TASO METROLOGY CO.,LTD

Document Release Date:Mar.17.2026

Large-Range Splicing instant VMM

F4030,F5040 Series

F4030 Series Large-Area Spliced Instant VMM features a dual telecentric optical system and high-precision image stitching algorithms. It enables rapid measurement of 2D dimensions, geometric tolerances, and 3D features such as step height, depth, and flatness using point and line lasers. With a measuring range of 500 × 400 mm, it delivers 10–20× higher efficiency than conventional vision systems.

- High-precision electric workbench
- Ensuring splicing measurement accuracy
- Achieving cross-field-of-view measurement

Filed of vision
82mm*55mm

Product Weight
Around 380kgs / 420kgs

Device Dimensions
1100mm*790mm*1950mm
1200mm*890mm*1950mm

The F4030&F5040 can Instantly measure hundreds of part dimensions with a single click, with an accuracy of up to ±0.5 μm.

Parameters

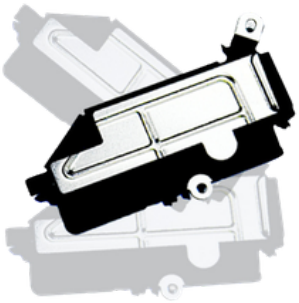
Category	Item	F4030	F4030P	F5040	F5040P
Basic	Positioning	Standard	High Precision	Standard	High Precision
Travel	X/Y/Z Stroke	400×300×200 mm		500×400×200 mm	
General	Equipment Size	1100×790×1950 mm		1200×890×1950 mm	
	Weight	380 kg		420 kg	
	Worktable Load	25 kg			
	Resolution	0.0001 mm			
Camera	Camera	20 MP CMOS			
Optics	Telecentric Lens	Double telecentric			
	Magnification (Wide)	0.16X	0.16X	0.16X	0.16X
	Magnification (High Precision)	—	0.64X	—	0.64X
	Depth of Field (Wide)	6 mm	6 mm	6 mm	6 mm
	Depth of Field (High Precision)	—	0.5 mm	—	0.5 mm
	Field of Vision (Wide)	82×55 mm			
	Field of Vision (High Precision)	—	21×14 mm	—	21×14 mm
	Mosaic Field	400×300 mm		500×400 mm	
Accuracy	Wide Accuracy (Static)	≤±3 μm		≤±3 μm	
	Wide Repeatability	≤±1 μm			
	Splicing Accuracy (Wide)	≤±(3.5+L/150) μm		≤±(4+L/150) μm	
	Splicing Repeatability (Wide)	≤±1.5 μm	≤±1.5 μm	≤±2 μm	≤±2 μm
Key Difference	High Precision Accuracy (Static)	—	≤±1.2 μm	—	≤±1.2 μm
	High Precision Repeatability	—	≤±0.5 μm	—	≤±0.5 μm
Accuracy	Splicing Accuracy (High Prec.)	—	≤± (2.0+L/150) μm	—	≤± (2.5+L/150) μm
	Splicing Repeatability (High Prec.)	—	≤±1 μm	—	≤±1 μm
Lighting	Lifting Light	Combined			
	Contour Light	Coaxial telecentric			
Software	Software	TASO-8.0E			
Environment	Working Environment	20±3°C; 35–65%; <0.002g			

Product Features

01

Items can be placed freely

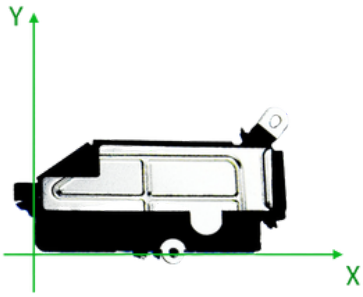
Automatic recognition of workpieces and arbitrary placement of products



Random placements on the F100V &VF100P

VS

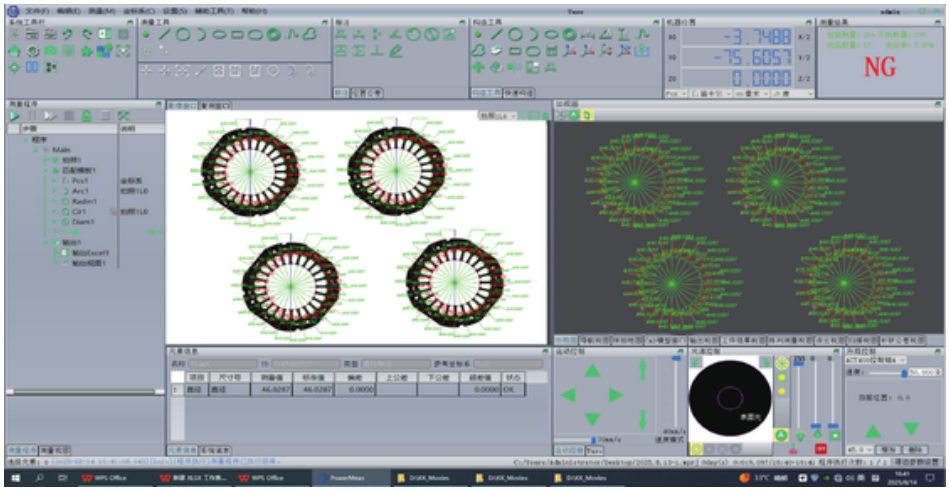
Traditional placements



02

Instant measurements, even with multiple products

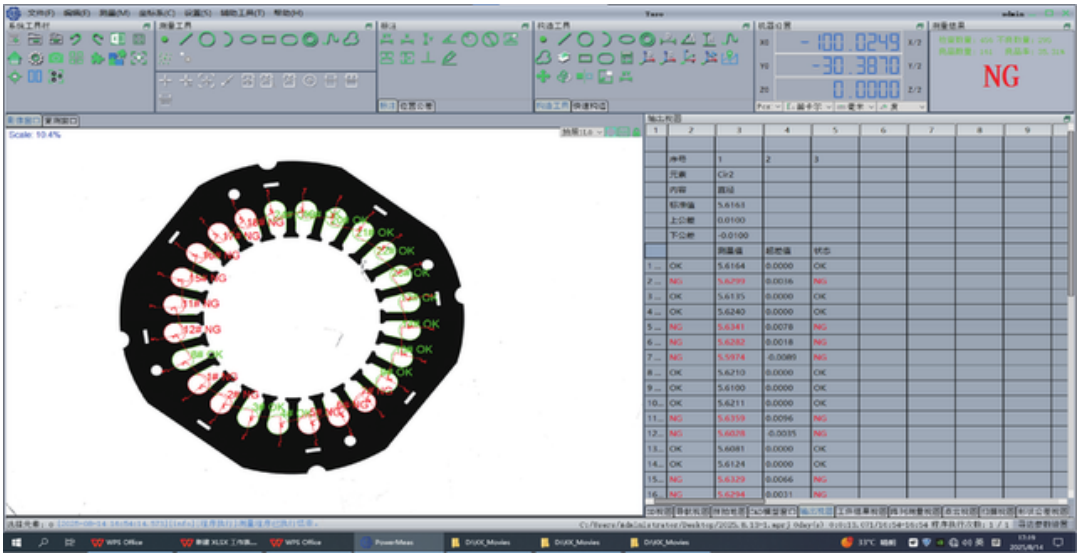
Press one button to complete the measurement instantly.



03

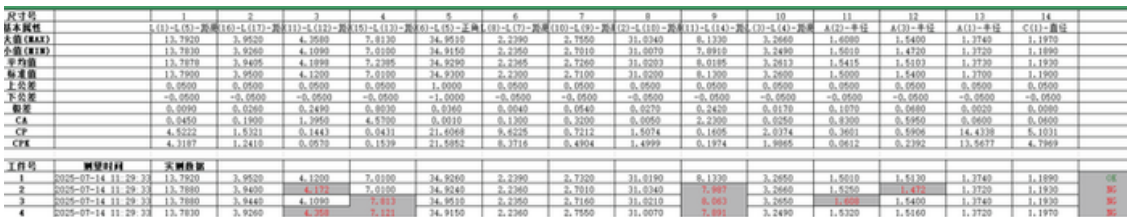
Automatic Determination of OK/NG

Complete all dimensional measurements instantly and automatically determine OK/NG.



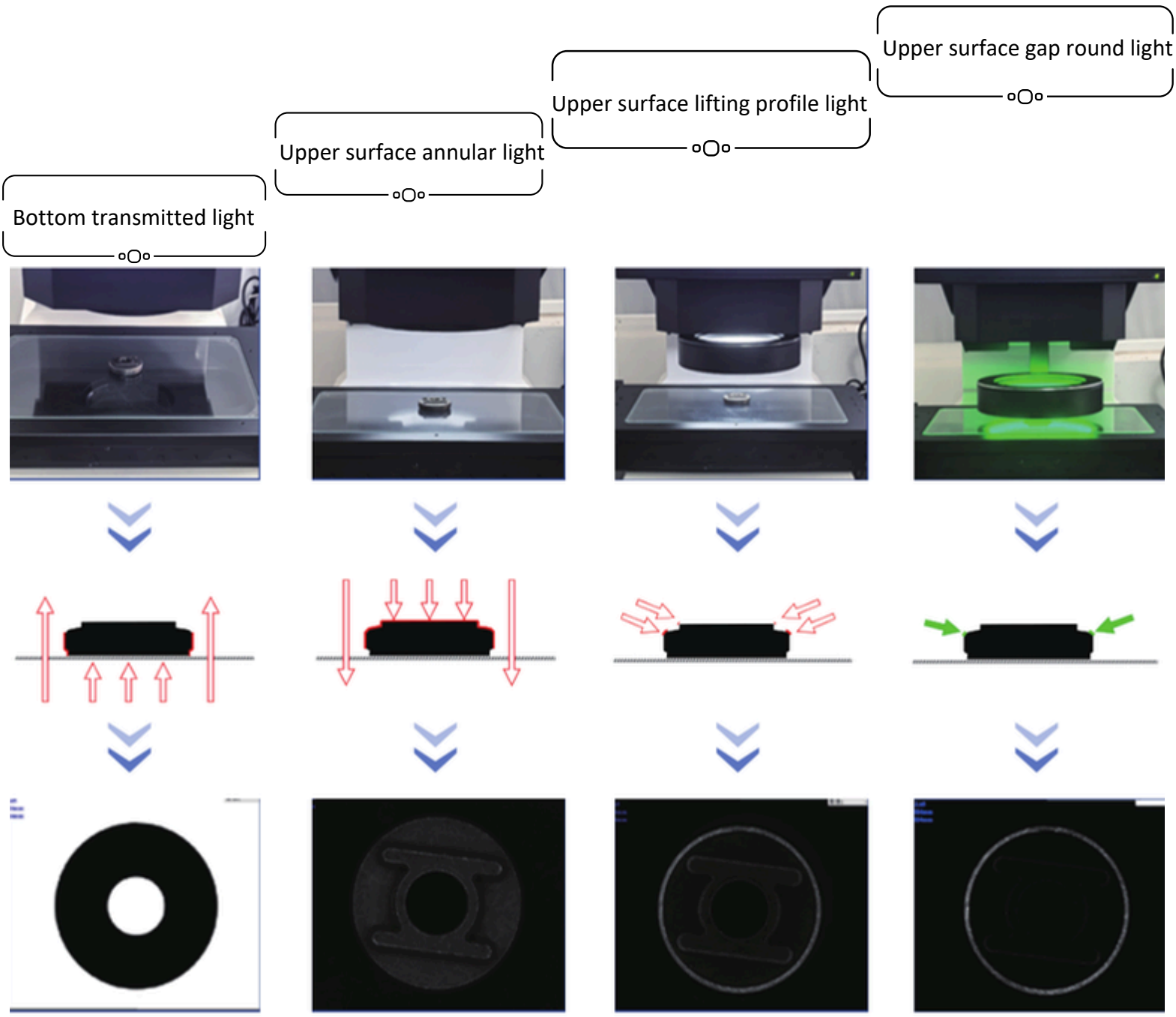
04

Generate Measurement Report Immediately



The report is automatically generated in this machine and automatically saved: convenient and fast, withoutcomplicated settings and additional software. Out of-tolerance data is automatically marked with red prompt, whichis conspicuous and easy to find

Lighting methods

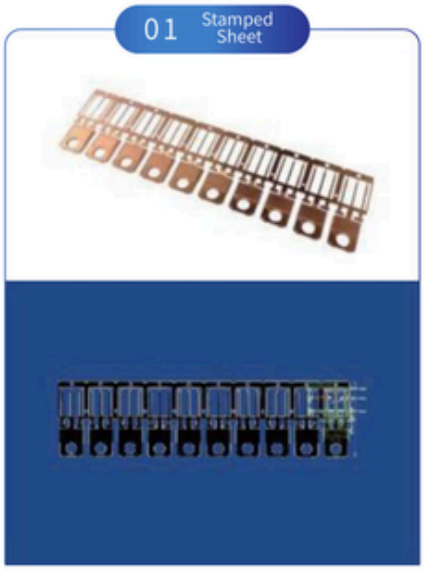


Application filed

Use cases

The F2010 & F2010P can be applied to the dimensional measurement of various precision components.

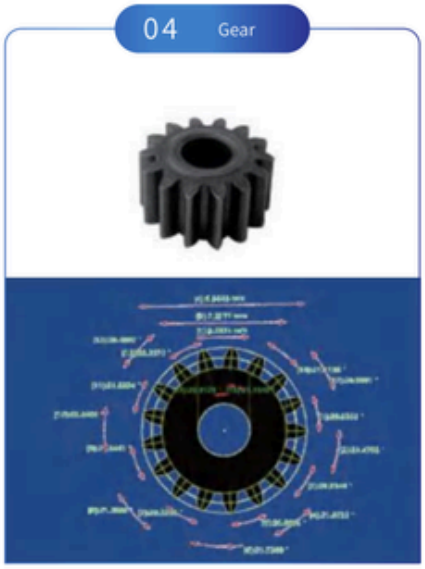
01 Stamped Sheet



02 Screw

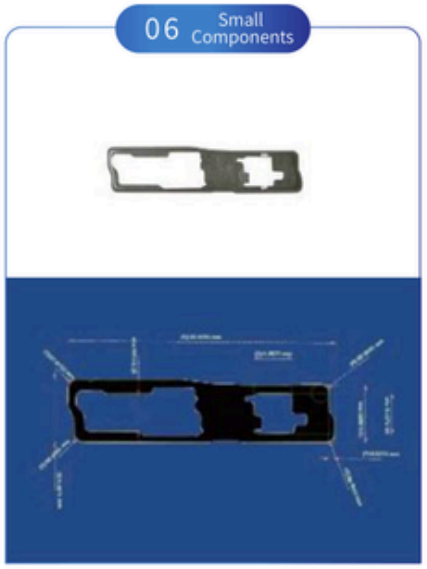
03 Connector

04 Gear



05 Plastic Components

06 Small Components



Packing list

No.	Item	Specification	Qty
1	Main Unit	Including power cable	1
2	Computer		1
3	Monitor	27 inch	1
4	Mouse / Keyboard / Mouse Pad		1
5	Measurement Software		1
6	Security Dongle	Software license key	1
7	Certificate / Warranty Card		1
8	Software User Manual		1
9	Toolbox		1
10	Pin Gauge / Block Gauge	8 mm	1
11	Table		1
12	Power Strip		1
13	Wireless Network Card		1
14	Hex Wrench Set		1
15	Protective Film		2
16	Fuse	5A	3

TASO

Get in touch with us today!

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