



CARMAR ACCURACY CO., LTD.



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Seamless Splicing, Boundless Vision.

Usage Timing

- Incoming Inspection
- Pilot / Trial Batch Inspection

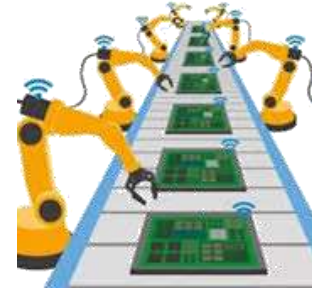


Detect defects early and request suppliers to return/replace, avoiding defective materials that may cause product failures.



Validate specifications during prototyping to optimize the process before mass production, ensuring zero material waste.

- Mass Production Sampling Inspection
- Pre-Shipment Inspection



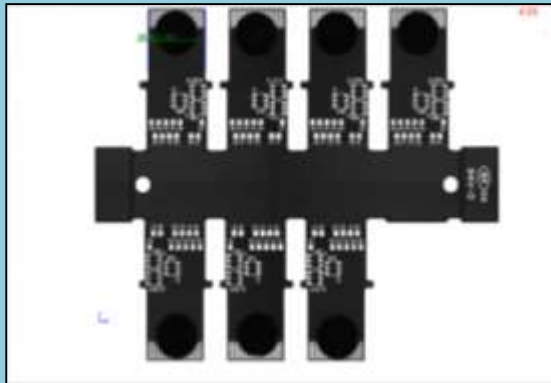
Adaptive process control:
Utilizing inspection data to fine-tune production parameters during mass production.



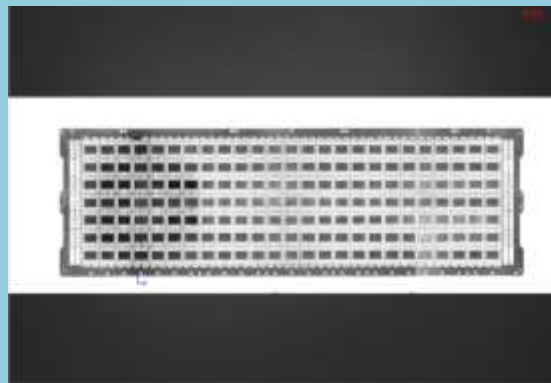
Ensure premium quality with robotic-arm-assisted inspection, maximizing your product yield.

➤ Application Example

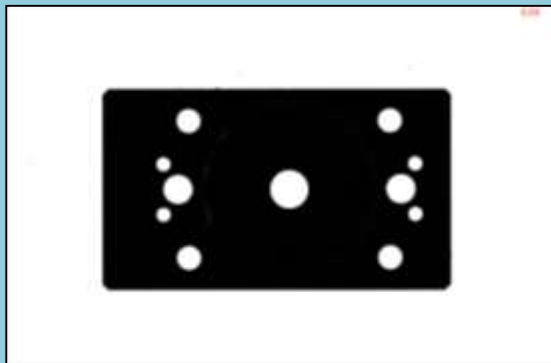
- PCB



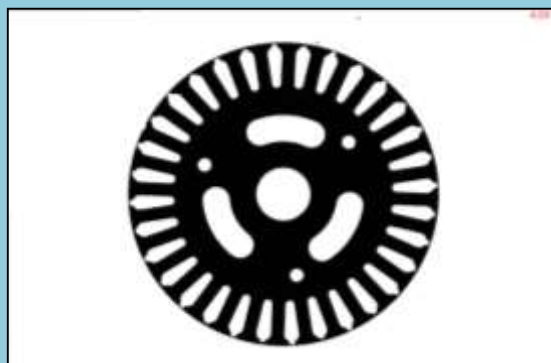
- Busbar Frame



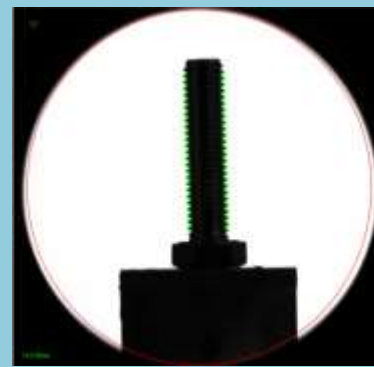
- Large Machined Parts



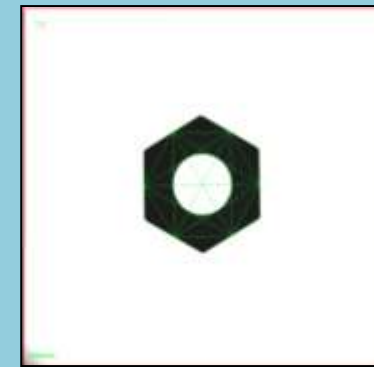
- Lathe Wash Parts



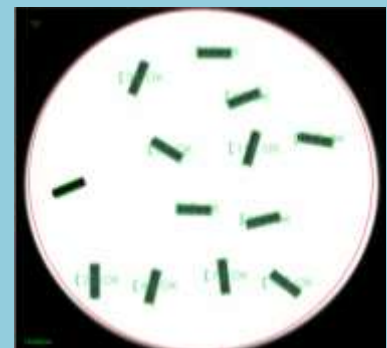
- Large Parts (Ø96 mm)



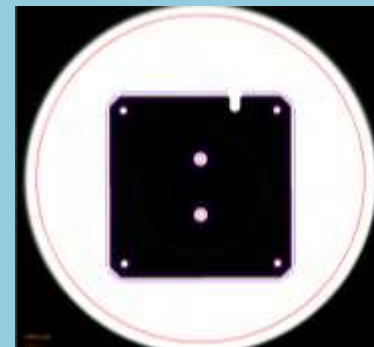
- Fixture-Free Measurement



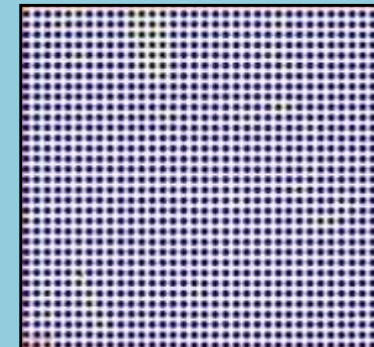
- Multi-Part Inspection



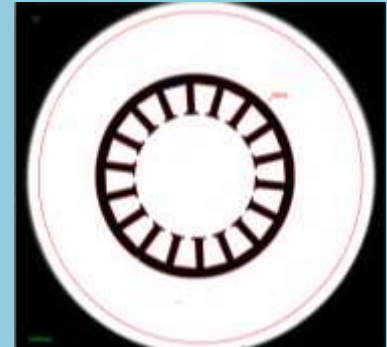
- DXF Overlay Comparison



- Auto Circle Detection



- Rotate & Copy Function



Instant inspection system



- ▶ Key Features
- ▶ Motorized Lifiable Ring Light & Bottom Light
- ▶ Easy Switching Between Two FOV Sizes
- ▶ High-Accuracy Measurement
- ▶ Measure Hundreds of Dimensions in Seconds
- ▶ Integrated SPC Statistical Analysis
- ▶ Simultaneous Multi-Part Inspection

Specifications

		VS-100A	VS-100C
Lifting light source		Not Available	Available
working distance(mm)		120	
Working load (kg)		3	
Working table lifting stroke(mm)		50	
focus(z)		auto focus	
Drive control system		Independent Motor Control	
System	Telecentric lens magnification	0.088 X	0.176 X
	Measuring Field of View(mm)	96*96	50*50
	Repeatability (μm)	3	3
	Movement accuracy (μm)	5	5
	depth of field (mm)	±8	±3.6
image sensor		20 million USB3.0 industrial camera	
digital measuring system		CarVm100C Professional software for data processing	
Lighting system		Adopt LED ring surface light, bottom light (automatic best light source)	
Instrument Dimensions (L x W x H)		568*283*769 mm	
Instrument weight (kg)		About 40 kg	

Stitching instant inspection system



- ▶ Key Features
- ▶ Height-adjustable ring light with bottom backlight
- ▶ Freely switch between two field-of-view sizes
- ▶ High-precision measurement
- ▶ Instantly detect hundreds of dimensions in one shot
- ▶ Built-in SPC statistical system
- ▶ Simultaneous multi-part measurement
- ▶ Image stitching function

Specifications

		VS-200C	
Lifting light source		Available	
working distance(mm)		120	
Working load (kg)		3	
Working table lifting stroke(mm)		40	
focus(z)		auto focus	
Drive control system		Independent Motor Control	
System	FOV type	Large FOV	Small FOV
	Telecentric Lens	0.088 X	0.176 X
	Without Stitching (mm)	96*96	50*50
	With Stitching (mm)	200*96	150*50
	Repeatability (μm)	3	
	Movement accuracy(μm)	5	
X, Y indication error (μm)		3+L/100	
image sensor		20 million USB3.0 industrial camera	
digital measuring system		CarVm200C Professional software for data processing	
Lighting system		Adopt LED ring surface light, bottom light (automatic best light source)	
Instrument Dimensions (L x W x H)		568*300*768	
Instrument weight (kg)		45kg	

Large Field of View Image VMM

Key Features

- ▶ Stitchable FOV, custom view
- ▶ FOV setup, full-area single-part file
- ▶ Multi-part simultaneous measurement
- ▶ 200×200 mm stitching ≤40 s
- ▶ Motorized light height adjustment



Dual-Module Large Field of View Image VMM

Key Features

- ▶ Custom stitchable FOV
- ▶ FOV setup, full-area single-part mapping
- ▶ Multi-workpiece simultaneous measurement
- ▶ 200×200 mm stitching ≤40 s
- ▶ Modular switching



Specifications

Model		VMM-3525PJ	VMM-4535PJ
Working distance(mm)		145 ± 2	
Z Axis Lift Stroke(mm)		150	
Focus (z)		Auto Focus	
Drive control system		independent motor control	
SYSTEM	Centrifugal lens magnification	0.16 X	
		0.64 X	
	Large field of view(mm)	80*50	
	Large view measuring range (mm)	400*300	500*400
	Small field of view(mm)	20*14	
	Small view measuring range (mm)	350*250	450*350
	Repeatability (μm)	5	
	X, Y indication error (μm)	3+L/200	
	Depth of Field (mm)	6mm@25Ip/mm Large field of view	
	Depth of Field (mm)	0.6mm@64Ip/mm Small field of view(mm)	
Image Sensor		20 million USB3.0 industrial camera	
Software		BroCarVm Data Processing Professional Software	
Lighting System		Surface light and bottom light respectively	
Dimensions(mm) (L x W x H)		1000*690*1755	1130*810*1800
Weight (kg)		Approximate 500 kg	Approximate 570 kg

Specifications

Model		VMM-D3525PJ	VMM-D4535PJ
Working distance(mm)		145 ± 2	
Z Axis Lift Stroke(mm)		150	
Focus (z)		Auto Focus	
Drive control system		independent motor control	
SYSTEM	Centrifugal lens magnification	0.16X	
	Large field of view(mm)	80*50	
	Auto zoom lens □	0.7X ~ 4.5X	
	Auto zoom FOV (mm)	9.73~1.68	
	Large view measuring range (mm)	400*300	500*400
	Lens module switching	Auto	
	Zoom lens measurement range (mm)	350*250	450*350
	Wide FOV repeatability (mm)	5	
	Auto zoom repeatability (mm)	3	
	X, Y indication error (mm) ⚙️	3+L/200	
Image sensor (wide FOV)		20 million USB3.0 industrial camera	
Image sensor (auto zoom) 📷		20 million USB3.0 industrial camera	
Software		BroCarVm Data Processing Professional Software	
Lighting System		Surface light and bottom light respectively	
Dimensions(mm) (L x W x H)		1000*690*1755	1130*810*1800
Weight (kg)		Approximate 500 kg	Approximate 570 kg