

**Mikrosize®**

# VMQ-100

## Instant Video Measuring System



Video



# 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.

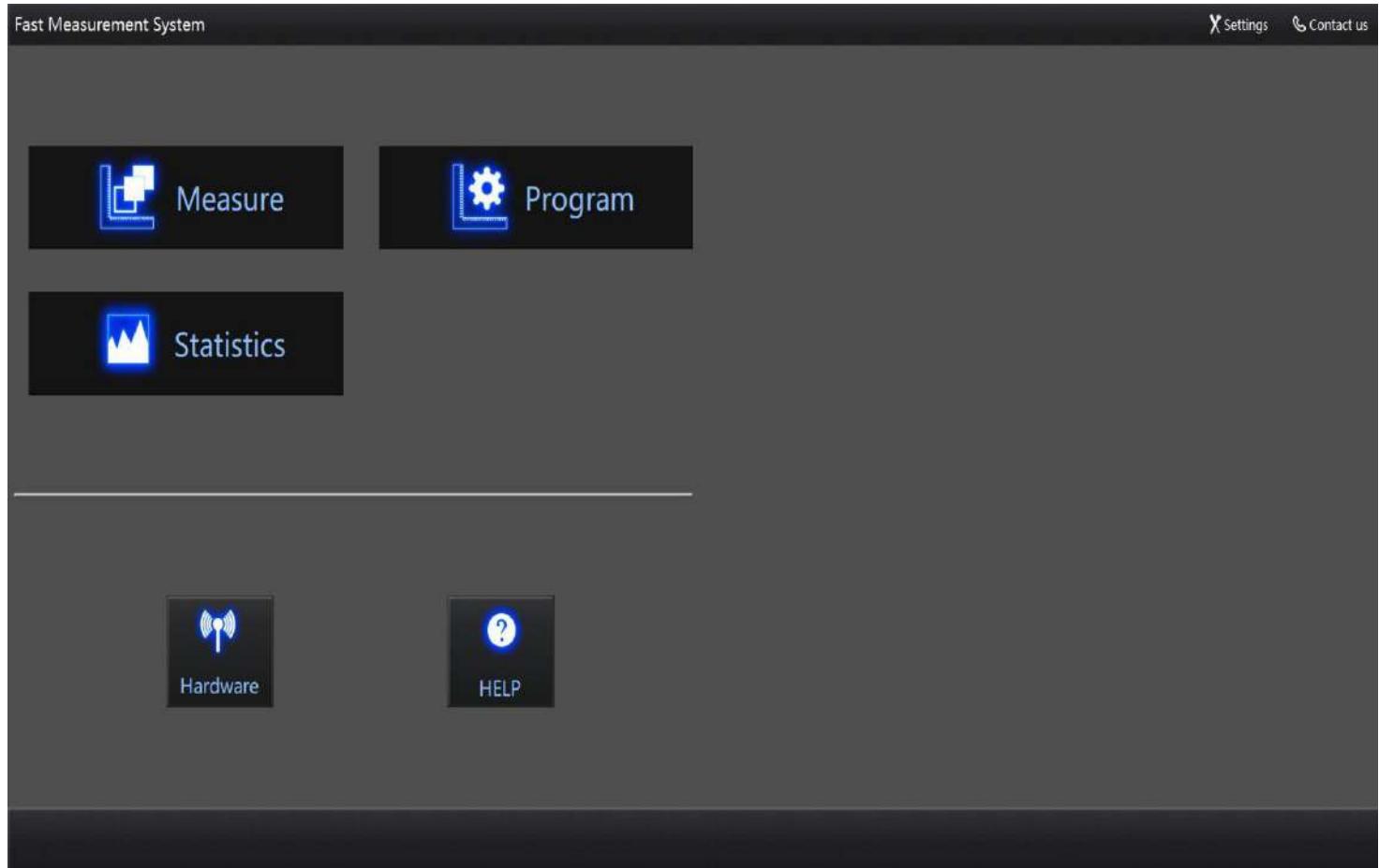
## 4. Various function, automatic report

- 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

### 1. Software Interface

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

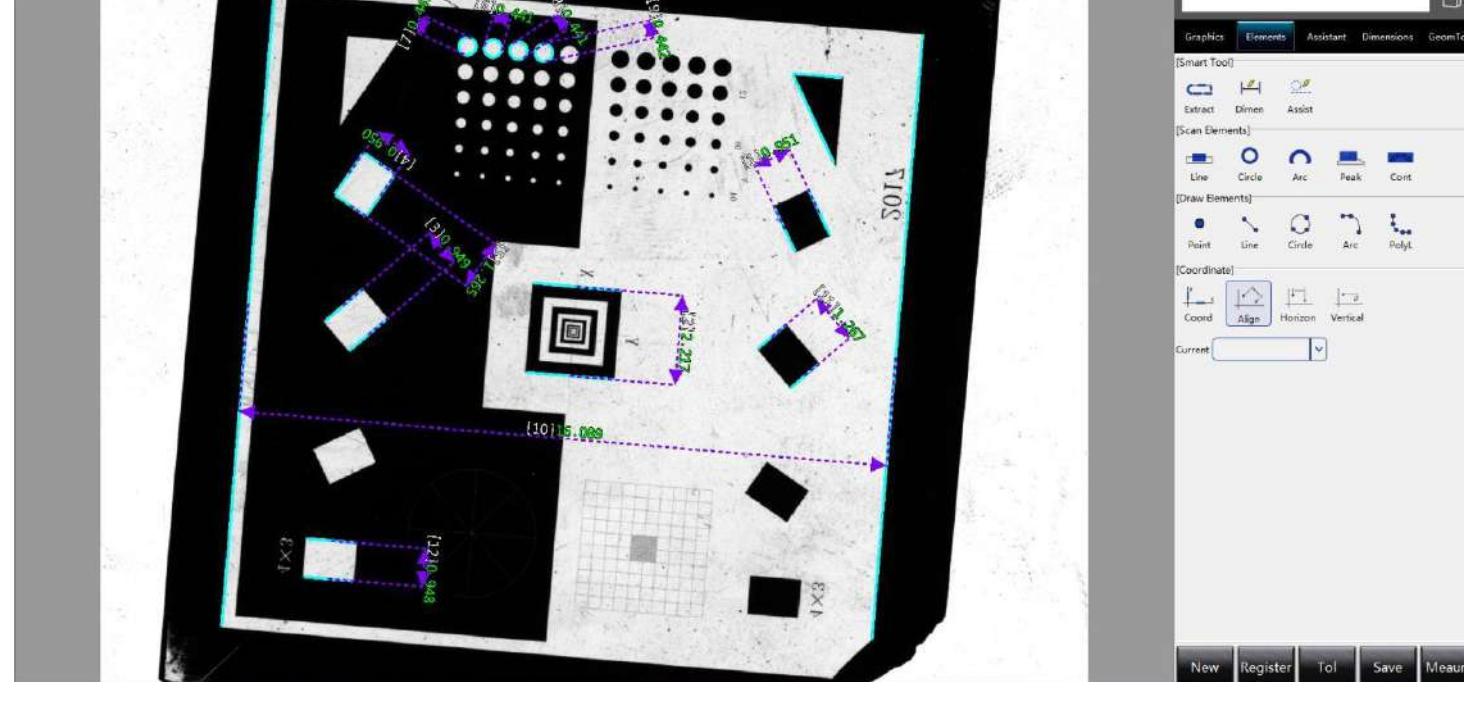


Software Interface

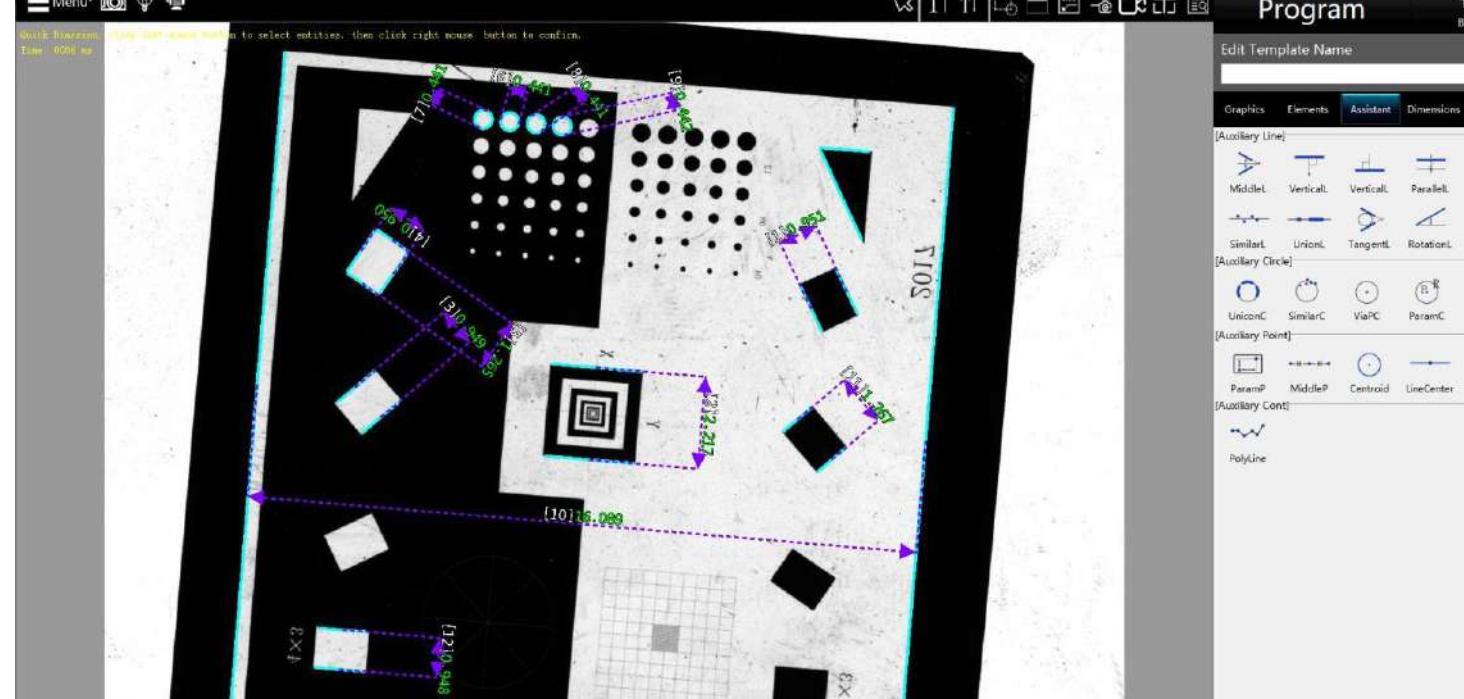
## Software Function

### 2. Measurement Setting

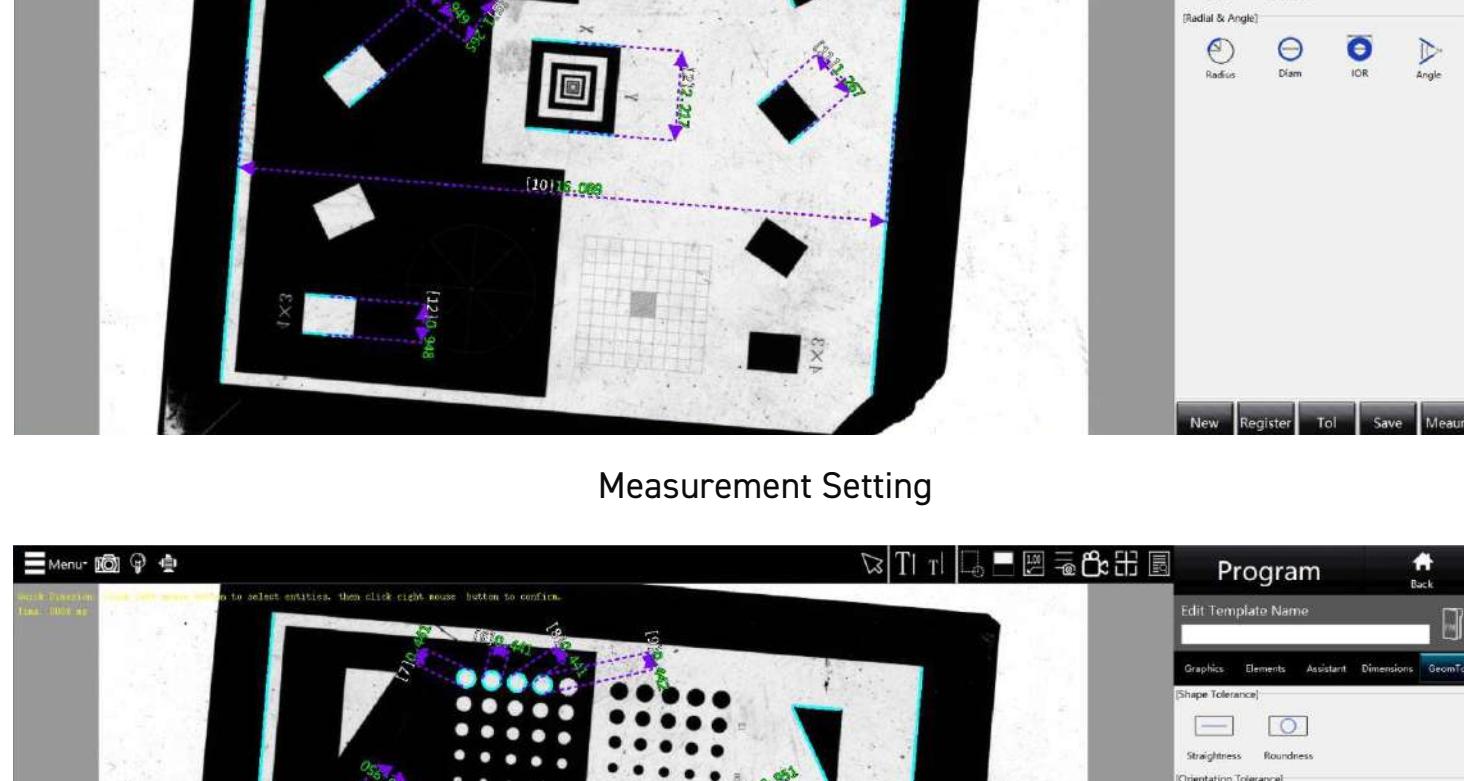
In this model, we can quickly extract geometric elements and do dimensioning to complete the measurement setting.



Measurement Setting



Measurement Setting



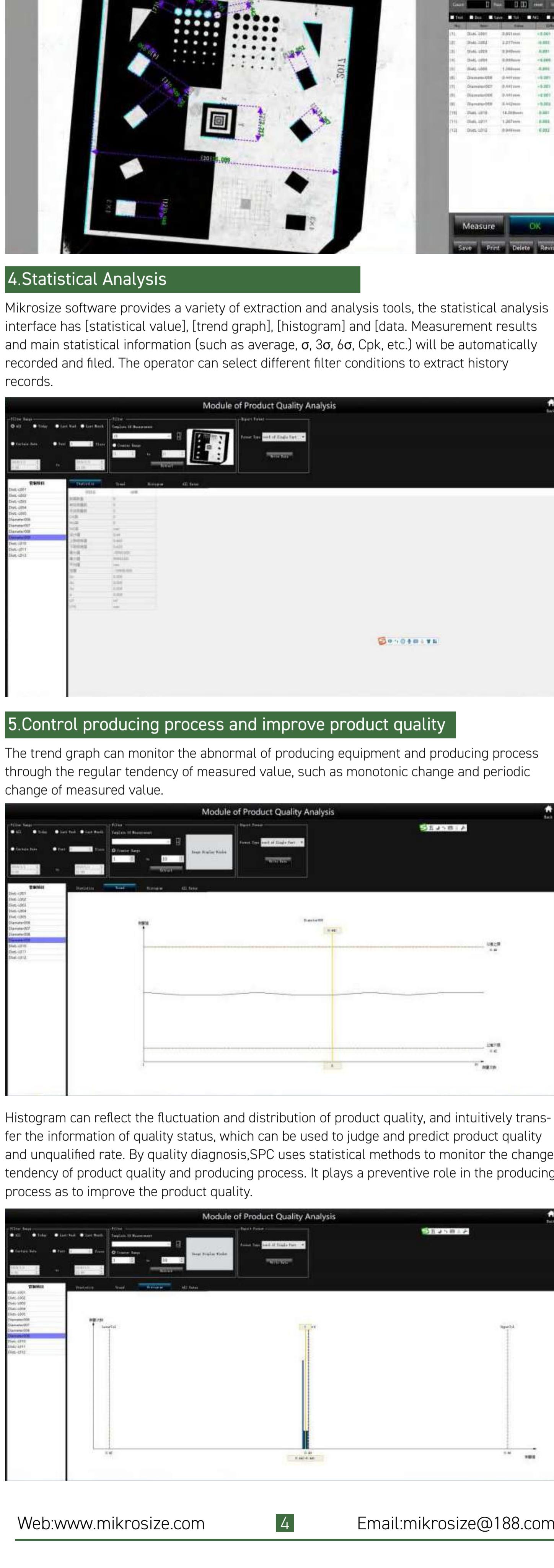
Measurement Setting



## Software Function

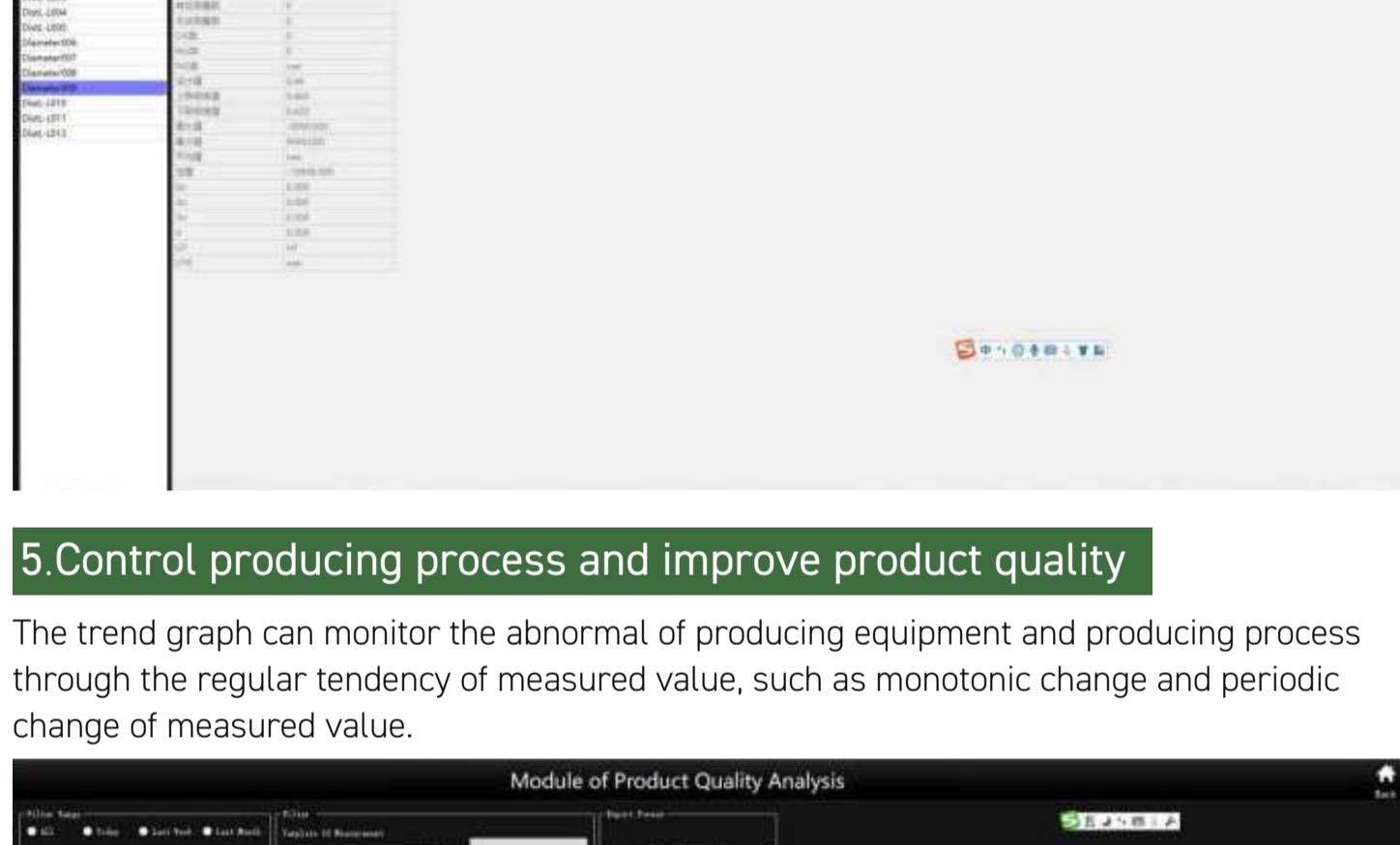
### 3. Continuous Measurement

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



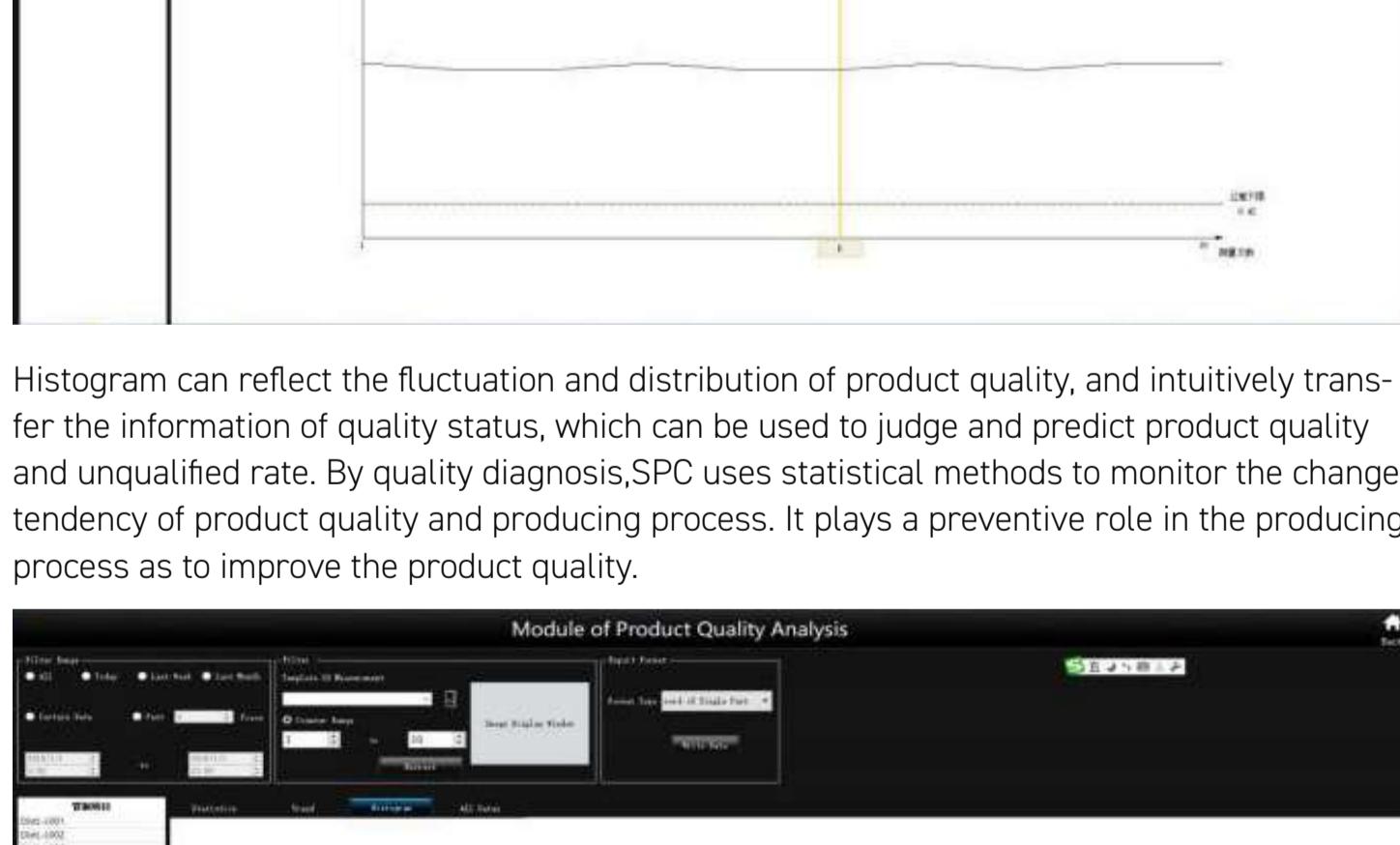
### 4. Statistical Analysis

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.

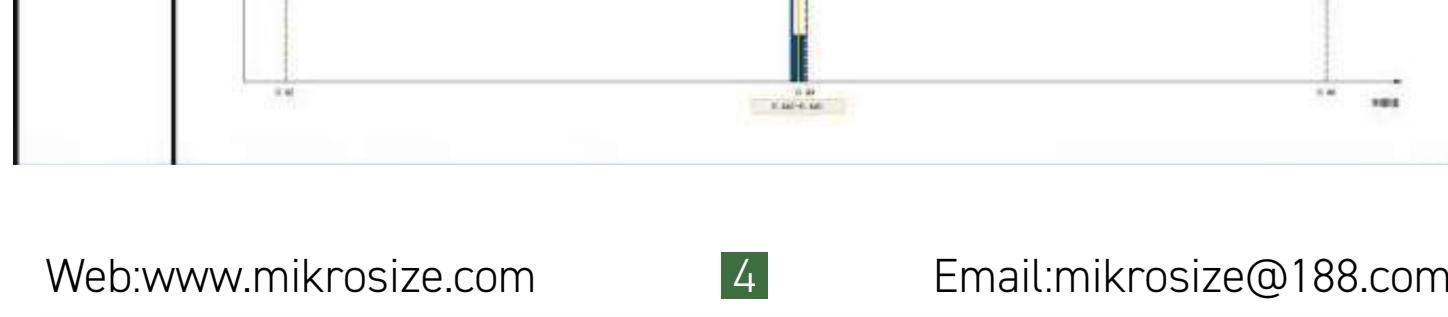


### 5. Control producing process and improve product quality

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.



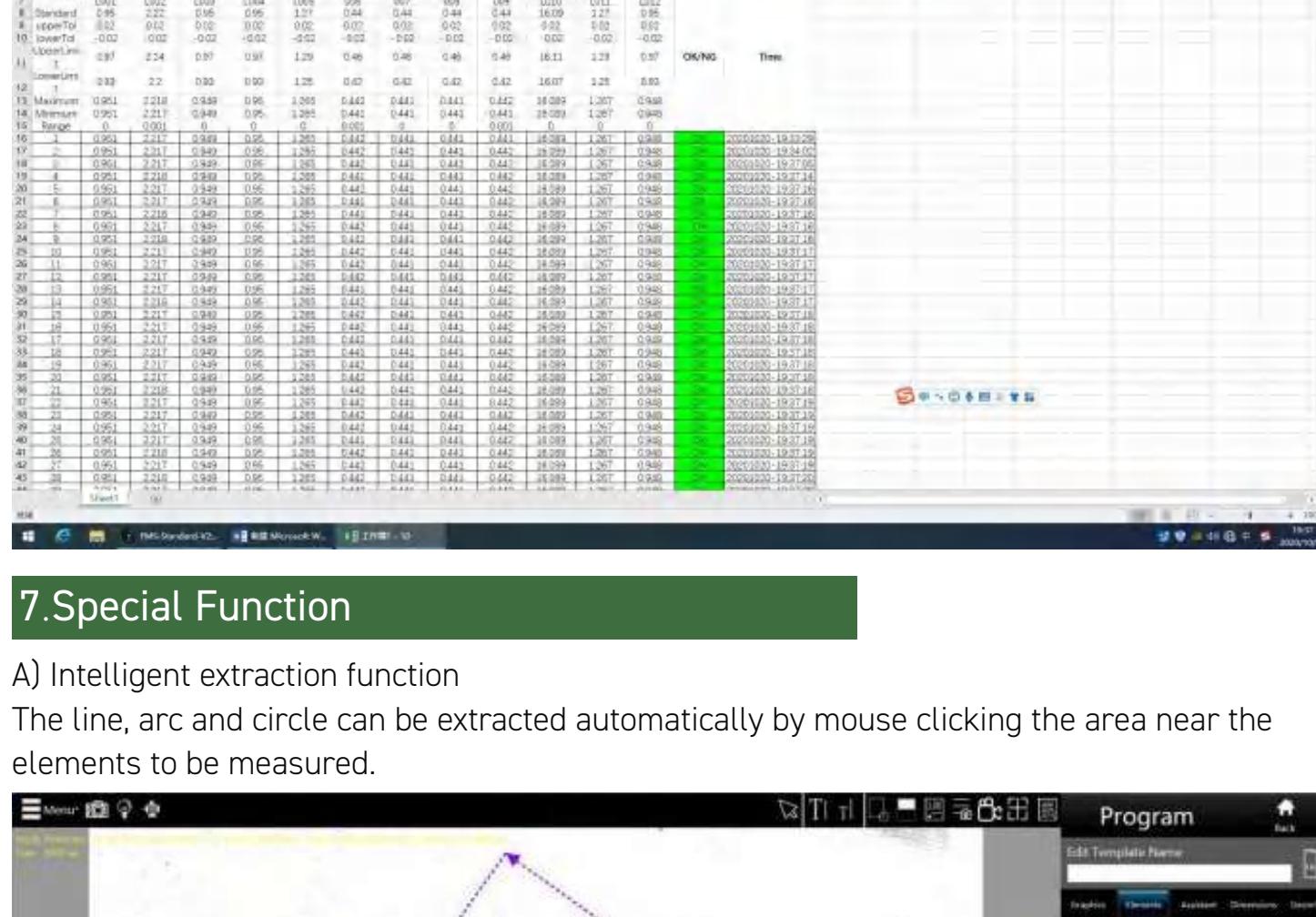
Histogram can reflect the fluctuation and distribution of product quality, and intuitively transfer the information of quality status, which can be used to judge and predict product quality and unqualified rate. By quality diagnosis, SPC uses statistical methods to monitor the change tendency of product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



## Software Function

### 6. Test report Generated with one key

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

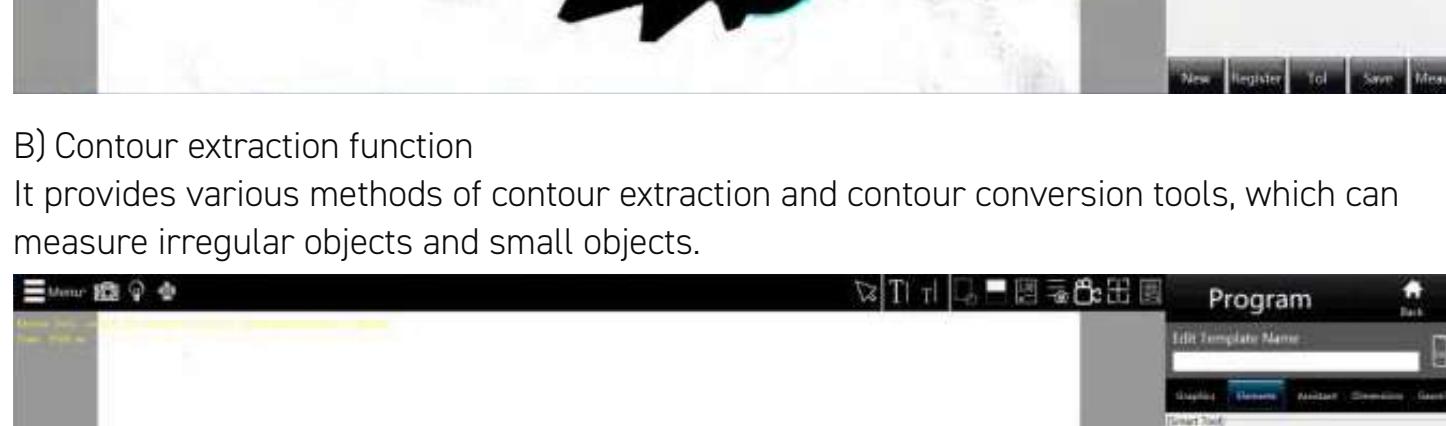


	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
7	Content	0.01	0.02	0.10	0.04	0.05	0.06	0.07	0.09	0.08	0.10	0.11	0.12												
8	Standard	0.95	2.22	0.96	0.95	1.27	0.44	0.44	0.44	0.44	18.09	2.27	0.95												
9	UpperTol	0.92	0.12	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02												
10	LowerTol	-0.02	0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02												
11	AcceptLine	0.97	2.14	0.97	0.97	1.29	0.46	0.46	0.46	0.46	18.11	2.23	0.97												
12	LowerLimit	0.93	2.2	0.99	0.99	1.25	0.47	0.42	0.42	0.42	18.07	2.28	0.93												
13	Maximum	0.961	2.218	0.989	0.96	1.265	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
14	Minimum	0.951	2.218	0.949	0.95	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.948												
15	Range	0	0	0	0	0	0.001	0	0	0	0	0	0												
16	1	0.961	2.217	0.989	0.96	1.265	0.442	0.441	0.441	0.442	18.084	1.261	0.988												
17	2	0.961	2.217	0.949	0.95	1.285	0.442	0.441	0.441	0.442	18.084	1.267	0.988												
18	3	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
19	4	0.961	2.217	0.949	0.95	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
20	5	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
21	6	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
22	7	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
23	8	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
24	9	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
25	10	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
26	11	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
27	12	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
28	13	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
29	14	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
30	15	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
31	16	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
32	17	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
33	18	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
34	19	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
35	20	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
36	21	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
37	22	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
38	23	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
39	24	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
40	25	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
41	26	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
42	27	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
43	28	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												
44	29	0.961	2.217	0.949	0.96	1.285	0.443	0.441	0.441	0.442	18.089	1.267	0.988												

### 7. 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.

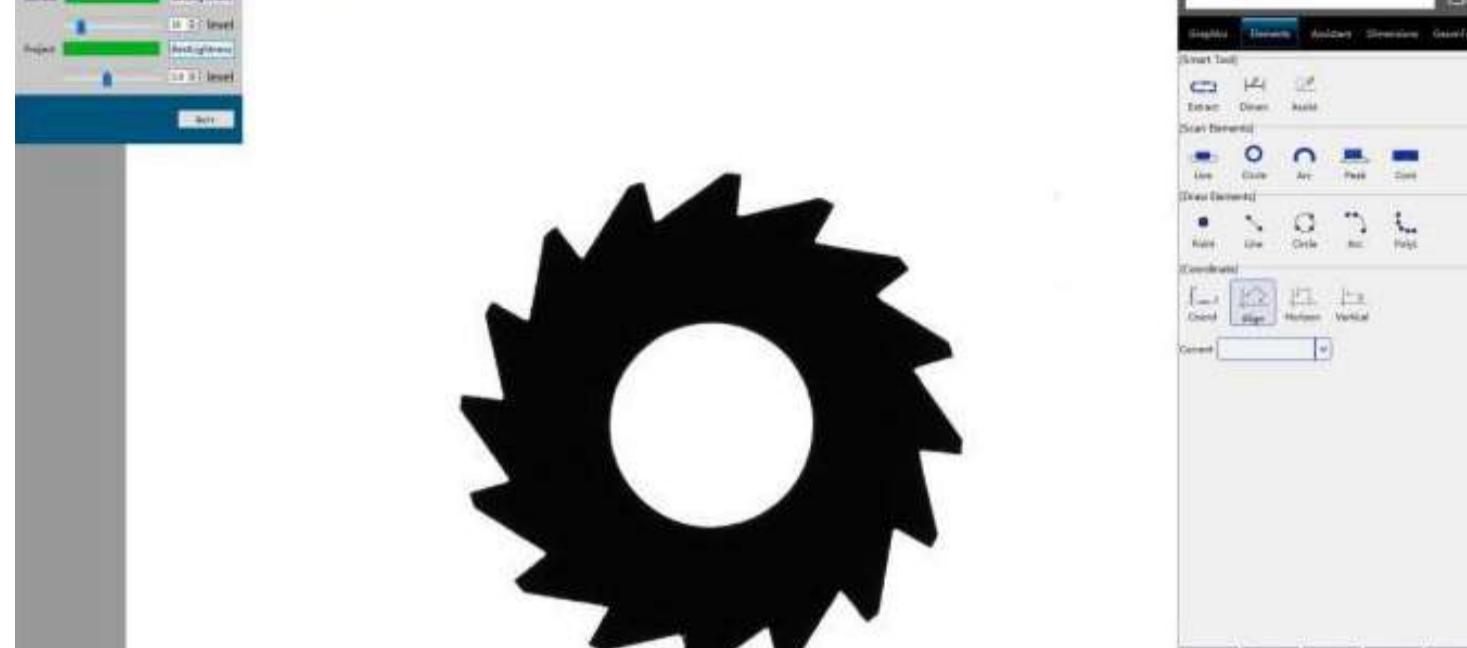


#### B) Contour extraction function

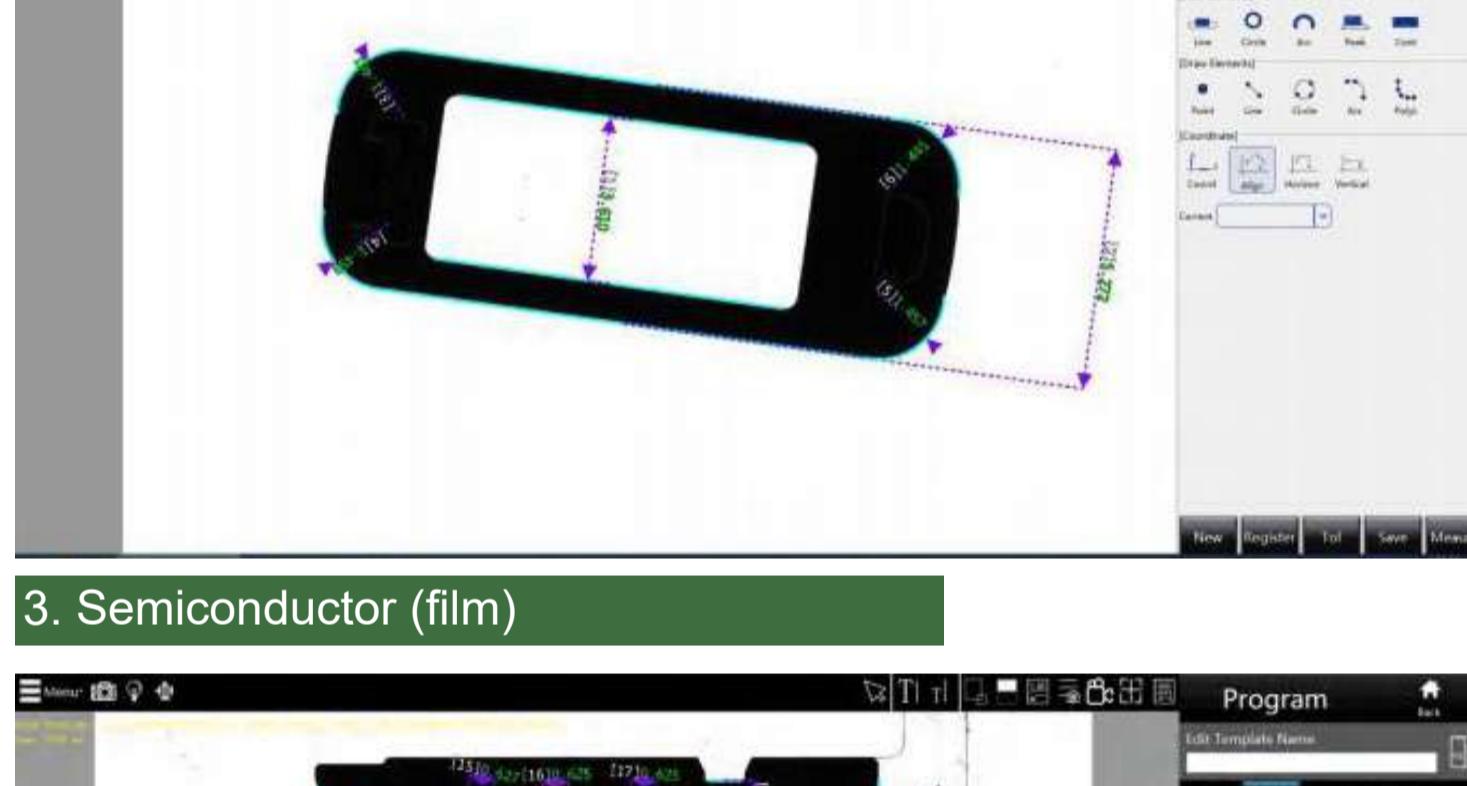
# Application

rubber, low-voltage electrical appliances, magnetic materials, precision stamping, connectors terminals, mobile phones, household appliances, printed circuit boards, medical devices, watches, knives and other fields.

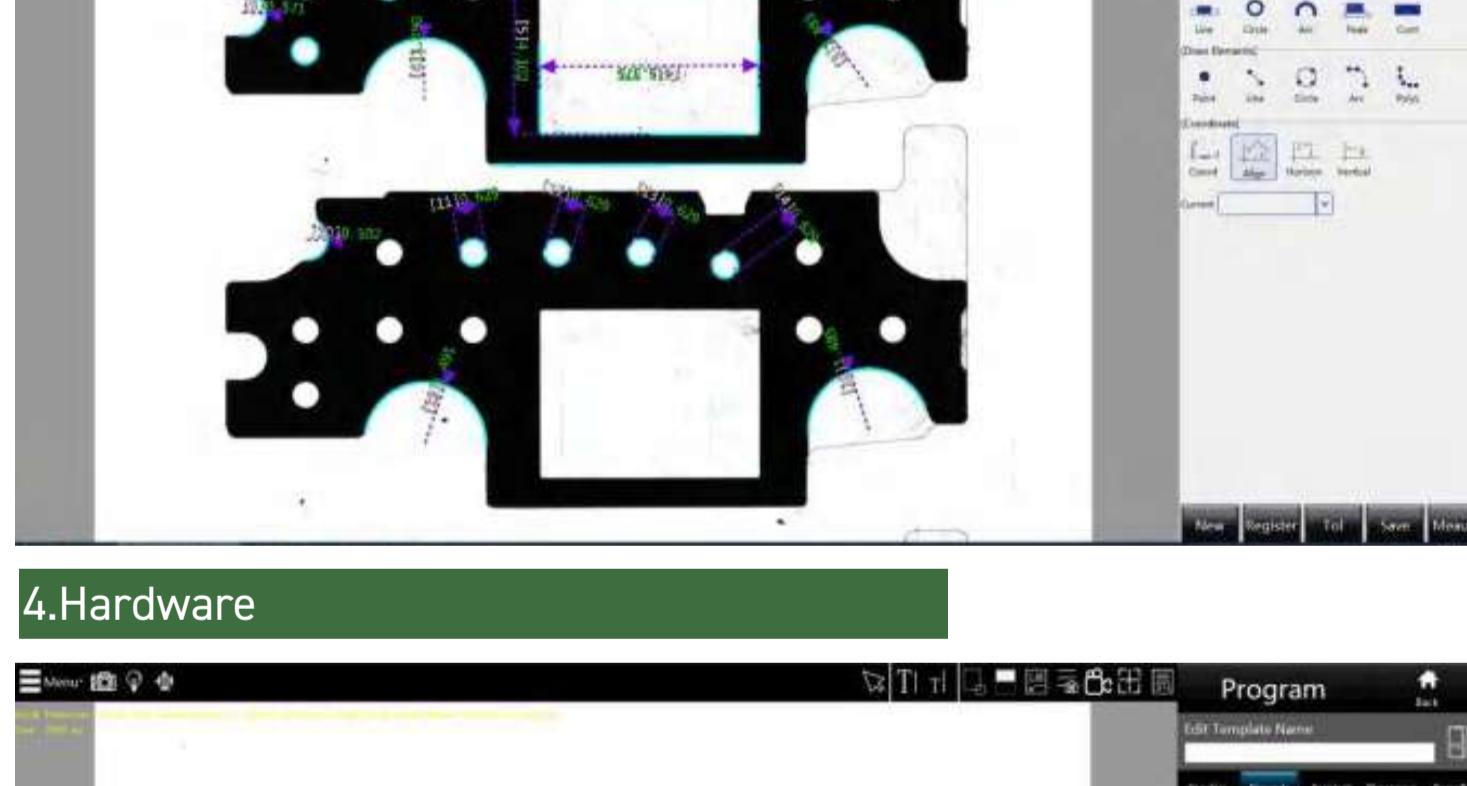
Microsoft Word



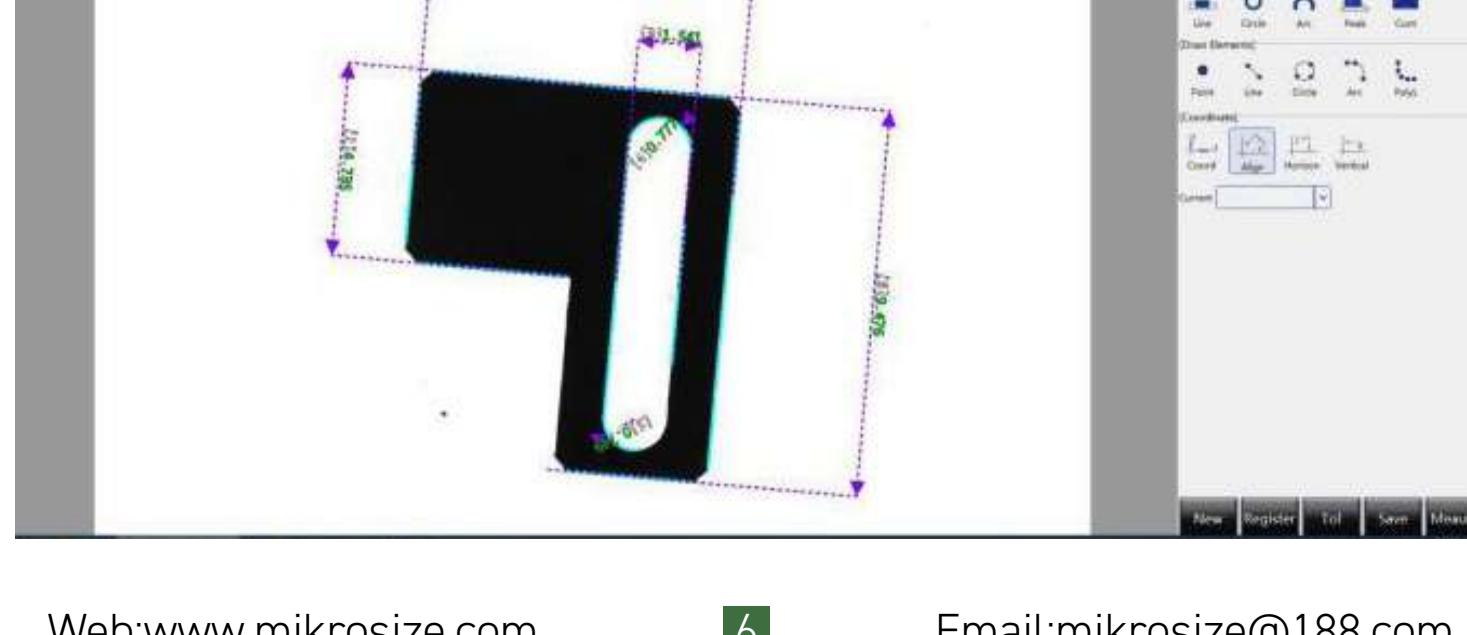
10.1002/anie.201907002



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# Specification

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



## Packing List

Packing List	Packing List	Packing List
Machine Mainframe	Dell 24 inch Computer	Mikrosiz Measuring Software
Telecentric Lens	High Pixel Camera	Surface Lighting
Calibration Block	Power Line	Product Certificate/Packing List