ST SERIES
FLASH MEASURING MACHINE

MAKE MORE ACCURATE

METROLOGY SOLUTIONS
FOR ALL MANUFACTURINGS

High Precision │ Smart Software │ R&D Team

ABOUT JINUOSH

CUSTOMER FIRST QUALITY CONTROL TEAM WORK

Guangdong Jinuosh Technology Co., Ltd. is a hightech enterprise egaged in the research and development,production and sales of optical microscope, precision measuring instruments experimental equipment and various optica components and components, with a technical teamand management team specializing in the development of advanced products and proces research.

Always follow: "customer first, quality first perfect" quality policy, wholeheartedly for domesti and foreign customers to provide beautiful shape,excellent performance, reasonable price,user satisfaction's testing equipment products, the products are mainly exported,our company has won the trust and praise of many customers by providing allround assistance, high quality and sincere service. The company has gradually established the leading position in the testing instrument industry in China.In the domestic and international markets to establish a good brand, with its strong strength and good reputation in the industry, to become the world's top brands of excellent partners.

GUANGDONG JINUOSH TECHNOLOGY CO., LTD

Service Hot: 4000 628860

Tel:0769-22820867

E-mail : Sales1@jinuosh.com

Website: www.jinuosh.com

Address: No.25 Dongke Road,Dongcheng Distric,Dongguan city,Guangdong province,China

JINUOSH TECHNOLOGY

MEASURE

FLASH MEASURING SYSTEM

ST 100

The ST Series are equipped with a specifically designed optical lens with a large depth of field. It can automatically bring measurement points into focus. This is useful for parts with uneven surfaces, where all of the measurement areas cannot be brought into focus at the same time.

Large Diameter Bitelecentric Lenses

No Difficult Focus Adjustment or Positioning Required

Ultra-high-definition CMOS

20-megapixel CMOS and New Edge Detection Algorithm for Three Times the Detection Performance

Multiple Illumination Units in One

The programmable ring-illumination unit integrates multiple ring illumination functions into a single unit. This allows a wide variety of features to be inspected without the need for lighting changeover, maximising efficiency
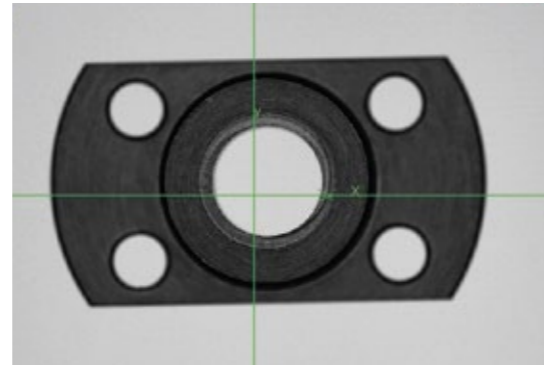
Large High-speed/High-precision Stage

Measurement Area of up to 300 × 200 mm

# No extreme focus adjustment or positioning required

Clear Focus Regardless of Height Differences

The ST Series are equipped with a specially designed lens with a large depth of field. This ensures accurate measurements despite height differences on the part.

Apparent Feature Size Not Affected by Height Differences

The ST Series are equipped with a bitelecentric optical system, which means that the image is not affected by the height differences of the part. Allowing it to perform accurate measurements of parts with uneven surfaces.
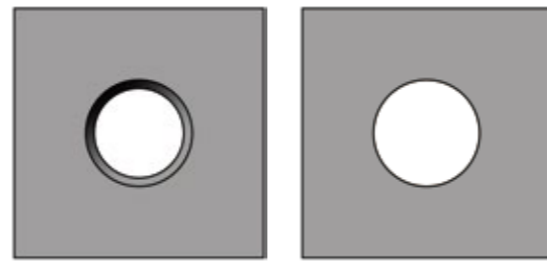
普通镜头(凹凸不平)　　远心镜头(平整)

Reduced Distortion Throughout the Entire Field of View

The ST Series are equipped with a low distortion lens designed to not only minimise distortion near the centre but also at the outer reaches of the field of view, so parts can be measured accurately regardless of their location on the stage.
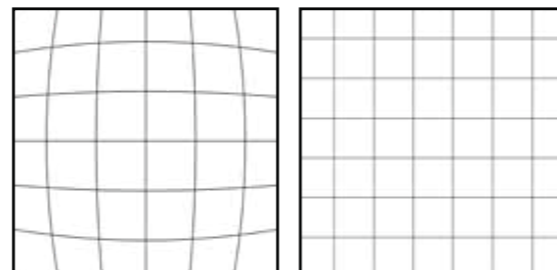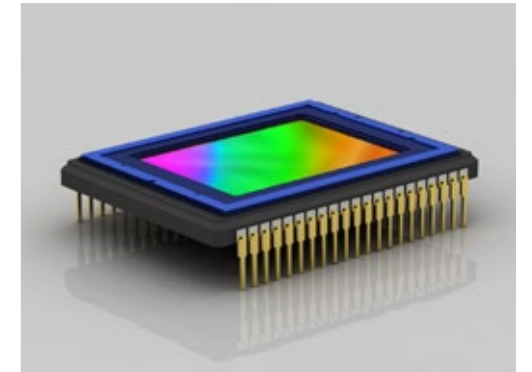
普通镜头畸变　　远心镜头畸变

20-megapixel CMOS and New Edge Detection Algorithm for Three Times the Detection Performance

Ultra-high-definition 20-megapixel CMOS

This CMOS sensor provides the optimal lens resolution and has three times the number of pixels of a conventional system, visualising minute edges that were difficult to see until now.

Dual Camera Simultaneous Measurement Optical System

With a single setting, it is possible to switch between the 100 mm diameter wide-field camera and the 25 mm square high-precision camera. The former can be used to capture the outer dimensions and overall shape of the part quickly, and the latter can be used to measure microscopic shapes and points requiring high precision, reducing measurement time and improving precision.
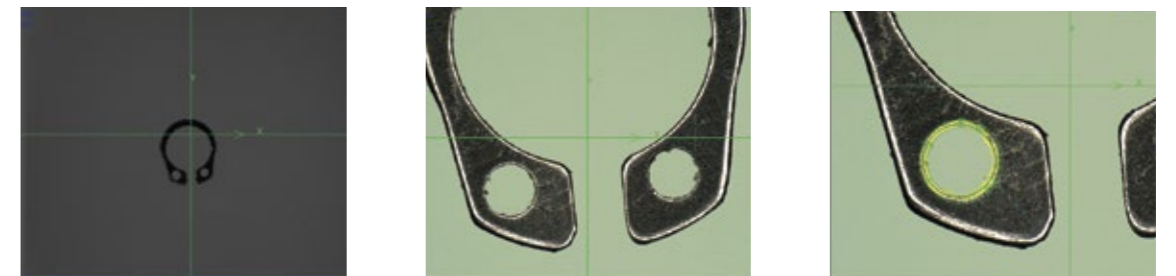
Powerful Edge Detection Engine

This new engine can stably detect edges with weak light/dark contrast. JINUOSH's newly developed algorithm identifies edges from the surrounding edge information, enabling measurement with higher precision.
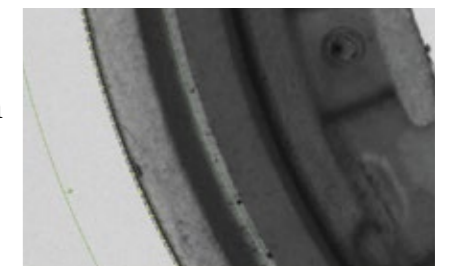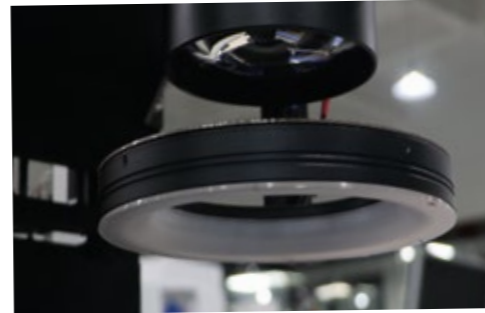
Programmable Ring-illumination Unit

Multiple Illumination Units in One

The programmable ring-illumination unit integrates multiple ring illumination functions into a single unit. This allows a wide variety of features to be inspected without the need for lighting changeover, maximising efficiency.

Automatically Finds the Optimal Lighting Settings

It is often difficult to determine the correct lighting settings for a given feature. The optimal lighting search function simplifies this process by showing you actual images using different lighting techniques so you can simply select the one you want. This means that even first time users can feel confident in their ability to use the instrument.
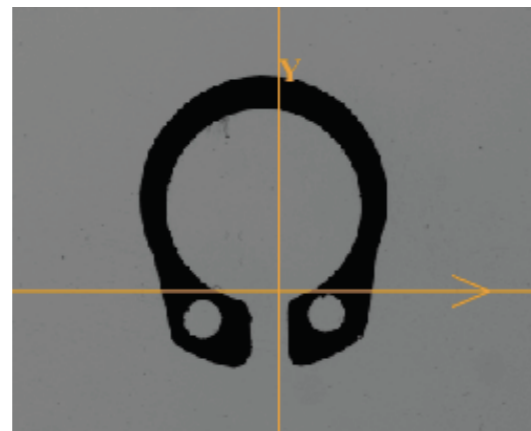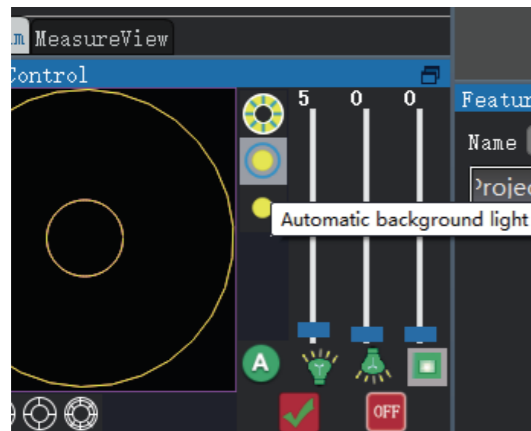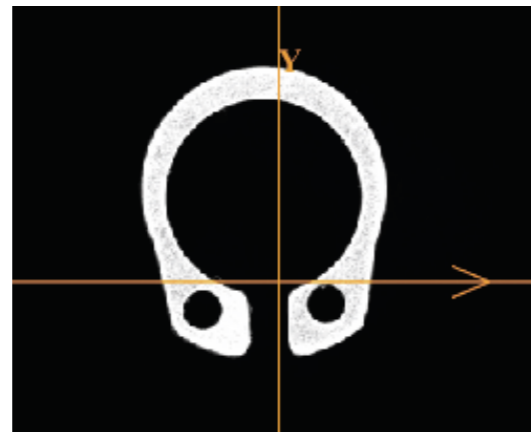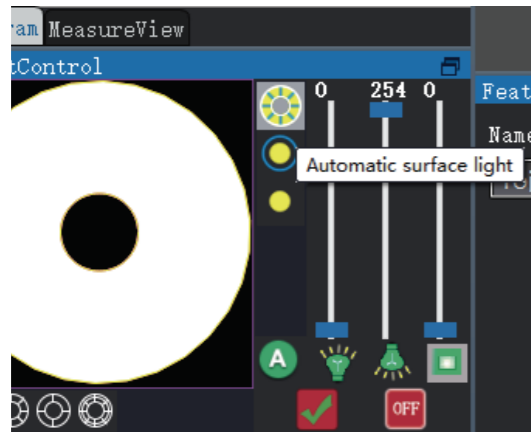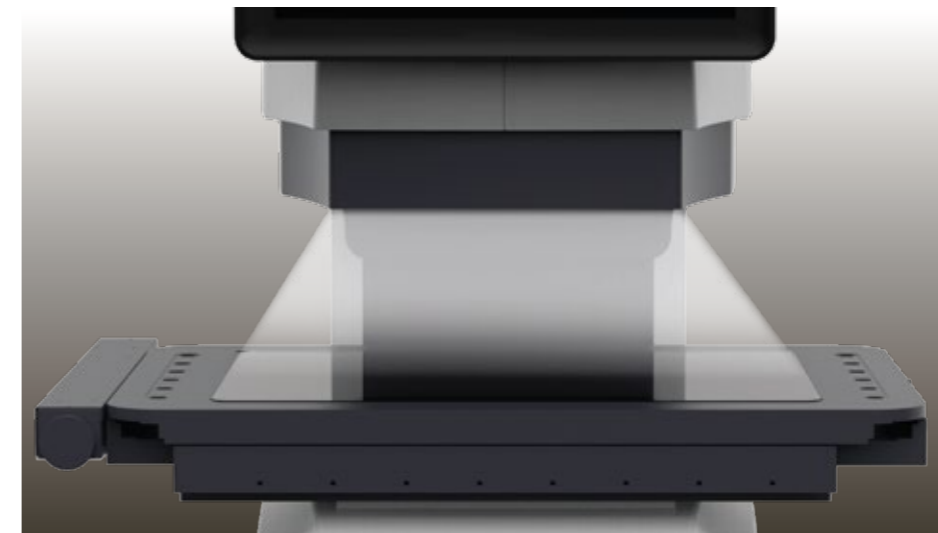

Measurement Area of up to 300 × 200 mm

300 × 200 mm Field of View, Twice the Measurement Speed

Parts up to 300 × 200 mm across and up to 85 mm high can be measured. The new design minimises the resistance between the motor and the feed screw, narrowing the movement pitch and allowing for stable measurement at high speed without having to fix parts in place.

Automatic Search for Parts

The ST Series search for and measures parts anywhere on the stage. There is no need to place parts directly under the lens. The high-speed motion of the stage over a wide area ensures that the part will be found and measured.
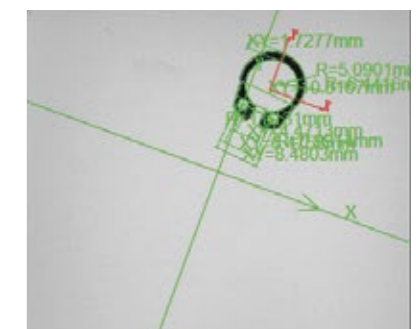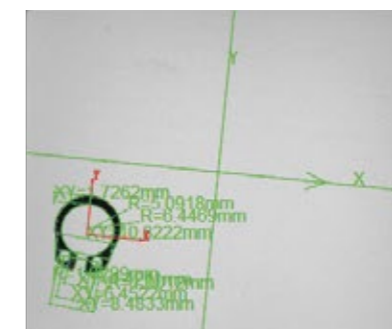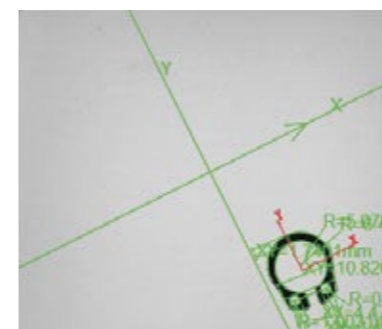
Faster, Easier, and More Accurate Dimensional Measurement

FAST
- No time consuming positioning work or datum setup required
- Measure up to 300 dimensions on up to 100 parts with the push of a button
- Automatically saves measurement data and creates inspection reports

CONSISTENT
- Automatically identifies measurement points, ensuring that the same measurement results are obtained each time
- Automated focus adjustment prevents inconsistent values
- The simple place-and-press operation means consistent measurement results regardless of the operator

EASY
- Easily set up measurements with just a few clicks
- Setting up virtual lines and points is just as simple
- No measurement expertise is required to measure parts

FAST Measurement Performed in Seconds

Dimensional Measurement in as Little as One Second

A new function enables instant measurement just by placing the parts on the stage.
This feature greatly reduces production costs when the number of measurements is large.
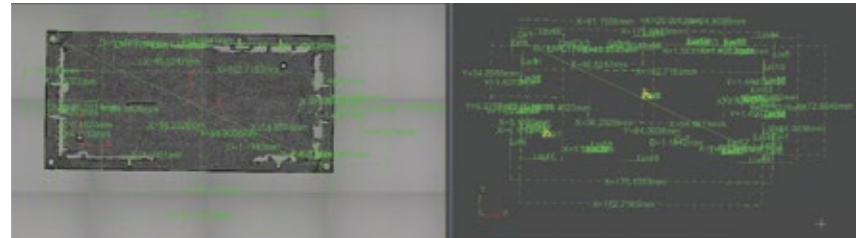

Simultaneous Measurements on Multiple Parts

By preparing a program file with measurement points and conditions, up to 300 dimensions per part and up to 100 parts can be measured simultaneously. This function saves time and effort even with many parts and measurement points.


Find Program Files Quickly

Just place the QR code printed on an inspection report on the stage to read the program file.
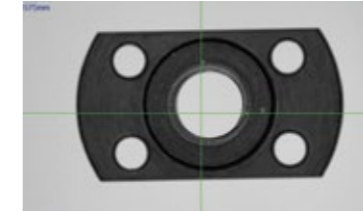This function ensures the correct file selection even when there are many file types.
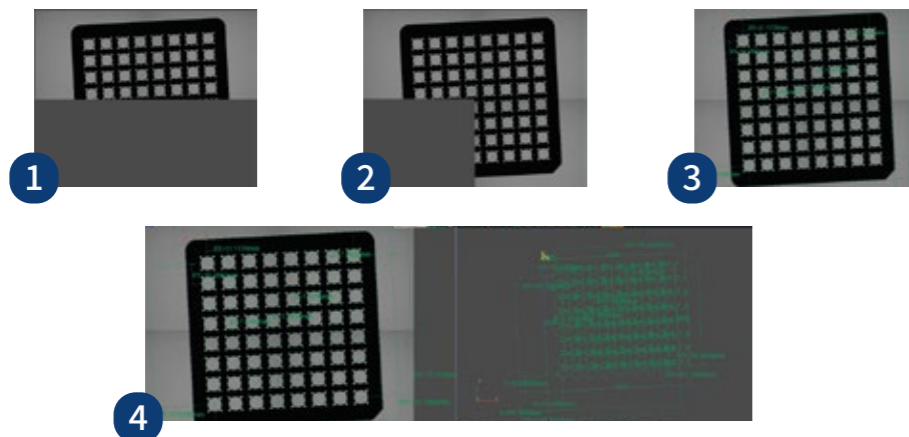
CONSISTENT Eliminate Operator Error
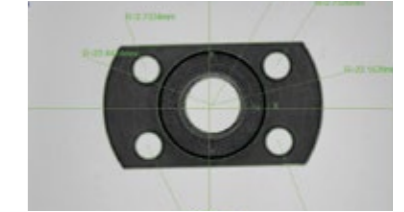
Automated Focus Adjustments

The ST Series are equipped with a specifically designed optical lens with a large depth of field. It can automatically bring measurement points into focus. This is useful for parts with uneven surfaces, where all of the measurement areas cannot be brought into focus at the same time.
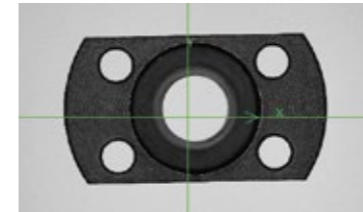
Only the lower edges are in focus   Only the upper edges are in focus   The focus is automatically adjusted for measurement

Automatic Edge Detection

By splitting each pixel into 100 or more sub-pixels, There may be less than 100 points depending on the shape.Burrs and chips found in the detection area are automatically recognised and removed from the fitting process as abnormal locations. It is also possible to set the system to interrupt measurement when burrs or chips are found that are larger than a particular threshold.
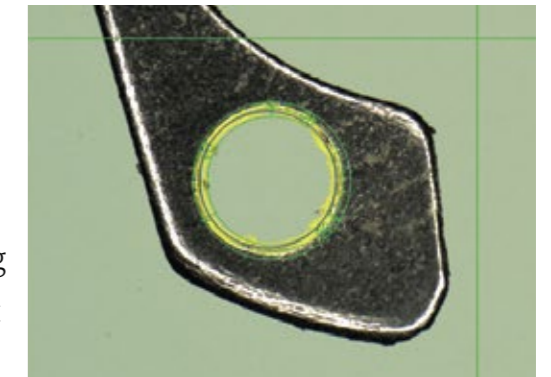
Automatically identify the measurement location and obtain consistent measurement results every time
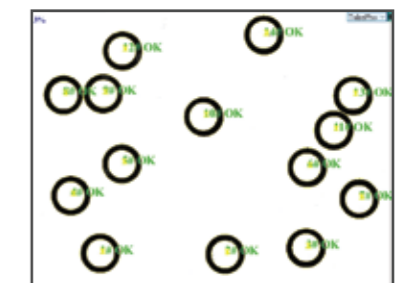
After setting the template, the program automatically recognizes the same product. The same product can be identified and measured at any location.
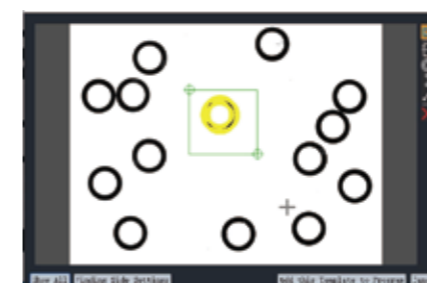
Setting up processing   Measuring the elements   Recognise and measure

Intuitive Menus and Built-in Procedures Manual

The programming procedure is very intuitive. While viewing a part, simply select what points, lines, circles, virtual lines, and other features to measure. Animations showing the operation methods and a procedures manual showing operation flow are provided for each menu. These on-screen procedures let anyone configure program settings with confidence.
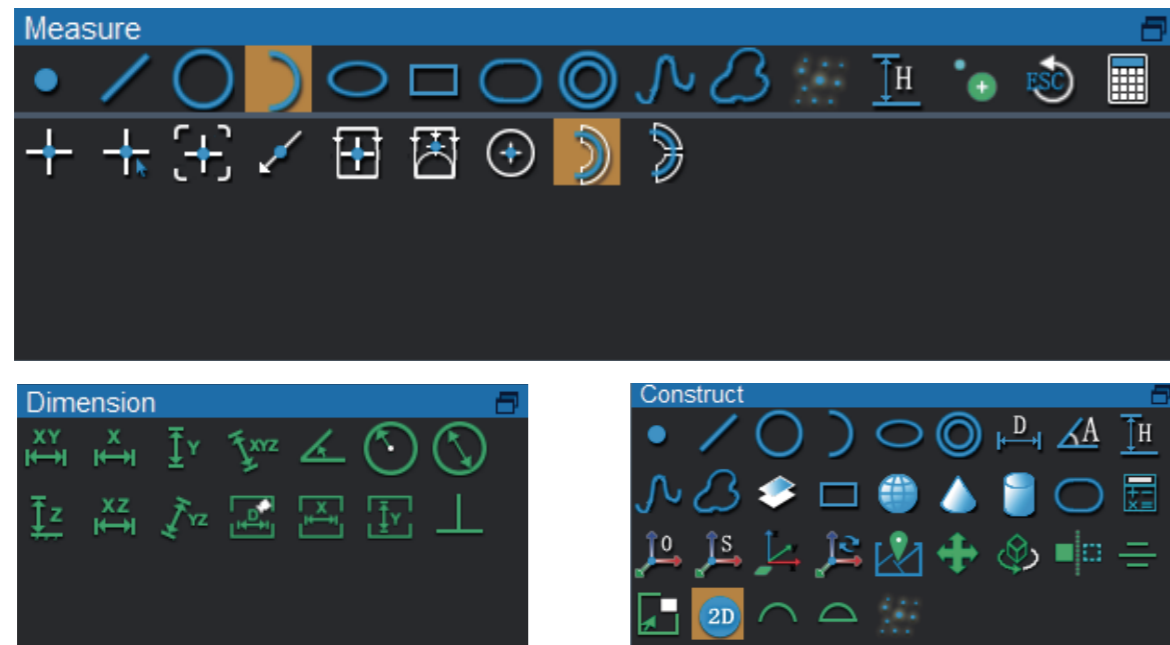
Automatic Measurement Function

The automatic measurement function enables measurement of a single part or a small quantity of mixed parts with no setup. This function can automatically detect measurement points on parts up to 300 × 200 mm, even if the parts have not been measured before.
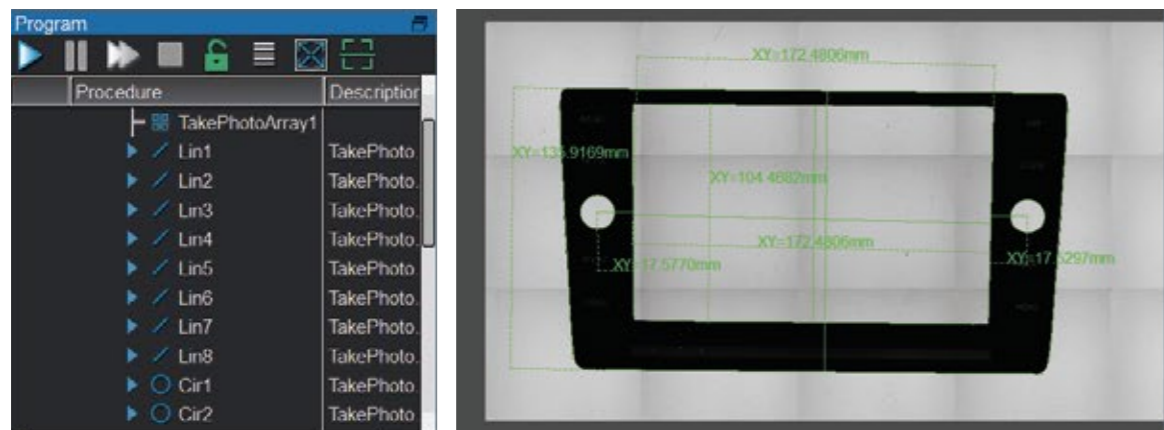
ST 300

Specification

Model				ST100	ST200	ST300
XY Satge(motorized)				—	120mm x 140mm	200mm x 140mm
Z Satge(motorized)				75mm		
Camera				20MP Black and White Digital	12MP Black and White + 8MP color Digital camera	
Monitor				11.6 inch LCD Monitor(WXGA:1920×1080)		
Lens				Bitelecentric lens		
Image Measurement	FOV	Wide-field measurement mode		82mm × 55mm	200mm × 200mm	300mm × 200mm
		High-precision measurement mode		—	140mm × 154mm	240mm × 154mm
	Resolution			0.1μm		
	Measuring accuracy	Wide-field measurement mode	Without stage movement	±2.0μm		
			With Stage Movement	—	±(2.0+L/50)μm	
		High-precision measurement mode	Without stage movement	±1.5μm		
			With Stage Movement	—	±(1.3+L/50)μm	
	Repeat accuracy	Wide-field measurement mode	Without stage movement	±1.5μm		
			With Stage Movement	—	±2.0μm	
		High-precision measurement mode	Without stage movement	±1.5μm		
			With Stage Movement	—	±1.5μm	
Lighting system	Surface light			Multi-angle lighting (motorized)		
	Transparent			Telecentric transparent illumination		
Weight				28KG	35KG	

*L=is the measured length ,unit mm