



Instant Vision Measuring System



Sinowon Innovation Metrology Manufacture Limited

## 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, 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!



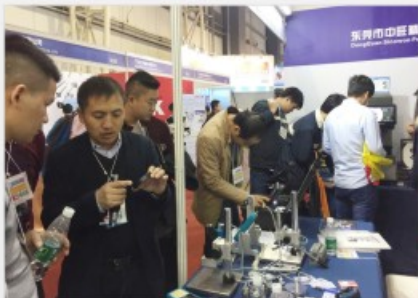
Intermach Metal Processing Machinery Fair



CCMT China CNC Machine Tool Fair



ASEAN International Machine Tool Fair



DMP Tooling and Machining Fair



SIMM Machinery Fair



Control Stuttgart Quality Control Fair

Instant Vision Measuring System

**ivs** Series



High Precision



Easy Operation



Low Cost



Data Output



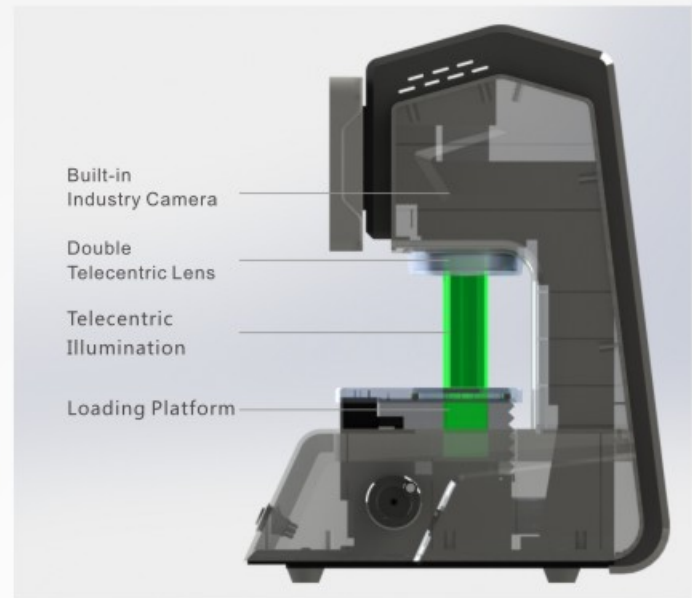
Batch Measurement





## + Characteristic

- High depth of field, low distortion double telecentric lens, no need to repeat focus.
- Software processes the image by the way of Sub-pixel edge detection and automatic removal of burrs and outliers and the leastsquare method to ensure accuracy.
- Automatic location and orientation correction, automatically detect and measure based on the recorded shape of the sample, measure with a click of button.
- Automatically identify multiple parts, test elements, then conduct automatic measurement, satisfied with batch measurement requirements.
- Entire image, no need to move the working stage, both high efficiency and high accuracy.
- Improve efficiency, save labor cost, eliminate operator error.
- Automatic memory and output measuring values, and make test data simple applied.



## + Application

| Model                           | iVS-30   | iVS-60                           | iVS-80                            | iVS-160                           |
|---------------------------------|--|----------------------------------|-----------------------------------|-----------------------------------|
| Code#                           | 500-030  | 500-060                          | 500-080                           | 500-160                           |
| Lens                            | 0.3X<br>Double Telecentric Lens  | 0.17X<br>Double Telecentric Lens | 0.088X<br>Double Telecentric Lens | 0.088X<br>Double Telecentric Lens |
| Working Distance                | 110mm  | 110mm                            | 120mm                             | 390mm                             |
| Wide Field                      | Ø30mm(28x24)   | Ø60mm(56x50)                     | Ø116mm(94x76)                     | Ø229.6mm(146.7x110)               |
| Measurement Accuracy            | ±2um   | ±3um                             | ±4um                              | ±7um                              |
| Repeatability Accuracy          | ±1um   | ±2um                             | ±2um                              | ±5um                              |
| Camera                          | 2/3"5 million pixel B/W camera (Ethernet)  |                                  |                                   |                                   |
| Illumination                    | Digital controls, automatic memory   |                                  |                                   |                                   |
|                                 | Telecentric Green LED Contour illumination   |                                  |                                   |                                   |
|                                 | Ring White LED illumination  |                                  |                                   |                                   |
| PC System                       | DELL (I5 Intel processors)   |                                  |                                   |                                   |
| Monitors                        | Built-in 10.4 inch LCD Monitor(1920x1080)  |                                  |                                   |                                   |
|                                 | External 21.5 inch LCD Monitor(1920x1080)  |                                  |                                   |                                   |
| Measuring Software              | iMeasuring 6.0   |                                  |                                   |                                   |
| Measuring Amount                | Max.99   |                                  |                                   |                                   |
| Test Time                       | <5S (Less than 100 tests)  |                                  |                                   |                                   |
| Output Data                     | Test data, reports, determine the results (OK, NG, WAIT), etc  |                                  |                                   |                                   |
| Function                        | 2D measurements: points, lines, circles, arcs, angles, distance, oval, O-rings, Groove, rectangle, parallelism   |                                  |                                   |                                   |
| Auxiliary Function              | Intersecting, parallel, perpendicular, tangent, bisection  |                                  |                                   |                                   |
| Geometric Tolerances            | Dimension tolerances and position tolerances, tolerances of form and position (Point position concentricity, straightness, parallelism, roundness, straightness, profile, etc) |                                  |                                   |                                   |
| Measurement Mode                | Manual / Automation  |                                  |                                   |                                   |
| SPC Data Management and Control | √  |                                  |                                   |                                   |
| CAD Data Input / Output         | √  |                                  |                                   |                                   |
| Power Supply                    | AC100~240V,50~60Hz   |                                  |                                   |                                   |

## + Software Introduction

### ● Perfect Accuracy

Recover the original dimension with high accuracy.

- Double telecentric lens and high depth of field, allow height difference in sample, section with slope or curvature and other difficult measuring elements. And low distortion without having to worry about sample placement and blurred focus, and recover the original dimension with high accuracy.
- Low distortion lens, clear edge image, no distortion, eliminate measuring error.
- Software with sub-pixel (Sub Pixel), least-square method regression algorithm and high video compensation to ensure accuracy.
- Sub Pixel edge detecting image processing algorithm makes pixel division smaller, closer to the actual edge.
- The least-square method automatically removes burrs and outliers, ensures the least influence on feature location.

### ● Efficient Batch Measurement

Takes only 2~5 seconds to measure dozens of position, 99 measurements can be conducted at a time within the measuring range, it significantly shortens the measurement time and improve measurement efficiency.

#### ● Workpiece Placing

No location and fixture requirements, anywhere within the effective range of the lens.

#### ● Workpiece Positioning

Automatic location and orientation correction, automatically detected and measured based on the recorded shape of the sample.

#### ● Workpiece Measuring

Entire image reduces the time of import program, moving worktable and lens.

#### ● Workpiece Focusing

Double telecentric lens, long working distance, allow height difference.

### ● Entire Image

No need to move working stage, efficient and high accuracy.

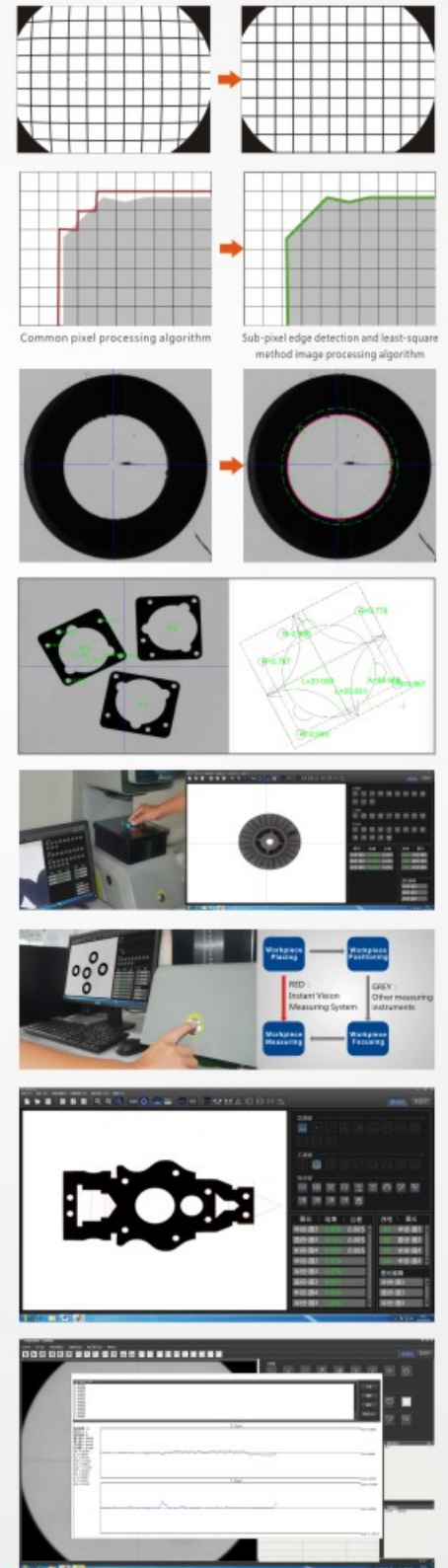
- Traditional measuring instruments have narrow field of vision, can only test one position at a time, and it requires to move working stage and position specimen, Traditional measuring instruments repeatable steps and more time-consuming and complex to operate.
- Traditional measuring instruments need to consider the accuracy of supporting hardware, such as, linear scales, working stage mounting accuracy, etc.

### ● Simple Application

- Automatically record and output the measured values to WORD, EXCEL, TXT documents and SPC statistics and analysis which makes it easy for the test data application.
- It can set tolerances, when measurement exceeds the tolerance, it has automatic alarm and automatically SPC statistics and analysis and output the reports.

### ● Support Reverse Engineering

- Imported DXF files by software can be measured, graph and data can also be exported from the software for DXF files for other applications.





**Effectively Eliminate Operator Error**

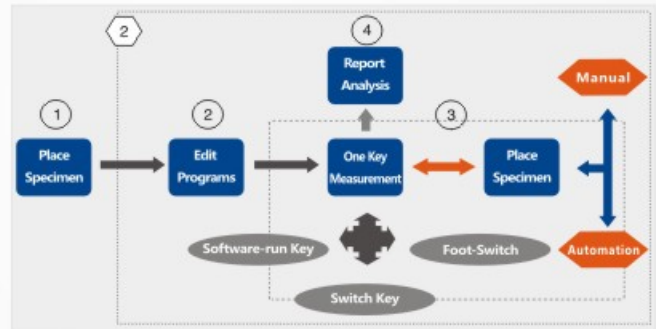
Avoid operated method, specimen placing, measuring sequence, eliminate the operator error efficiently.

| Human error elements | Other measuring instruments (Human Error)   | Instant Vision Measuring System (Eliminate Human Error)   |
|----------------------|---|---|
| Measuring Method     | The operator is not familiar with the software and the machine  | Memory and storage of measurement method, point position and test direction, auto running, eliminate operator error efficiently |
|                      | Operators emotion changes will cause accuracy and stability deviation   | Automatic & Mechanization, eliminate operator error   |
|                      | Short working distance and depth of field, repeatedly focusing will cause misjudgment and mechanical tolerance        | High DOF double telecentric lens, long working distance, allow height difference, no need to repeat focusing                    |
|                      | Different operators, different habits and focus clearness, point selection, illumination intensity, different results | Automatically memorize illumination, measuring mode, point selection mode   |
| Measuring Method     | Different positions and directions  | Without fixture, and place randomly   |
|                      | Fixture shift, point location will cause coordinate origin error  | Automatic location and direction adjustment and take accurate measurement   |
|                      | Point position and measured elements are out of sequence  | Automatic & Mechanization   |

**Friendly Operation, Low Costs**

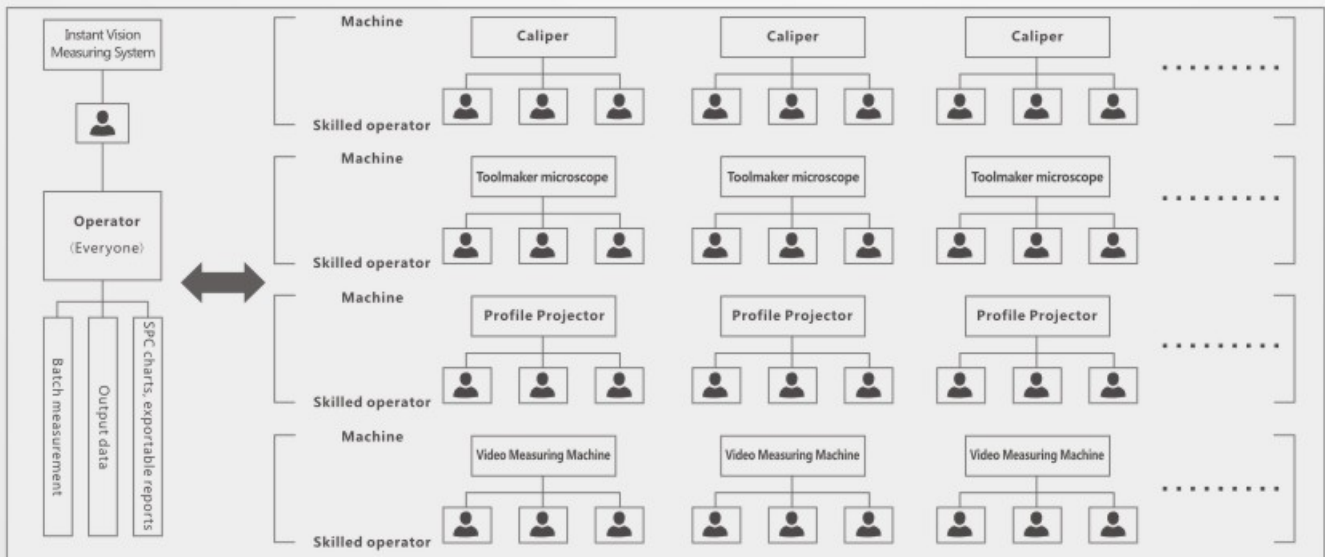
High efficiency, save labor cost, eliminate operator error.

- No fixture, location, correction, focus, lighting, running control requirements, automatically measure within the maximum range of the measuring field, greatly improve efficiency.



- Anyone can operate, general workers can meet the requirements, high efficiency, save labor cost.

| For example                | Other measuring instruments  | Instant Vision Measuring System   |
|----------------------------|--|---|
| Save training costs        | It takes a long time to learn the instrument operation   | One key operation, anyone can operate   |
|                            | Worried about losing skilled operators, resulting in * disconnect *  |   |
| Lower utility costs        | Limited to skilled operators, high salary requirements (1000 USD/month)  | Anyone can operate, general workers can meet the requirements (500 USD / month) |
| Save test efficiency costs | Equipped with 5~10 machines in one production workshop, each equipped with at least one or two skilled operators | Instant Vision Measuring System, one general worker                             |



**Contact us for brand new, refurbished and used KEYSIGHT Equipment**



AGS-TECH Inc.

Phone: +1-505-550-6501 and +1-505-565-5102 Fax: +1-505-814-5778

Email: [sales@agstech.net](mailto:sales@agstech.net)

Web: <http://www.agstech.net>