

# Mikrosize®

# VMQ-100

## Instant Video Measuring System



Video



### Contact us

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## Product Advantage

### 1. One-key Instant Measuring, Batch Testing

- A) Measuring Sample can be placed randomly without fixture positioning, software can identify and match automatically.
- B) Unlimited dimension measurement, and measurement task can be completed within 1 s.
- C) CAD drawing import for direct measurement.
- D) One-time measurement of the same type of measuring sample.

### 2. Accurate Calculation and High Repeatability

- A) Unique patent technology of Edge extraction and lens distortion correction
- B) Automatic lighting,, greatly improve the repeatability.
- C) It can be compared with the measurement accuracy and repeatability of traditional Video Measuring Machine.

### 3. Easy To Operate Without Training

- A) Anyone can get started quickly without training.
- B) Simple interface, intelligent measurement , the optimized operation process , real-time operation tips.
- C) All measurement data can be automatically recorded, statistical analysis can be generated with one key. measurement results can be printed in various file formats or directly printed by printer.

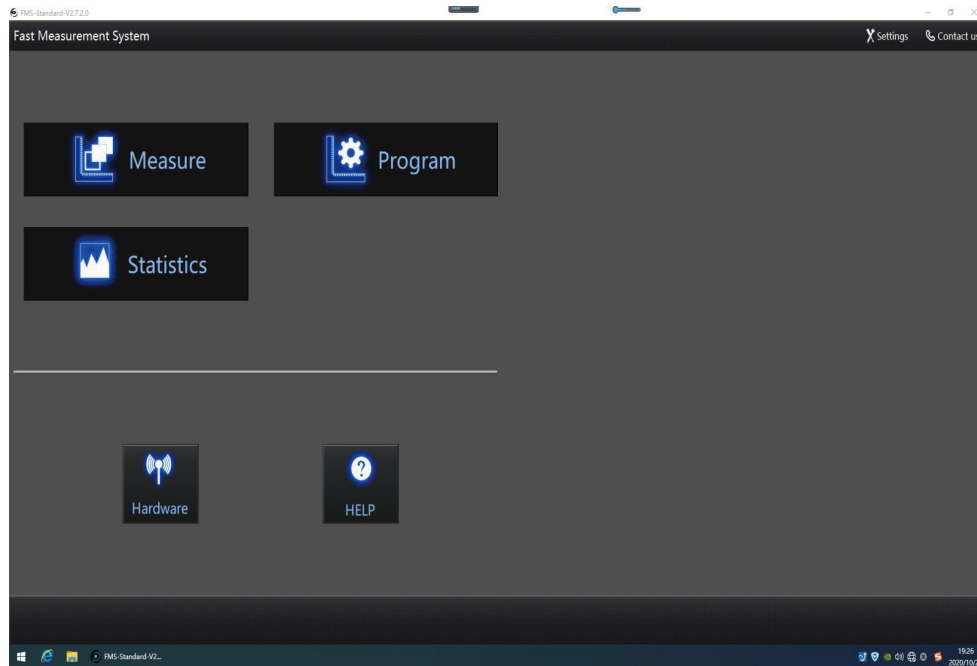
### 4. Various Function, Automatic Report

- A) The software is divided into three functional models: measurement setting, continuous measurement and statistical analysis.
- B) Continuous measurement can be used for real-time measurement, and it can judge NG / OK without pressing the key, providing 80 tools of extraction and analysis , including feature extraction tools (such as maximum point, center line, arc, peak circle, etc.), auxiliary tools (such as arbitrary point line circle, fitting line, fitting circle, tangent line, inscribed circle, etc.), intelligent annotation tool, geometric tolerance tool, special application tool (such as R angle, etc.).

## Software Function

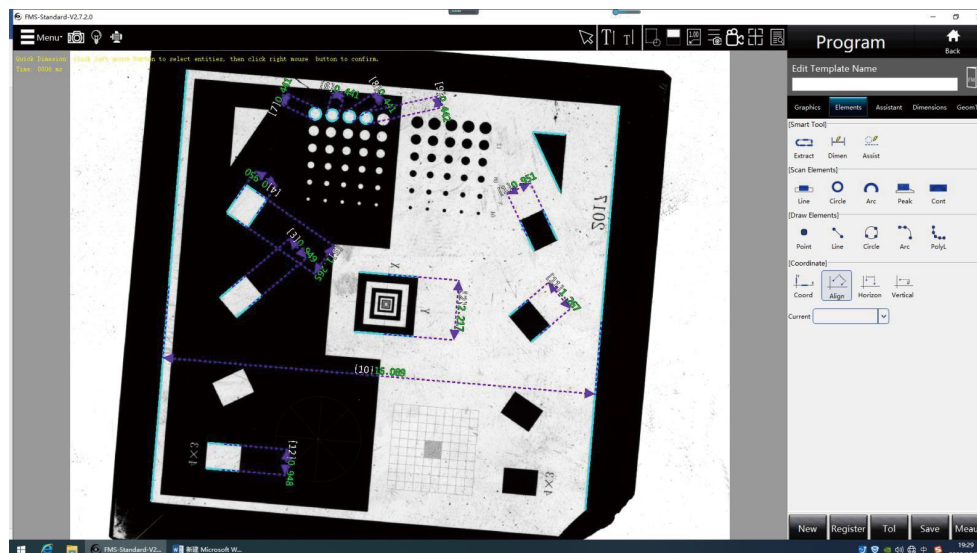
### Software Interface

- Software main interface is divided into three functional models: measurement setting, continuous measurement and statistical analysis. Simple, easy to use.



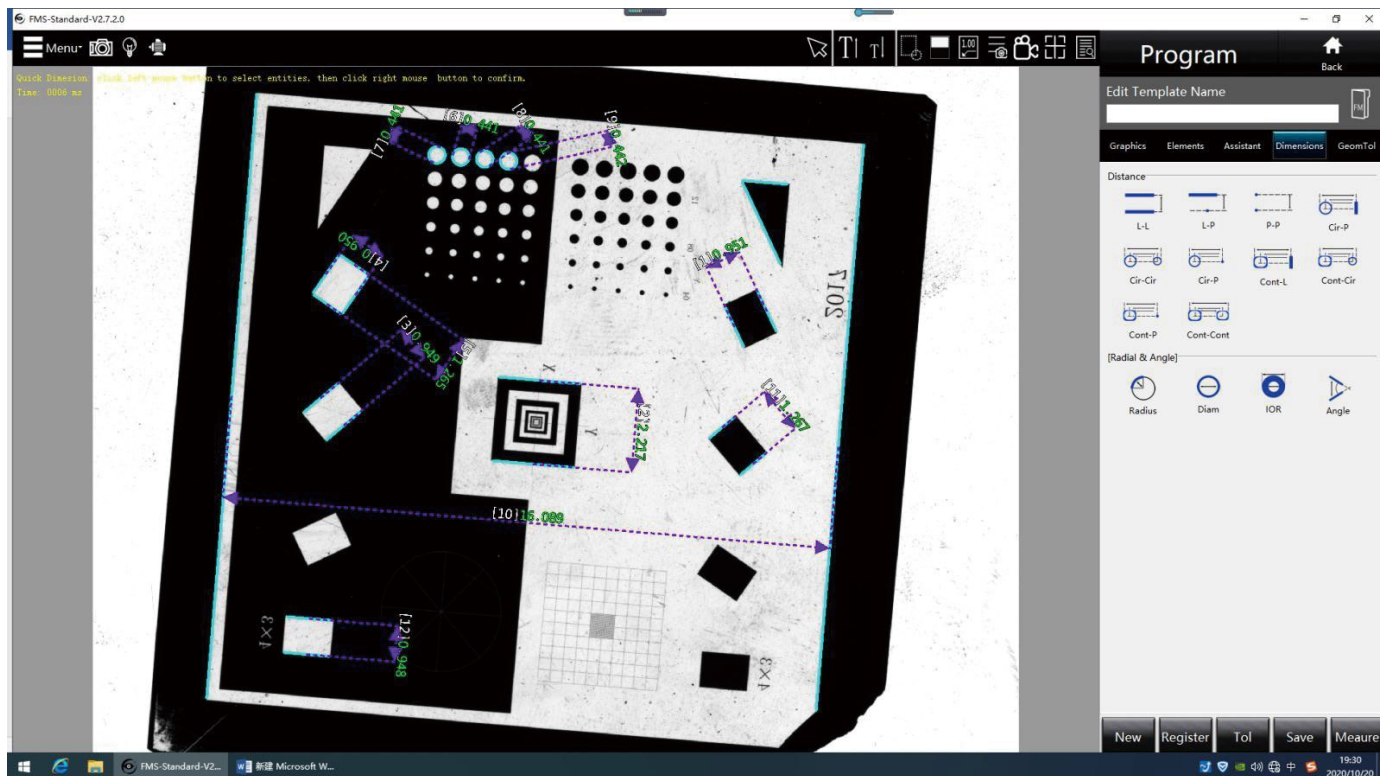
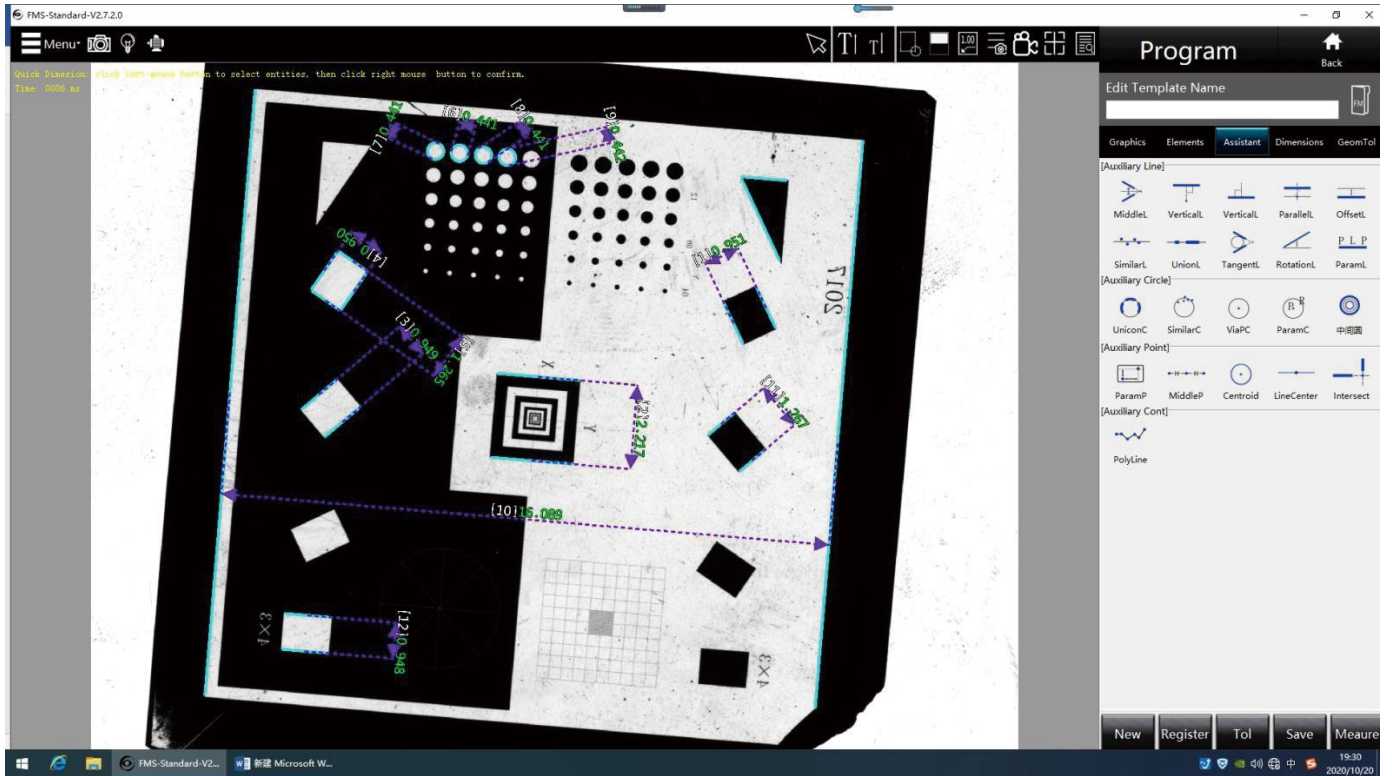
### Measurement Setting

- In this model, we can quickly extract geometric elements and do dimensioning to complete the measurement setting.



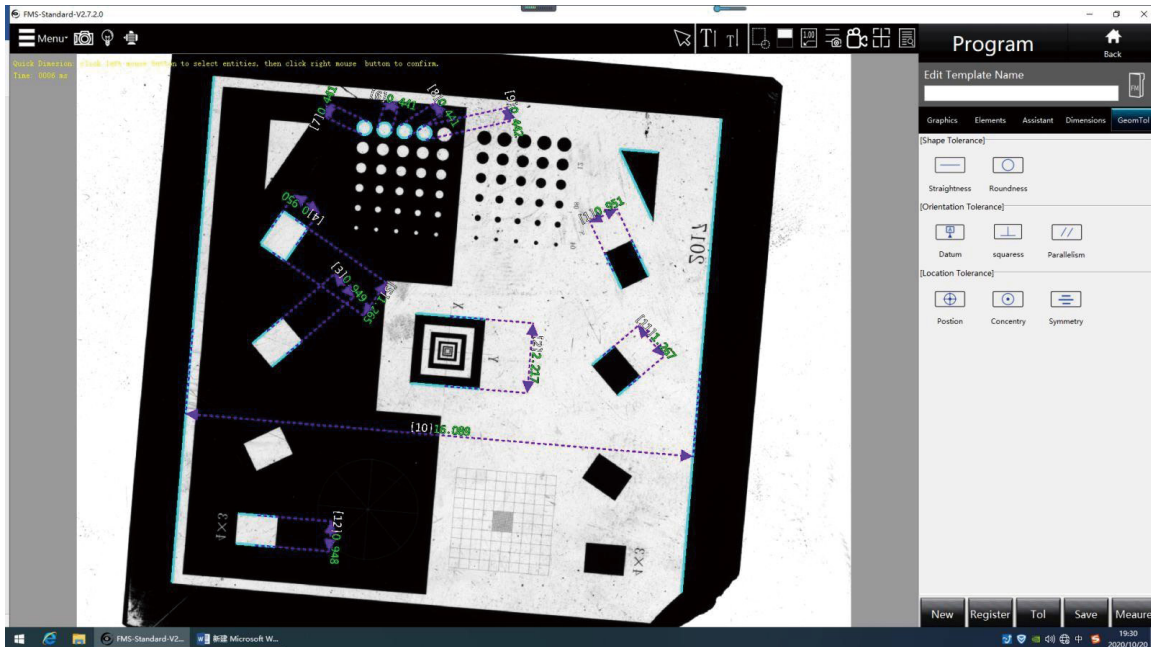
## Software Function

### Measurement Setting

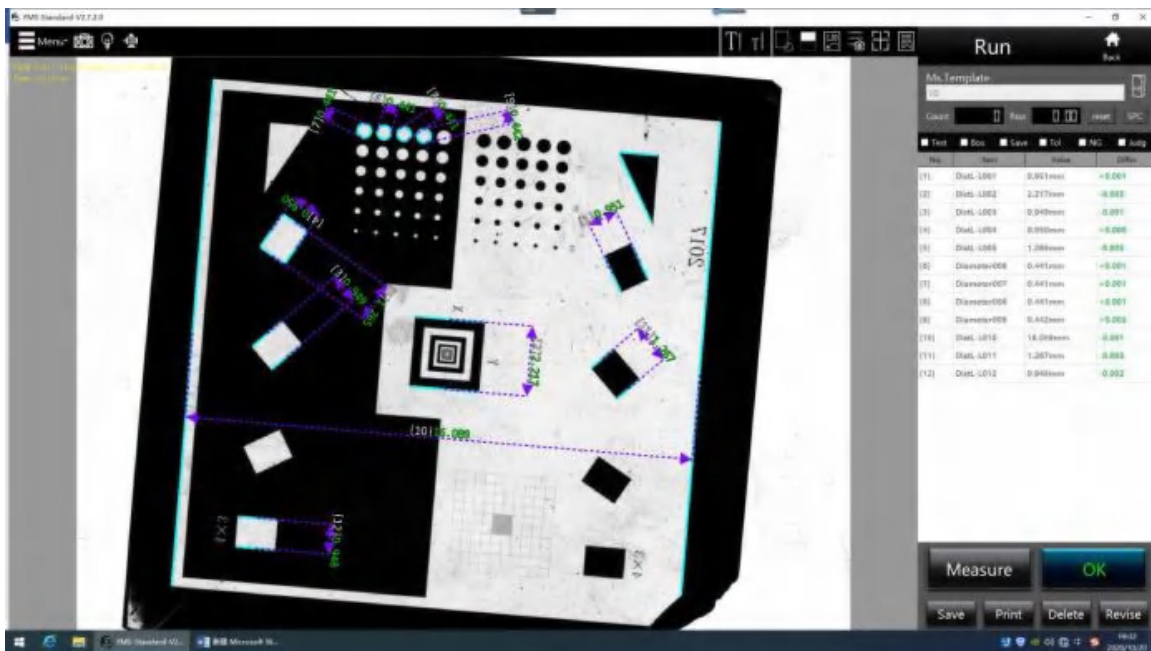


## Software Function

### Measurement Setting



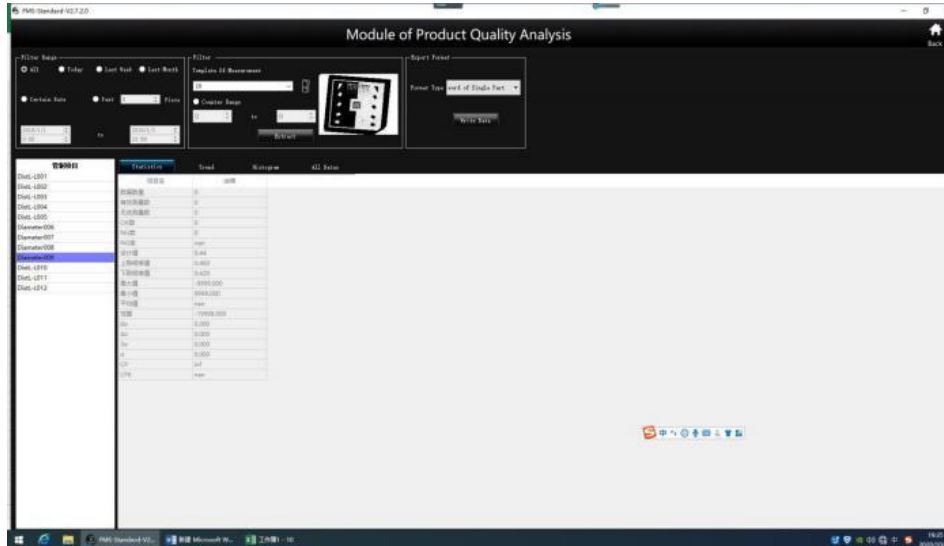
### Continuous Measurement



- After measurement setting , software enters to the continuous measurement model, which can be doing rapid and accurate batch measurement.

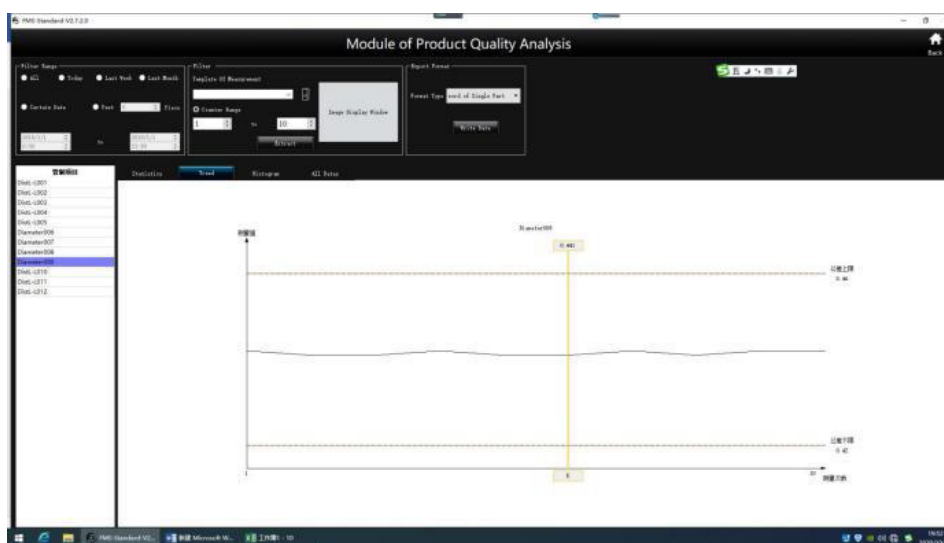
## Software Function

### Statistical Analysis



- Mikrosize software provides a variety of extraction and analysis tools, the statistical analysis interface has [statistical value], [trend graph], [histogram] and [data]. Measurement results and main statistical information (such as average,  $\sigma$ ,  $3\sigma$ ,  $6\sigma$ , Cpk, etc.) will be automatically recorded and filed. The operator can select different filter conditions to extract history records.

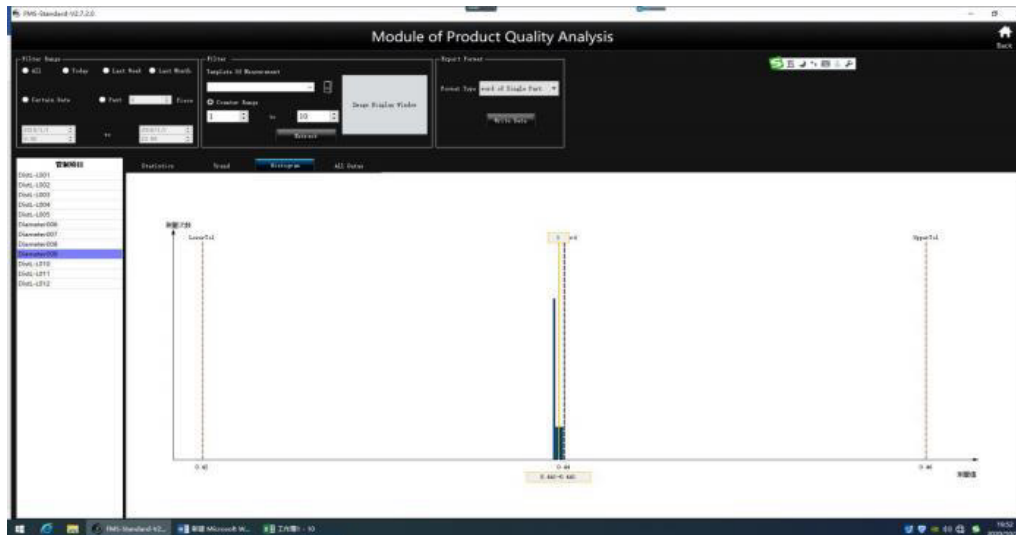
### Control Producing Process And Improve Product Quality



- The trend graph can monitor the abnormal of producing equipment and producing process through the regular tendency of measured value, such as monotonic change and periodic-change of measured value.

## Software Function

### Control Producing Process And Improve Product Quality



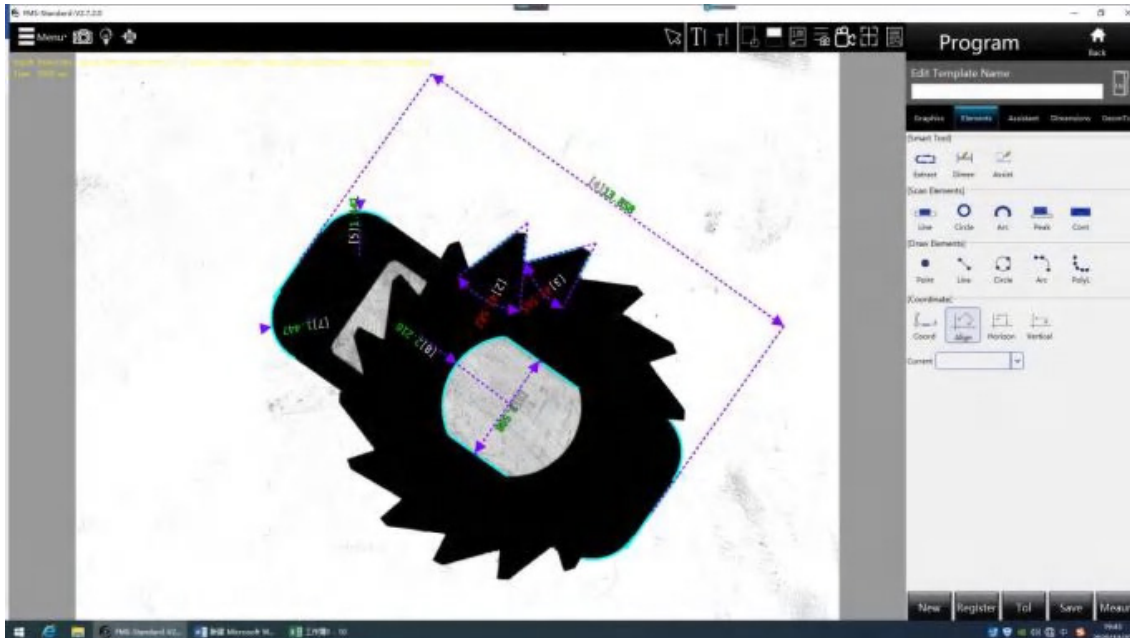
- Histogram can reflect the fluctuation and distribution of product quality, and intuitively transfer the information of quality status, which can be used to judge and predict product quality and unqualified rate. By quality diagnosis, SPC uses statistical methods to monitor the change tendency of product quality and producing process. It plays a preventive role in the producing process as to improve the product quality.

### Test Report Generated With One Key

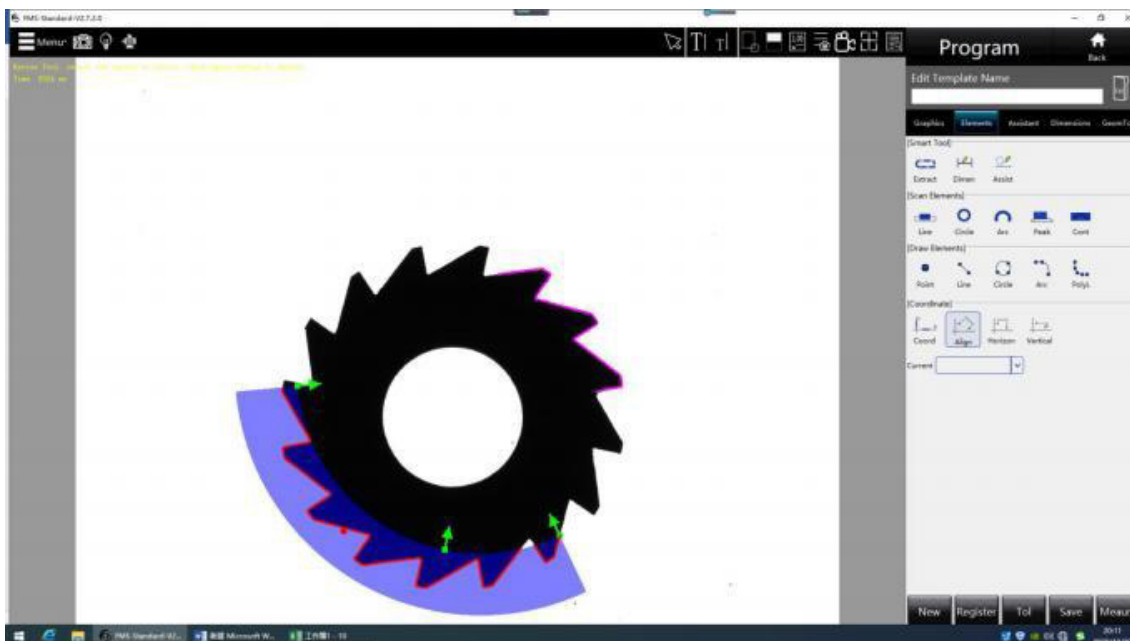
- The test results report and SPC analysis report can be automatically generated with one key.

## Software Function

### Special Function



- A) Intelligent extraction function
- The line, arc and circle can be extracted automatically by mouse clicking the area near the elements to be measured.



- B) Contour extraction function
- It provides various methods of contour extraction and contour conversion tools, which can measure irregular objects and small objects.

## Software Function

### Special Function



- C) Automatic lighting
- When a single lighting unit, falling lighting or projection lighting is used, the software can automatically and quickly determine the best illumination brightness (within 5 seconds).

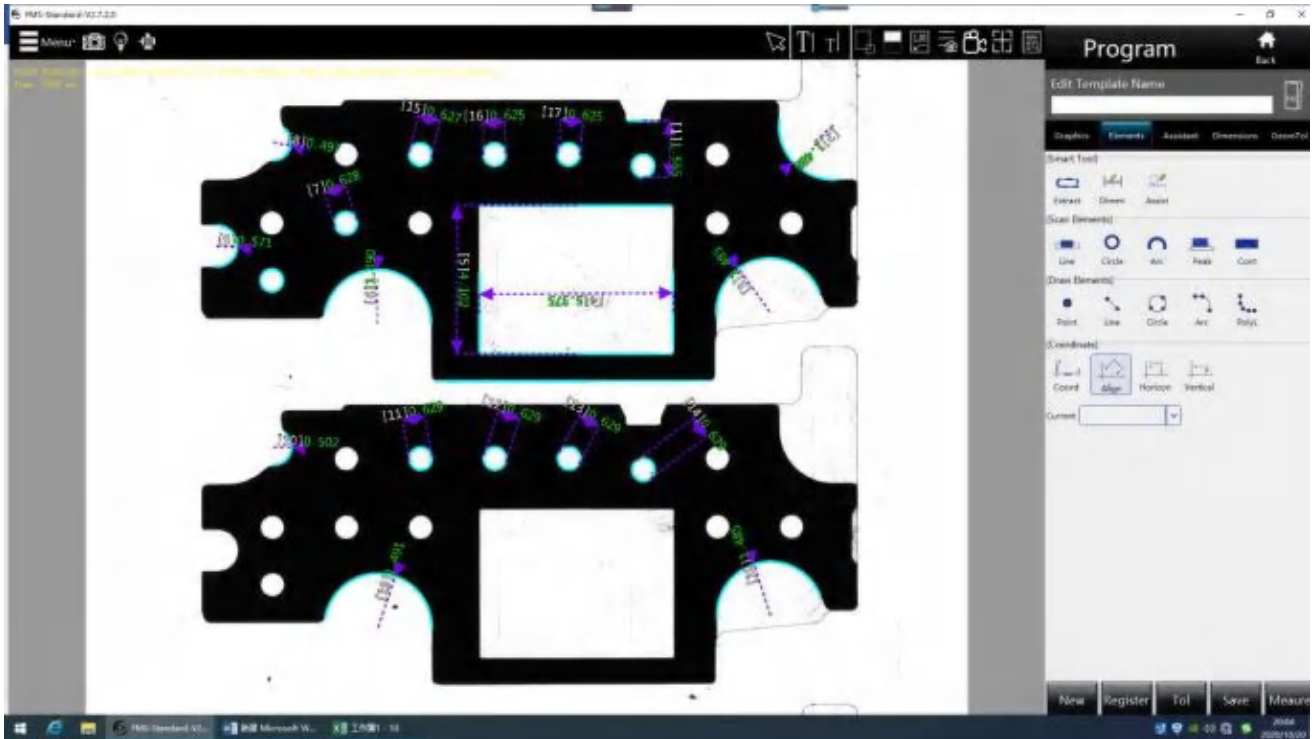


- D) Quick Module Search
- For the measurement of a large number of different spare parts, the software can automatically find out the corresponding measurement program (within 0.1s) from the measurement module pool after placing a spare part.

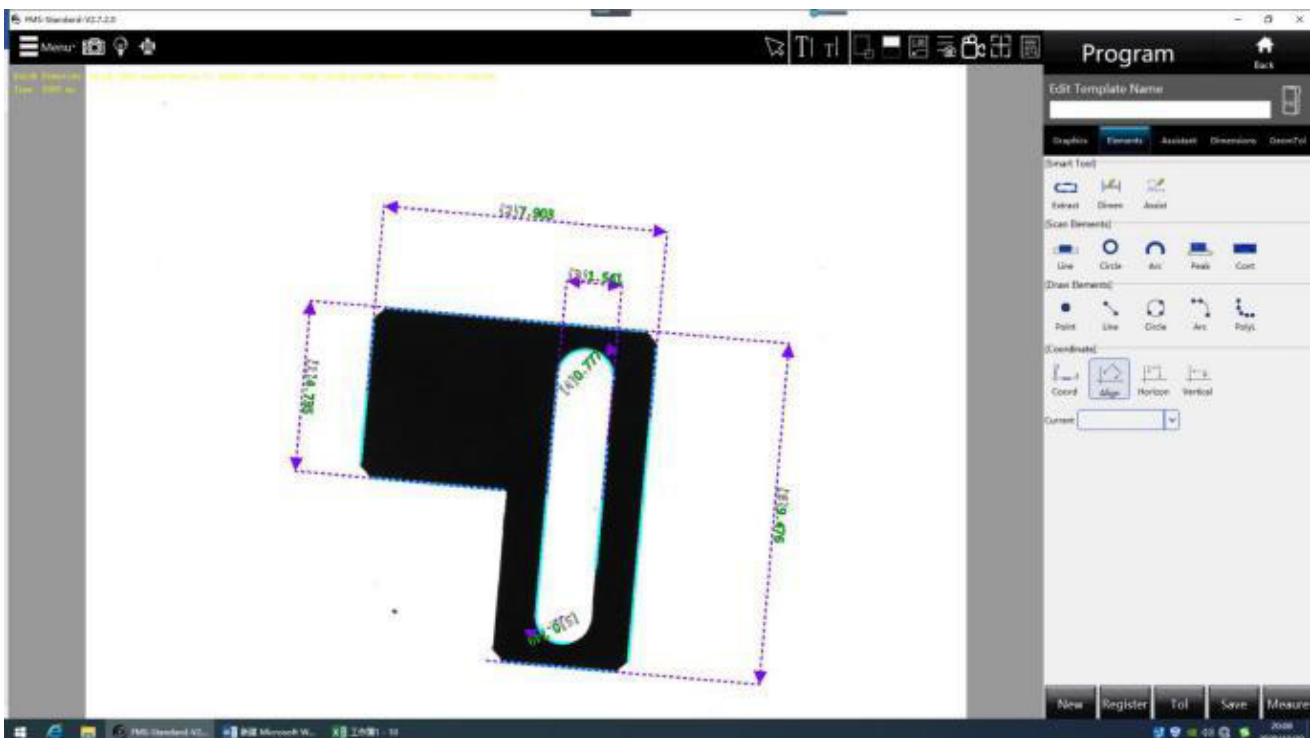


## Application

### Semiconductor (film)



### Hardware



# Technical Specification

<b>Instrument Dimensions</b>	480×240×680cm
<b>Instrument Weight</b>	30KG
<b>Working Stage Capacity</b>	3KG
<b>Software</b>	Fom2d
<b>Camera</b>	5 millions Pixels CCD Industrial Camera
<b>Lens</b>	Double Telecentric Lens
<b>Illumination</b>	Program controlled parallel light or telecentric parallel light, each section of brightness is controlled independently
<b>Field of view</b>	30mm~100mm
<b>Focus</b>	Manual
<b>Measuring Accuracy</b>	±3 μm
<b>Measuring Function</b>	Point, line, circle, multipoint line, multipoint circle, automatic circle, arc, multisection circle, automatic R angle, contour scanning, fixed point, peak line, circle, etc
<b>Tagging Function</b>	Aligned, vertical, angular, radius / diameter
<b>Geometrical Tolerance</b>	Straightness, roundness, symmetry, profile, etc
<b>Virtual Structure</b>	Center line, bisector, tangent point, tangent point of circle line,
<b>Automatic Template Matching</b>	Support
<b>Report Function</b>	SPC analysis report ( CPK, CA , PPK, CP, PP )
<b>Software Customization</b>	CAD import profile analysis, automatic management link, APP management application
<b>Measuring Quantity</b>	99 pieces/second
<b>Template quantity</b>	Unlimited
<b>Power</b>	AC100-240V 50/60Hz
<b>Working Environment</b>	Temperature 23 C ± 2 C humidity 20% to 80% RH

## Standard Delivery

Name	Qty
Main Unit	1pc
Telecentric Lens	1pc
Calibration Block	1pc
Dell 24 inch Computer	1pc
High Pixel Camera	1pc
Power Line	1pc
Mikrosiz Measuring Software	1pc
Surface Lighting	1pc
Product Certificate/Packing List	each 1copy