardness Tester, etc and some other accessory products. And all of our products have passed The CE EU certification and widely used in metal, plastics, electronics, semiconductors, home appliances, telecommunications, automotive, aviation, aerospace and other industrial laboratories, production workshops, assembly line for quality control.

From the date of establishment, SINOWON is based on the Metrology industry, focused on customer and be a striver for committing to make measurement more accurate and uncomplicated and supply high cost-performance products and service for customers.

We warmly welcome you to visit our headquarter in Free Experience Center, and looking forward to further essence from you.

Sinowon is Committed to Make Measurement More Accurate and Uncomplicated!



Intermach Metal Processing Machinery Fair



CCMT China CNC Machine Tool Fair



ASEAN International Machine Tool Fair



DMP Tooling and Machining Fair



SIMM Machinery Fair



Control Stuttgart Quality Control Fair





High Accuracy



Excellent Quality



Long Using Life

Ø300mm Digital Vertical Profile Projector

**VP300 Series**



Ø300  
Vertical Optical System



Standard  
10X Objective



Standard  
DP400 Digital Readout

## + Characteristic

- The lifting system adopts cross roller rail and precision screw drive, which makes lifting drive more comfortable and stable;
- With coating process reflector, clearer image and great dustproof;
- Adjustable contour and surface illumination, to meet with difference workpiece demand;
- Imported high light and long using life LED illumination, to ensure precision measurement demand;
- High resolution optical system with clear image and magnification error is less than 0.08%;
- Powerful Bi-axial fan cooling system, highly increase using life;
- Powerful and colorful DRO DP400, realized fast and accurate 2D Measurement;
- Built-in Mini-printer, can print and save data;
- With standard 10X objective, optional 20X,50X objective, rotary table, foot switch ,clamp, etc.

## Partial Display



## + Specifications

Product Name	Digital Vertical Profile Projector	
Reverse Image	VP300-1510 (#511-330)	VP300-2010 (#511-340)
Obverse Image	VP300-1510Z (#511-330Z)	VP300-2010Z (#511-340Z)
Metal Stage Size	258x308mm	258x358mm
Glass Stage Size	148x206mm	148x256mm
Stage Travel	150x100mm	200x100mm
Product Dimension	988x563x1224mm	988x563x1224mm
Packing Dimension	1200x800x1580mm	1200x800x1580mm
Gross/Net Weight	210/165kg	220/170kg
Focusing	90mm	
Accuracy	$\leq 3 + L/200(\mu m)$	
Resolution	0.0005mm	
Screen	Dia: $\phi 312mm$ , Measurement Range $\geq \phi 300$ Rotation Angle 0~360° ;Resolution: 1 or 0.01°, Accuracy 6'	
Load Capacity	10Kg	
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout	
Working Environment	Temp 20°C $\pm$ 5°C, Humidity 40% – 70%RH	
Illumination	Contour Illumination : 3.2V/10W LED	
	Surface Illumination : 3.2V/10W LED	
Cold-air Blowing System	3-axis Powerful Fan	
Power Supply	AC110V/60Hz; 220V/50Hz, 150W	

## + Objective Lens

Specifications			
Magnification	10X ( Std. )	20X ( Opt. )	50X ( option )
Field of View	$\phi 40mm$	$\phi 20mm$	$\phi 8mm$
Working Distance	80mm	67.7mm	51.4mm



High Accuracy



Excellent Quality



Long Using Life

Ø400mm Digital Vertical Profile Projector

**VP400 Series**



Ø400  
Vertical Optical System



Standard  
10X Objective



Standard  
DP400 Digital Readout

## + Characteristic

- The lifting system adopts cross roller rail and precision screw drive, which makes lifting drive more comfortable and stable;
- Coating process reflector, clearer image and great dustproof;
- Adjustable contour and surface illumination, to meet with difference workpiece demand;
- Imported high light and long using life LED illumination, to ensure precision measurement demand;
- High resolution optical system with clear image and magnification error is less than 0.08%;
- Powerful Bi-axial fan cooling system, highly increase using life;
- Powerful and colorful DRO DP400, realized fast and accurate 2D Measurement;
- Built-in Mini-printer, can print and save data;
- With standard 10X objective, optional 5X, 20X, 50X objective, rotary table, foot switch, clamp, etc.



## + Specifications

Product Name	Digital Vertical Profile Projector		
Reverse Image	VP400-2010 (#511-410)	VP400-2515 (#511-420)	VP400-3020 (#511-430)
Obverse Image	VP400-2010Z (#511-410Z)	VP400-2515Z (#511-420Z)	VP400-3020Z (#511-430Z)
Metal Stage Size	308x408mm	308x408mm	458x358mm
Glass Stage Size	198x306mm	198x306mm	356x248mm
Stage Travel	200x100mm	250x150mm	300x200mm
Product Dimension	1003x617x1309mm	1003x617x1309mm	1003x617x1309mm
Packing Dimension	1200x800x1580mm	1200x800x1580mm	1200x800x1580mm
Gross/Net Weight	280/230kg	280/230kg	280/230kg
Focusing	100mm		
Accuracy	$\leq 3 + L/200(\mu m)$		
Resolution	0.0005mm		
Screen	Dia: $\phi 412mm$ , Measurement Range $\geq \phi 400$		
	Rotation Angle $0 \sim 360^\circ$ ; Resolution: 1 or 0.01°, Accuracy 6'		
Load Capacity	10Kg		
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout		
Working Environment	Temp $20^\circ C \pm 5^\circ C$ , Humidity 40% – 70%RH		
Illumination	Contour Illumination : 3.2V/10W LED		
	Surface Illumination : 3.2V/10W LED		
Power Supply	AC110V/60Hz; 220V/50Hz, 150W		

## + Objective Lens

Specifications				
Magnification	5X	10X	20X	50X
Field of View	$\phi 80mm$	$\phi 40mm$	$\phi 20mm$	$\phi 8mm$
Working Distance	65mm	80mm	67.7mm	51.4mm





High Accuracy



Excellent Quality



Long Using Life

# Ø400mm Digital Vertical Profile Projector **VP420 Series**



Ø400  
Vertical Optical System



Standard  
10X Objective



Standard  
DP400 Digital Readout

## + Characteristic

- Ø400mm vertical optical path system ;
- Projector body lifting focus system;
- Stage load capacity can reach 30Kg;
- Telecentric Cold LED light source;
- High powerful and colorful DRO DP400;
- Optional 5X, 20X, 50X objective is available.

## + Specifications

Product Name	Digital Vertical Profile Projector
Reverse Image	VP420-3020 (#511-450)
Obverse Image	VP420-3020Z (#511-450Z)
Metal Stage Size	458x358mm
Glass Stage Size	356x248mm
Stage Travel	300x200mm
Product Dimension	1003x617x1309mm
Packing Dimension	1200x800x1580mm
Gross/Net Weight	280/230kg
Focusing	100mm
Accuracy	$\leq 3 + L/200(\mu m)$
Resolution	0.0005mm
Screen	Dia: $\phi 412mm$ , Measurement Range $\geq \phi 400$ Rotation Angle 0~360°; Resolution: 1 or 0.01°, Accuracy 6'
Load Capacity	10Kg
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout
Working Environment	Temp 20°C $\pm$ 5°C, Humidity 40% – 70%RH
Illumination	Contour Illumination : 3.2V/10W LED Surface Illumination : 3.2V/10W LED
Power Supply	AC110V/60Hz; 220V/50Hz, 150W

## + Objective Lens

Specifications				
Magnification	VP420-5X	VP420-10X	VP420-20X	VP420-50X
Field of View	$\phi 80mm$	$\phi 40mm$	$\phi 20mm$	$\phi 8mm$
Working Distance	65mm	80mm	67.7mm	51.4mm





High Accuracy



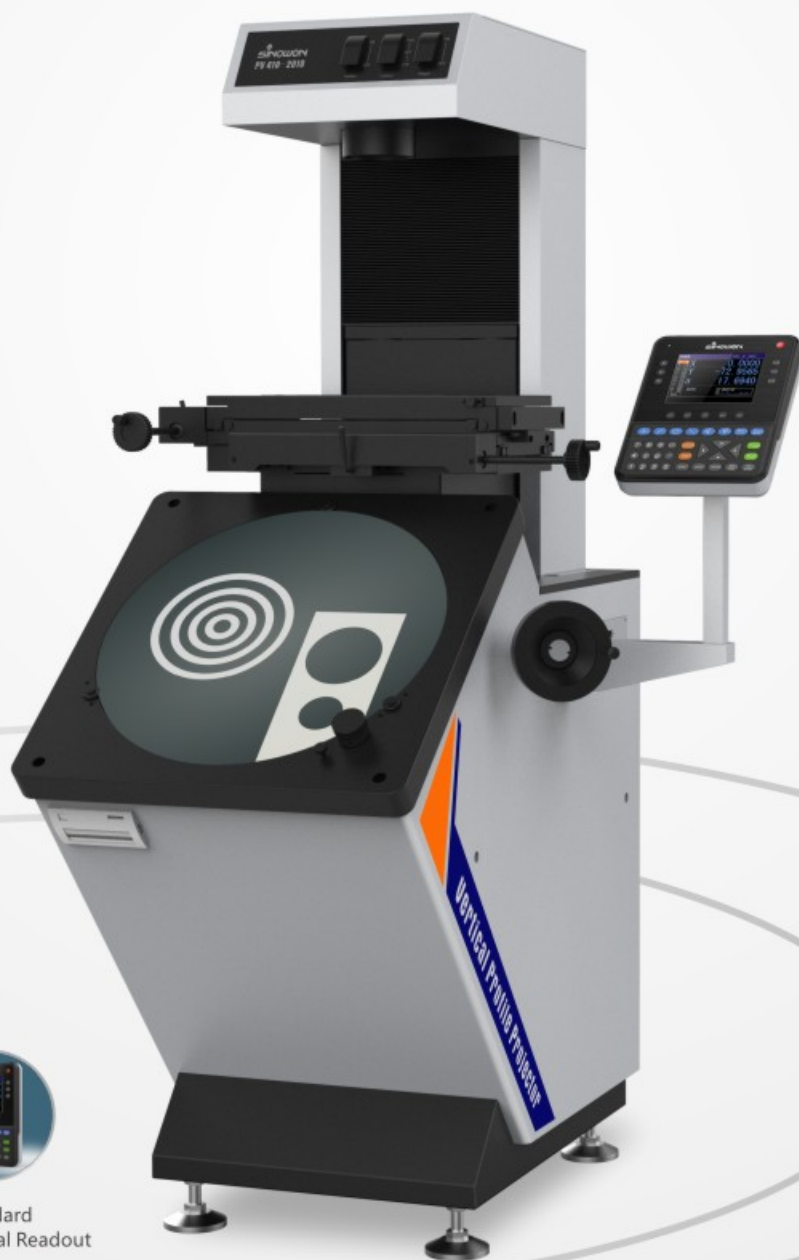
Excellent Quality



Long Using Life

Ø400mm Digital Vertical Profile Projector

**PV410** Series



Ø400  
Vertical Optical System



Standard  
10X Objective



Standard  
DP400 Digital Readout

## + Characteristic

- The lifting system adopts cross roller rail and precision screw drive, which makes lifting drive more comfortable and stable;
- Coating process reflector, clearer image and great dustproof;
- Adjustable contour and surface illumination, to meet with difference workpiece demand;
- Imported high light and long using life LED illumination ,to ensure precision measurement demand;
- High resolution optical system with clear image and magnification error is less than 0.08%;
- Powerful Bi-axial fan cooling system, highly increase using life;
- Powerful and colorful DRO Dp400, realized fast and accurate 2D Measurement;
- Built-in Mini-printer, can print and save data;
- With standard 10X objective, optional 5X,20X, 50X objective, rotary table, foot switch ,clamp, etc.

## + Specifications

Product Name	Digital Vertical Profile Projector
Model	PV410-2010
Code#	511-440
Table Size	308x408mm
Glass Table Size	198x306mm
XY Travel Range	200x100mm
Z Travel Range	100mm
Accuracy	$\leq 3 + L/200(\mu m)$
Resolution	0.001mm
Max. Workpiece Load	10Kg
Screen	Effective Diameter: $\phi 412mm \geq \phi 400mm$ Screen rotation 0~360° ; Resolution: 1' or 0.01°, accuracy: 6'
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout
Working Environment	Temp 20°C $\pm$ 5°C, Humidity 40% – 70%RH
Power Supply	AC110V/60Hz; 220V/50Hz,150W
Illumination	Contour Illumination : 3.2V/10W LED Surface Illumination : 3.2V/10W LED

## + Objective Lens

Specifications				
Magnification	PV410-5X	PV410-10X	PV410-20X	VP420-50X
Field of View	$\phi 80mm$	$\phi 40mm$	$\phi 20mm$	$\phi 8mm$
Working Distance	65mm	80mm	67.7mm	51.4mm



High Accuracy



Excellent Quality



Long Using Life

Ø350mm Digital Horizontal Profile Projector  
**PH350-2010**



Ø350  
Horizontal Optical System



Standard  
10X Objective



Standard  
DP400 Digital Readout



## + Characteristic

- The lifting system adopts linear guide rail and precision screw drive, which makes lifting drive more comfortable and stable;
- Coating process reflector, clearer image and great dustproof;
- Adjustable contour and surface illumination, to meet with difference workpiece demand;
- Imported high light and long using life LED illumination ,to ensure precision measurement demand;
- High resolution optical system with clear image and magnification error is less than 0.08%;
- Powerful Bi-axial fan cooling system, highly increase using life;
- Powerful and colorful DRO Dp400, realized fast and accurate 2D Measurement;
- Built-in Mini-printer, can print and save data;
- With standard 10X objective, optional,20X, 50X objective, rotary table, foot switch ,clamp, etc.

## + Specifications

Product Name	Digital Horizontal Profile Projector
Model	PH350-2010
Code#	512-350
Working Stage Size	355x126mm
Working Stage Travel	200x100mm
Focusing	90mm
Accuracy	$\leq 4+L/200(\mu m)$
Resolution	0.0005mm
Load Capacity	15Kg
Screen	$\phi 380\text{mm}$ , Effective range $\geq \phi 350\text{mm}$ Rotation Angle 0~360° ;Resolution: 1 or 0.01°,Accuracy 6'
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout
Illumination	Contour Illumination : 3.2V/10W LED Surface Illumination : 220V/130W LED
Working Environment	Temp 20°C $\pm$ 5°C, Humidity 40% — 70%RH
Power Supply	AC110V/60Hz; 220V/50Hz,200W

## + Objective Lens

Specifications			
Magnification	PH350-10X	PH350-20X	PH350-50X
Field of View	$\phi 30\text{mm}$	$\phi 15\text{mm}$	$\phi 6\text{mm}$
Working Distance	75mm	69mm	44mm



High Accuracy



Excellent Quality



Long Using Life

Ø400mm Digital Horizontal Profile Projector  
**PH400-3015**



Ø400  
Horizontal Optical System



Standard  
5X Objective



Standard  
DP400 Digital Readout

## + Characteristic

- The lifting system adopts cross roller rail and precision screw drive, which makes lifting drive more comfortable and stable;
- Coating process reflector, clearer image and great dustproof;
- Adjustable contour and surface illumination, to meet with difference workpiece demand;
- Imported high light and long using life LED illumination, to ensure precision measurement demand;
- High resolution optical system with clear image and magnification error is less than 0.08%;
- Powerful Bi-axial fan cooling system, highly increase using life;
- Powerful and colorful DRO DP400, realized fast and accurate 2D Measurement;
- Built-in Mini-printer, can print and save data;
- With standard 10X objective, optional 5X, 20X, 50X objective, rotary table, foot switch, clamp, etc.



## + Specifications

Product Name	Digital Horizontal Profile Projector
Model	PH400-3015
Code#	512-400
Working Stage Size	455x126mm
Working Stage Travel	300x150mm
Focusing	120mm
Accuracy	$\leq 3 + L/200(\mu m)$
Resolution	0.0005mm
Load Capacity	15Kg
Screen	Dia: $\phi 412mm$ , Measurement Range $\geq \phi 400$ Rotation Angle 0~360°; Resolution: 1 or 0.01°, Accuracy 6'
Digital Readout	DP400 (510-340) Multifunction colorful LCD digital readout
Illumination	Contour Illumination : 3.2V/10W LED Surface Illumination : 3.2V/10W LED
Working Environment	Temp 20°C $\pm$ 5°C, Humidity 40% – 70%RH
Power Supply	AC110V/60Hz; 220V/50Hz, 200W
Product Dimension	1099 x 1455 x 633mm
Packing Dimension	1157 x 1355 x 653mm
Gross/Net Weight	350/300kg

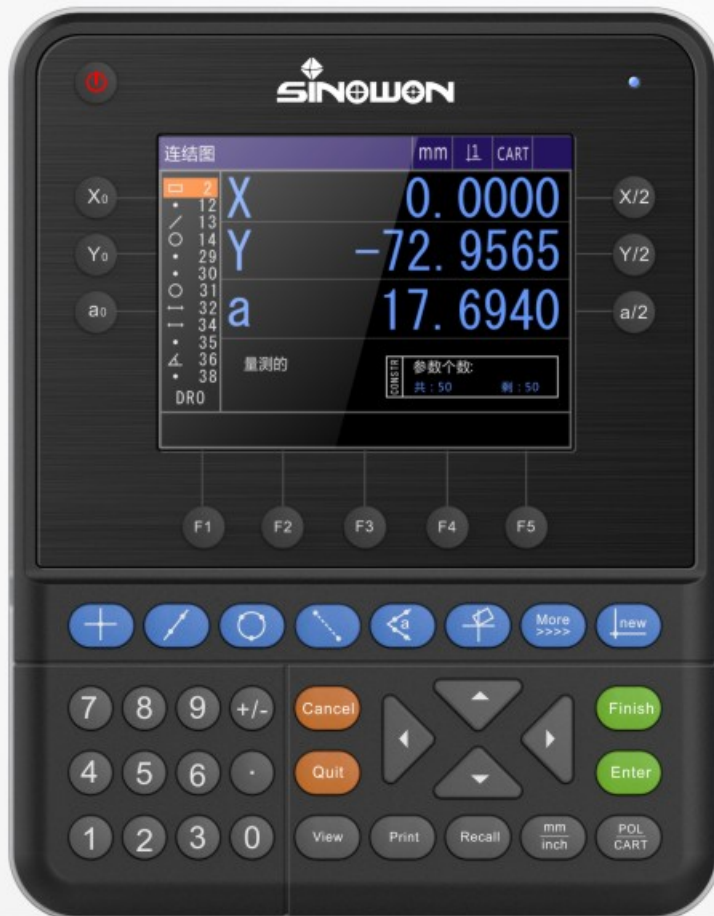
## + Objective Lens

Specifications					
Magnification	5X	10X	20X	50X	100X
Field of View	$\phi 80mm$	$\phi 30mm$	$\phi 15mm$	$\phi 6mm$	$\phi 3mm$
Working Distance	75mm	75mm	69mm	44mm	26mm



## Color Screen Multifunction Digital Readout

# DP400



Weak Current



Silicon Button



Multi-language



Color LCD

### + Characteristic

- 5.6" Color Screen and Sealed silicone touch button, with full information, friendly operation, long using life;
- Save 100 permanent image elements, can set and save current date;
- Multi-function Measurement: Point, line, circle, angle, distance, rectangular, screw thread, ellipse, slot, rounding, preset, construction, and so on;
- Obverse or Opposite direction counting function, 1/2 value, midpoint, permission function, Call function, REC(record) function, and Cycle measurement;
- Section and linear compensation are available for 3-axis, highly ensure measurement accuracy;
- Can connect foot switch, printer, optical edge detection and other multiple auxiliary measurement tools;
- With polar and coordinate system, and can display millimeter and inch, and can shift easily;
- With independent password permission function, to prevent the possibility of data deviation by wrong operation, it can also change the original setting by password permission;
- Support multiple language: Chinese, English and other language.

### + Specifications

Model	DP400
Code#	510-340
Language	Simple Chinese, Complicated Chinese, Portuguese, German and English, etc.
LCD Screen Size	115mm×85mm
LCD Screen Resolution	640*480
Digital Display Range	8 Digits (With Decimal Point)
Display Axis	3-axis (X, Y, Z/Q)
Z/Q Display Model	Length or Angle
Angle Display Model	Degree, Minutes and Second or Degree
Linear Scale Signal	TTL square-wave or AC sine wave of two 90° phase angle difference, drive capacity larger than 10MA
Linear Scale Resolution	0.1um, 0.2um, 0.5um, 1um, 2um, 5um
Baud Rate	4800, 9600, 14400, 19200, 38400, 57600
Data Output Port	RS232, DB-9 Parent interface
Operation Keyboard	Sealed Silicone touch-type keyboard
Expansion port	Foot Switch, Printer, Optical Edge Finder, etc
Input Power Supply	DC12V/3A
Operation Environment	Working Temperature: 0℃~40℃; Storage Temperature: -10℃~60℃; Relative Humidity: <90%RH

### + Operation Interface



## Zoom Lens

### + Zoom Lens

Product Name	Click Zoom lens	Coaxial Zoom lens	Electronic Zoom lens	Motorized Zoom lens	Motorized Coaxial Zoom lens
Code#	421-111	421-121	421-141	421-131	421-151
Optical Magnification	0.7~4.5X(0.6X~7.5X)				
Visual Field ( 1/3)	8.08~1.18mm				
Visual Field ( 1/2)	11.42~1.77mm				
Working Distance	92±2mm				
Focus Adjustment	0~3mm				
Magnification	0.7X	2X		4.5X	
Depth of Visual Field	0.56mm	0.10mm		0.07mm	
N.A.	0.03	0.072		0.085	
Resolution	5.56μm	2.31μm		1.96μm	
TV Distortion	0.13%	0.01%		0.01%	



### + Optional Auxiliary Objective



### + Optional CCD adapter



## Objective

### + VP300 Objective Specification

Magnification	5X(Special)	10X(Std.)	20X(Opt.)	50X(Opt.)	100X(Opt.)
Code#	/	511-110	511-120	511-130	511-140
Visual Field	/	Ø30mm	Ø15mm	Ø6mm	Ø3mm
Working Distance	/	75mm	69mm	44mm	26mm
Transmitted lens	/	10X(Std.)	20X(Opt.)	50X(Opt.)	100X(Opt.)
Code#	/	511-210	511-220	511-230	511-240

### + VP400 Objective Specification

Magnification	5X(Special)	10X(Std.)	20X(Opt.)	50X(Opt.)	100X(Opt.)
Code#	511-100	511-110	511-120	511-130	511-140
Visual Field	Ø80mm	Ø40mm	Ø20mm	Ø8mm	Ø3mm
Working Distance	75mm	75mm	70mm	47mm	26mm
Transmitted lens	/	10X(Std.)	20X(Opt.)	50X(Opt.)	/
Code#	/	511*T11	511*T21	511*T31	/

### + PH400 Objective Specification

Magnification	5X(Special)	10X(Std.)	20X(Opt.)	50X(Opt.)	100X(Opt.)
Code#	512-100	512-110	512-120	512-130	512-140
Visual Field	Ø80mm	Ø30mm	Ø15mm	Ø6mm	Ø3mm
Working Distance	75mm	75mm	69mm	44mm	26mm



## APO Objective

### + Characteristic

- For visible light imaging system;
- For invisible light imaging system;
- Supplied high resolution and outstanding contrast.



45mm Long working distance bright field metallurgical objectives



95mm Extended Long working distance bright field metallurgical objectives

### + 45MM Objective Specification

Product Name	Code#	N.A.	W.D.(mm)	F'(mm)	$\pm\Delta p(\mu m)$	R( $\mu m$ )	Eyepiece (WF10/25)		
							Magnification	Visual Field (mm)	$\pm\Delta(\mu m)$
45mmAPO 5X	426-415	0.13	11.6	40	16.3	2.1	50X	$\Phi 5$	38.3
45mmAPO 10X	426-425	0.3	6.4	20	3.1	0.9	100X	$\Phi 2.5$	7.8
45mmAPO 20X	426-435	0.4	11.1	10	1.7	0.7	200X	$\Phi 1.25$	3.5
45mmAPO 50X	426-445	0.55	8.2	4	0.9	0.5	500X	$\Phi 0.5$	1.4
45mmAPO 100X	426-455	0.80	2	2	0.4	0.3	1000X	$\Phi 0.25$	0.7

### + 95MM Objective Specification

Product Name	Code#	N.A.	W.D.(mm)	F'(mm)	$\pm\Delta p(\mu m)$	R( $\mu m$ )	Eyepiece (WF10/24)		
							Magnification	Visual Field (mm)	$\pm\Delta(\mu m)$
95mmAPO 2X	426-915	0.055	34.6	100	91	5	20X	$\Phi 12$	221
95mmAPO 5X	426-925	0.14	45	40	14	2	50X	$\Phi 4.8$	38.3
95mmAPO 10X	426-935	0.28	34	20	3.5	1	100X	$\Phi 2.4$	8.6
95mmAPO 20X	426-945	0.29	30.8	10	3.5	1	200X	$\Phi 1.2$	5.8
95mmAPO 50X	426-955	0.42	20.5	4	1.6	0.7	500X	$\Phi 0.48$	2.3



## Part Accessories

5-ring 8-division LED surface illumination



4-ring 8-division LED surface illumination



LED Parallel Contour Illumination



LED Point Illuminator



Zoom Lens



Motorized Zoom lens



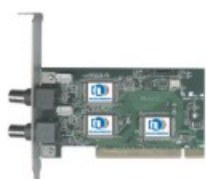
Touch Probe



Laser Probe



DH Capture Card



CCD Camera



3D Calibration block /ball



Calibration Block



Controller



Servo Motor



Stereo Microscopes Eyepieces



CCD Adapter



Screen Clamp Device



Over-Chart



Edge Detector



Foot-Switch



Rotary Vise



Objective



Working Cupboard



Rotary Tables





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