

High Accuracy Semiautomatic Vision Measuring Machine

# *iFocus* Series



1700-818-MSP(677)  
[www.mspmetrology.com](http://www.mspmetrology.com)

**Less Error**

Within 2um

**High Accuracy**

$\leq 3+L/200\mu\text{m}$

**High Stability**

Auto Focus

**High Resolution**

700TVL Color CCD

**Measurement Software**

iMeasuring 2.2



### + Characteristic

- High precision Jinan Qing marble base and pillar, to ensure high stability and accuracy;
- High precision toothless rod and fast moving locking device, to ensure hysteresis error is within 2um;
- High accuracy A grade optical linear scale with precision working stage, to ensure the accuracy is within  $3+L/200\mu\text{m}$ ;
- 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;
- Z-axis equipped with high accuracy linear guide and servo motor control system, realize auto focus measurement, and eliminate the human focus error, enhance measurement accuracy and stability;
- Powerful function iMeasuring2.2 Measuring Software, highly enhance the quality control;
- Optional FexQMS Measuring Data Analysis and Real-time monitoring software which enhance program control and reduce material consumption.

### Motorized Focus



### Auto Focus



### + Specifications

Mode	iMS-2010F	iMS-2515F	iMS-3020F	iMS-4030F	iMS-5040F
Code#	521-140F	521-150F	521-160F	521-170F	521-180F
Metal Table	408x308mm	408x308mm	458x358mm	608x470mm	708x470mm
Glass Table	306x198mm	306x198mm	356x248mm	456x348mm	556x348mm
X/Y-axis Travel	200x100mm	250x150mm	300x200mm	400x300mm	500x400mm
Dimension(WxDxH)	790x617x1000mm	790x617x1000mm	838x667x1000mm	1002x817x1043mm	1002x867x1043mm
Net Weight	175Kg	175Kg	185Kg	350Kg	380Kg
Z-axis Travel	High-precision linear guide , working travel 200mm				
X/Y/Z-axis Travel	0.0005mm				
X/Y-axis Accuracy*	$\leq 3+L/200(\mu\text{m})$				
Repeatability	2um				
Base and Pillar	High Accuracy Jinan Qing Marble				
Illumination System (Software Adjustment)	Surface: Stepless Adjustable 4-ring 8-division LED Cold Illumination				
	Contour: LED Parallel Illumination				
	LED Laser Navigation Lights				
CCD	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°C ± 2°C, change range < 2°C/hr				
	Humidity: 30~80%				
	Vibration < 0.002g , < 15Hz				
Measuring Software	iMeasuring 2.2				
Operation System	Support XP , WIN7 , WIN8.1 , WIN10 , 32/64 operating system				
Language	English, Simplified Chinese, Traditional Chinese, other language versions can be added				

\* 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.