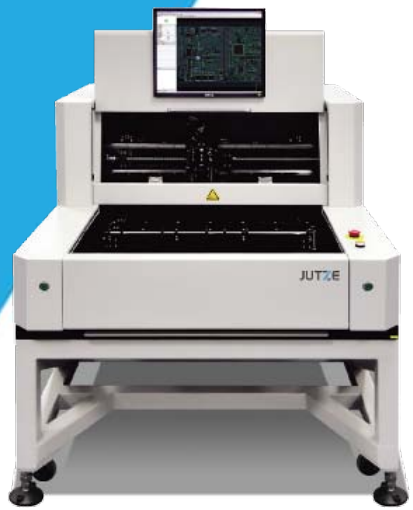
JUTZE

Do.Trust

A Leading Global

Professional Visual Inspection

Equipment Manufacturer



RCAB

www.rc-ab.se

info@rc-ab.se

Machine Vision Expert

— 机 器 视 觉 专 家 —

Information

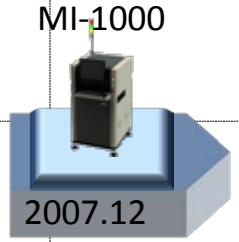
Name	JUTZE INTELLIGENCE TECHNOLOGY CO., LTD
Nick Name	Jutze
Founded	2007, Mar
TEL	+86-21-34687800
FAX	+86-21-34687805
E-mail	master@jutze.com.cn
Web	http://www.jutze.com.cn
Address	3 floor, Building 2, N0. 7178, Zhongchun Rd, Minhang, Shanghai

Jutze History

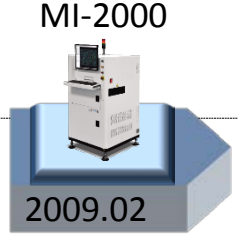
2007	2008	2009	2010	2011	*2012*

JUTZE Co., LTD Founded

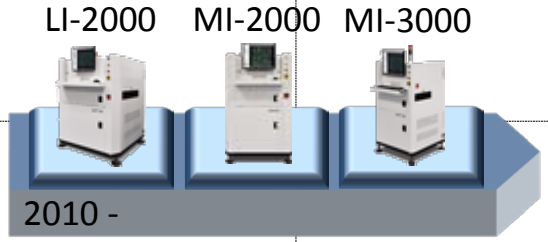
MI-1000



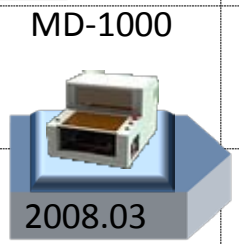
MI-2000



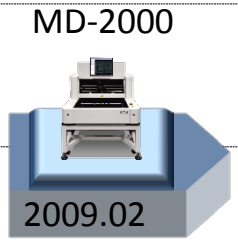
LI-2000 MI-2000 MI-3000



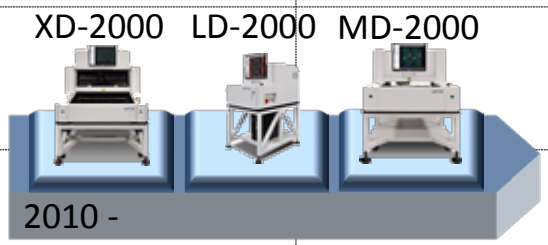
MD-1000



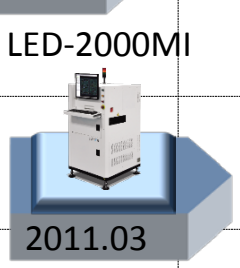
MD-2000



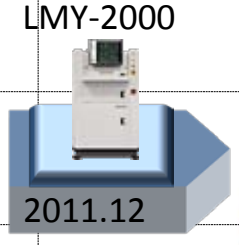
XD-2000 LD-2000 MD-2000



LED-2000MI



LMY-2000



ChangHong, DBG…

Foxconn, ASUS…

Panasonic, Inventec, COMPEQ…

Machine Vision Expert
— 机器视觉专家 —

Product - In-line

High Speed,
High Accuracy

Join Us To Zero Escape

Continue to improve process capability

MI-3000

Table Fixed,
Suitable for pre-reflow & post-reflow

LI-2000

Wide use

MI-2000B

Small Compact Design

JUTZE

Product - Off-line

Practical and Flexible
Reliable Quality Controller

XD-2000
Extra Large Size PCB

MD-2000
Delicate and Efficient

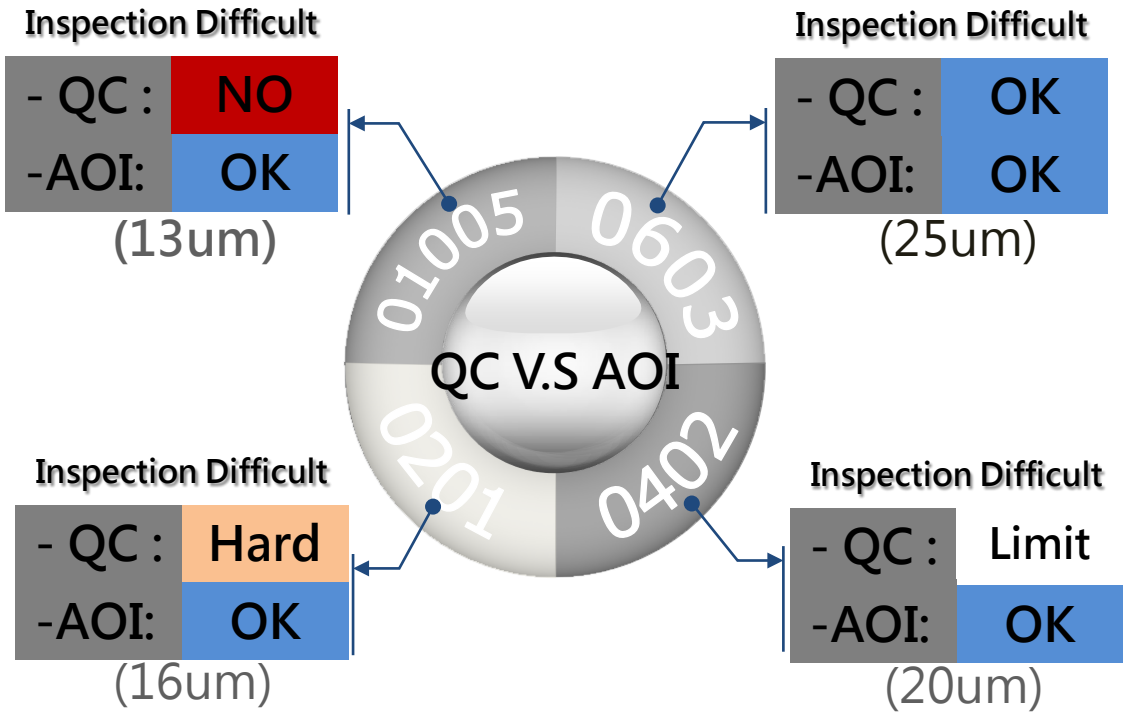
LD-2000
Suitable for 90% kind of normal size PCB

AOI Background

Why need AOI?

As process technology continues to progress and labor costs continue to rise, import AOI to control process can be achieved and reduce labor and maintenance costs, improve QC staff instability, and thus the purpose of increasing yield.

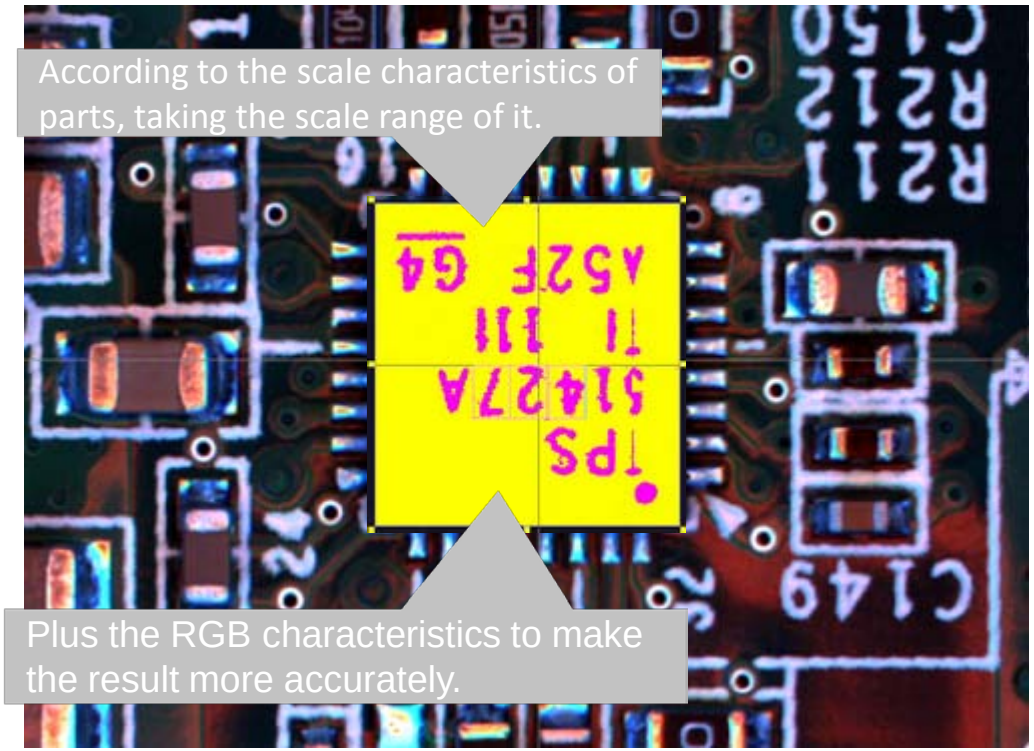
More importantly, more and more products use 01005, which is not capable of human inspect.

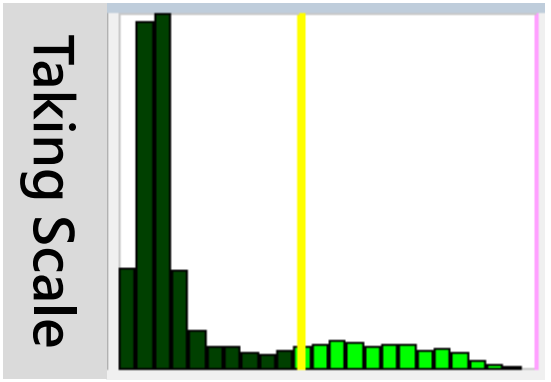


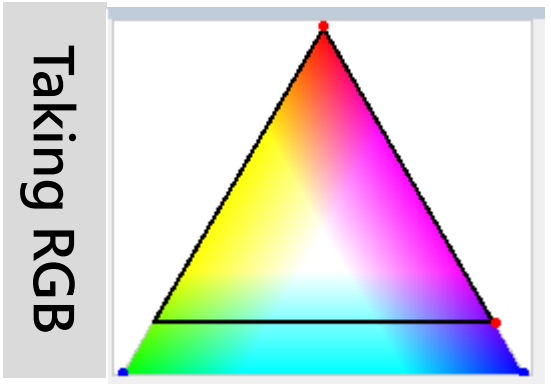
Component Size Compare

Jutze AOI Detection Principle

Based on scale and RGB, taking the geometry of the component image characteristics, and the pixel calculation.



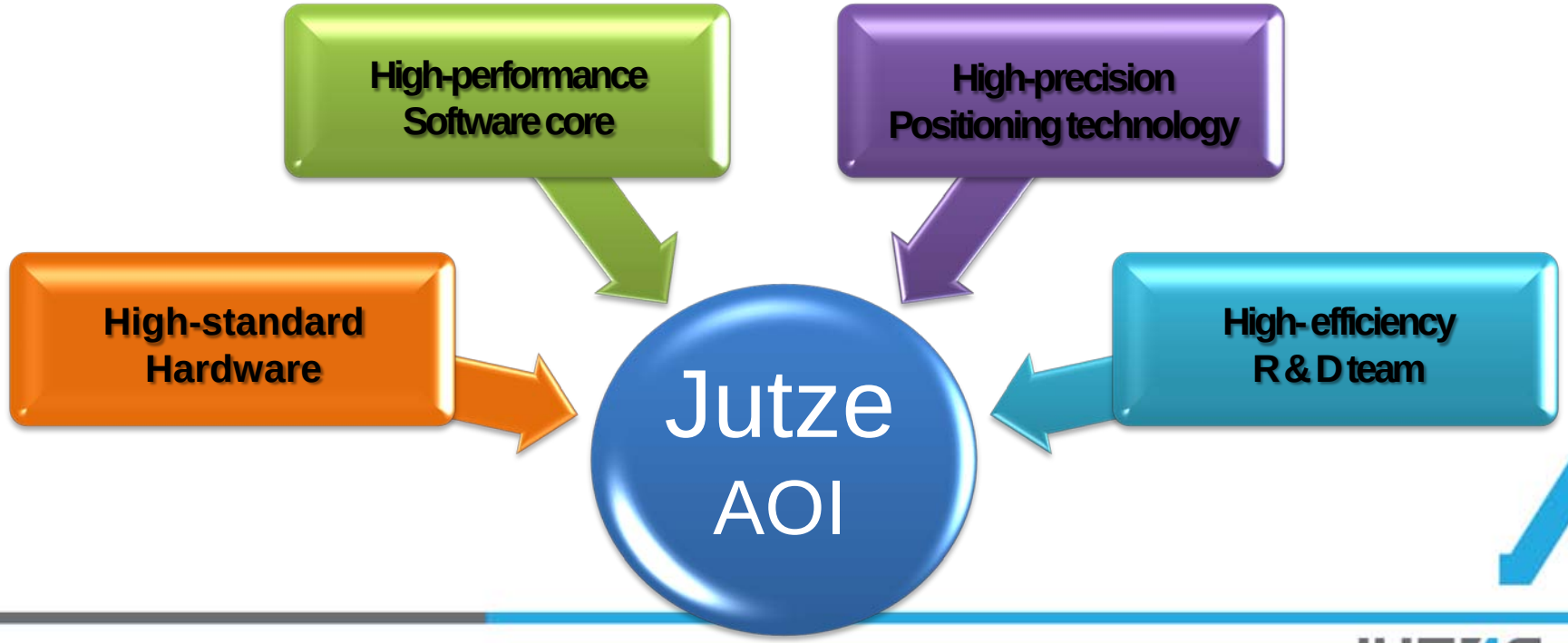




Product Special

- JUTZE - Automated Optical Inspection

Jutze AOI based on "High-standard Hardware configuration", "High-performance Software core", "High-precision Positioning technology", "High efficiency R & D team" to achieve high speed, high accuracy of the In-line real-time inspection equipment, and also leader of China AOI market high-level models. Especially cycle-time, FPY, false-call rate has been exceeded other brand AOI in the world.



Machine Vision Expert
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Product Special

10 um
High Precision
Optical Resolution

Parallel
Processing

HIGH
speed | precision

Core Technology

Ordinate solder pad and component automatically

Max. up to 1/16 pixel Accuracy for Gray / Color pixel calculation

HIGH
Inspection
Performance

Inspection by modularity and get data quickly

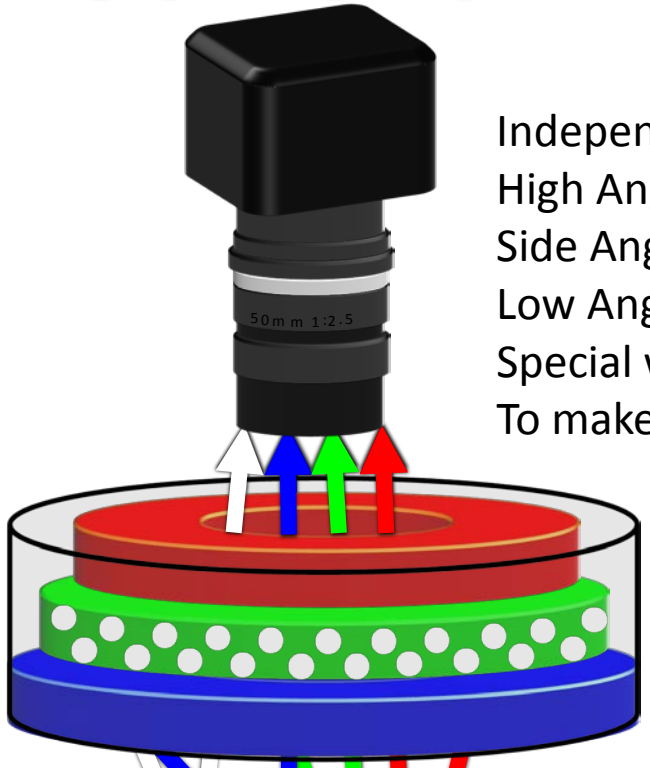
RGB with white LED lighting systems

JUTZE

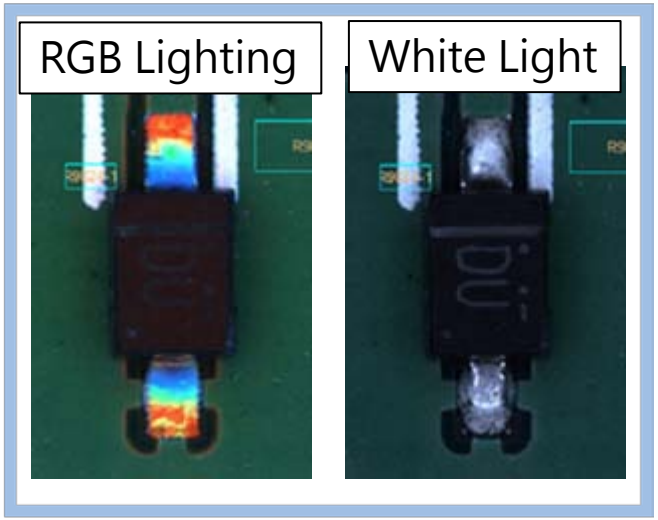
Product Special

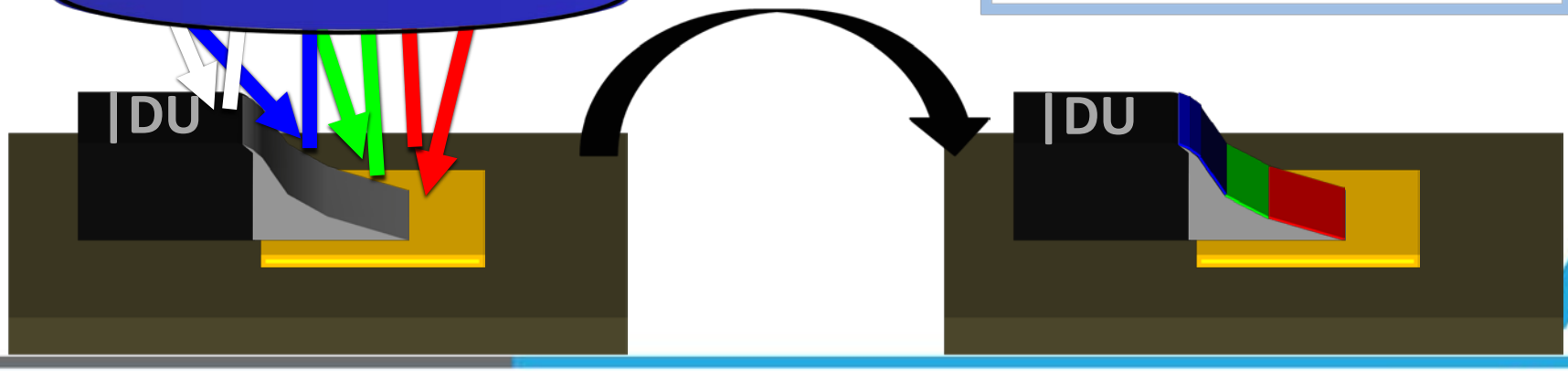
- 4 Channel Lighting System
- Adjust Whole Parts Position: Export Parts Of The X, Y, θ Offset
- Algorithm：LedBox
- Algorithm：PatternBox
- Multi-Threading
- Solution For Golden Finger
- In Control Analysis
- Multi-Repair Function
- Remote Tuning
- **01005 components correspond exactly**

Four Channel Lighting System



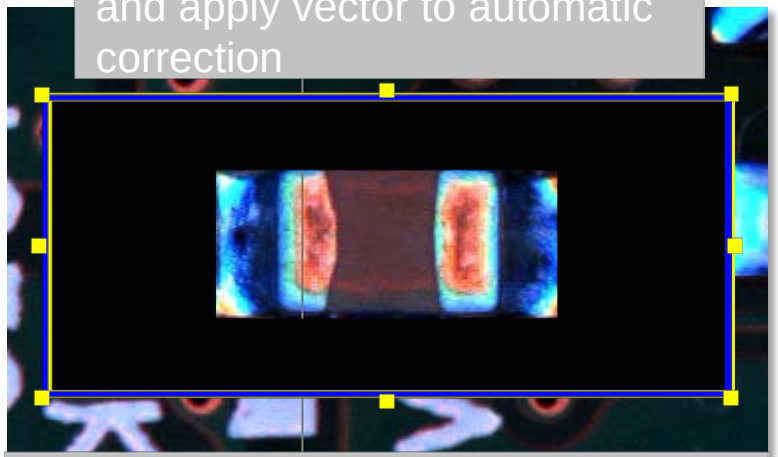
Independent development of four channel lighting system:
High Angle: Red
Side Angle: green
Low Angle: blue
Special white: for the text
To make the image clearer



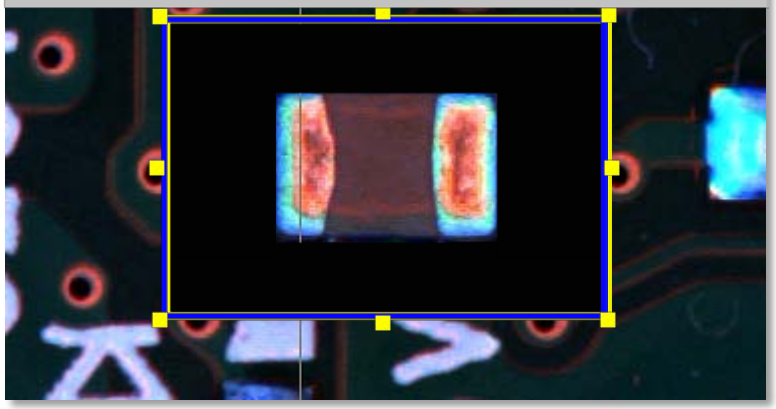


Adjust Whole Parts Position

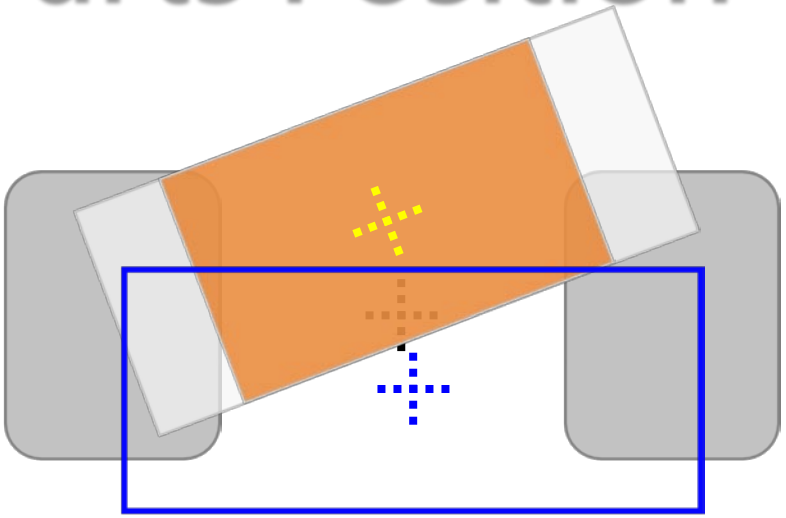
Identify full-board pad position and apply vector to automatic correction



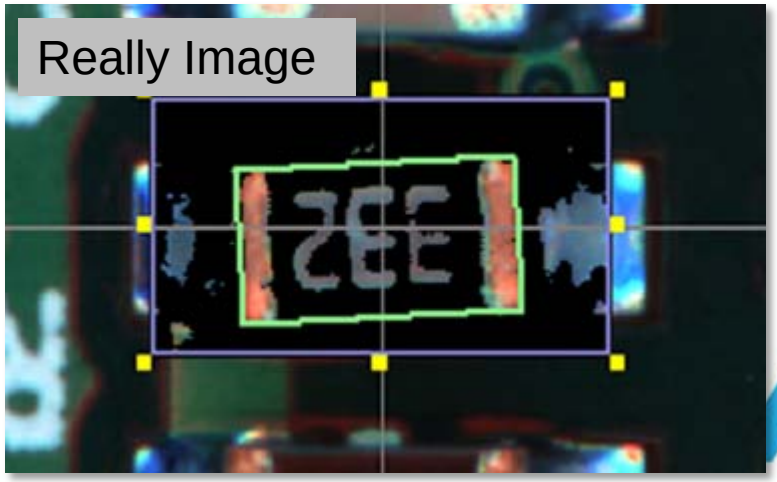
Based on the above, automatically identify the position parts to calculate the offset



Especially PCB bending or deformation



Accurate output to parts of the X, Y and θ offset.



Algorithm: LedBox

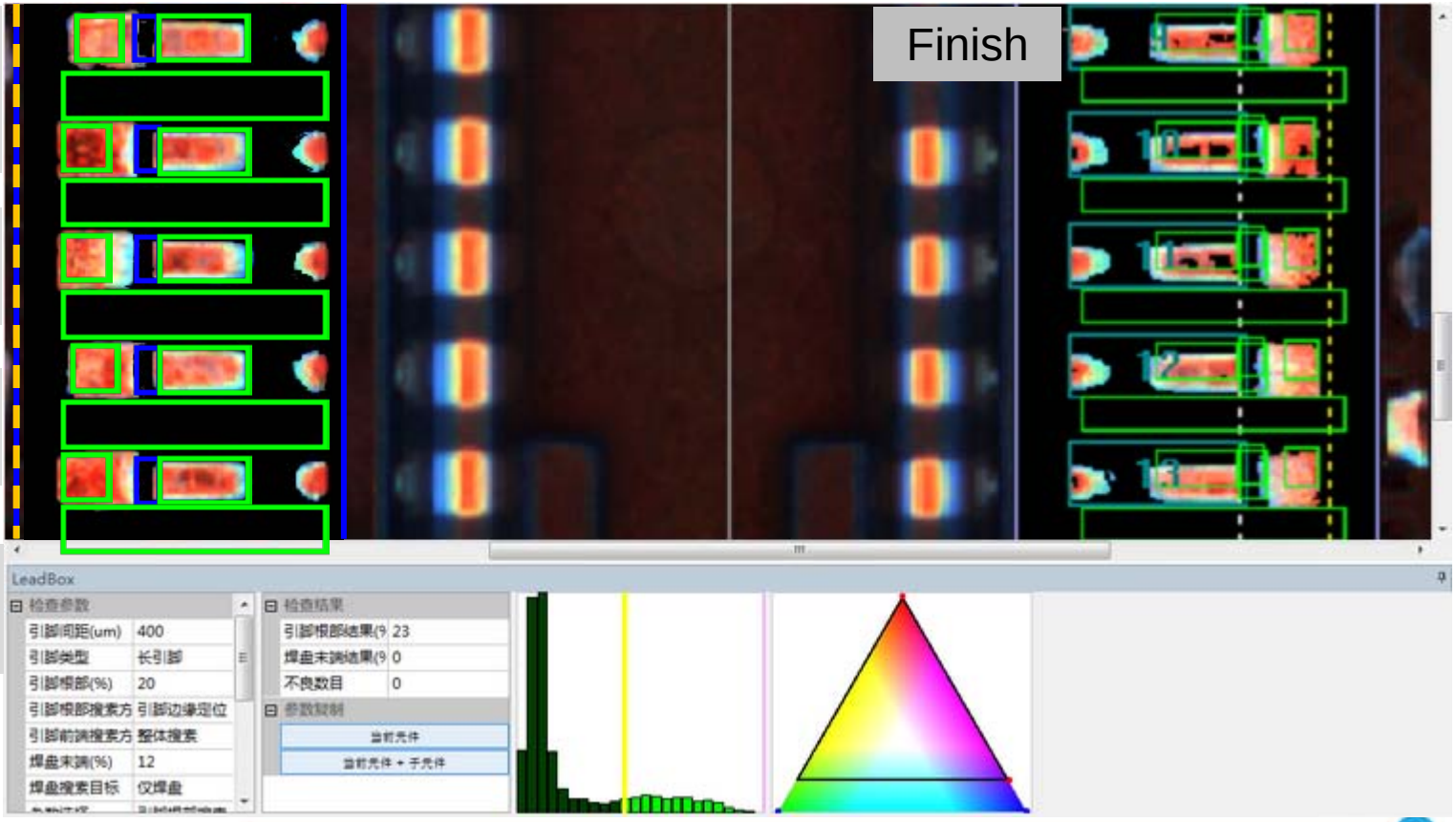
Based on a modular detection mode, applied to multi-pin parts: QFP, SOP, etc., to simplify programming, tuning, and make the results at a glance, more accurate.

Separate target by using scale and RGB

Auto search the end of Pad

Auto search the end of Led

Make all inspection window needs by automatically



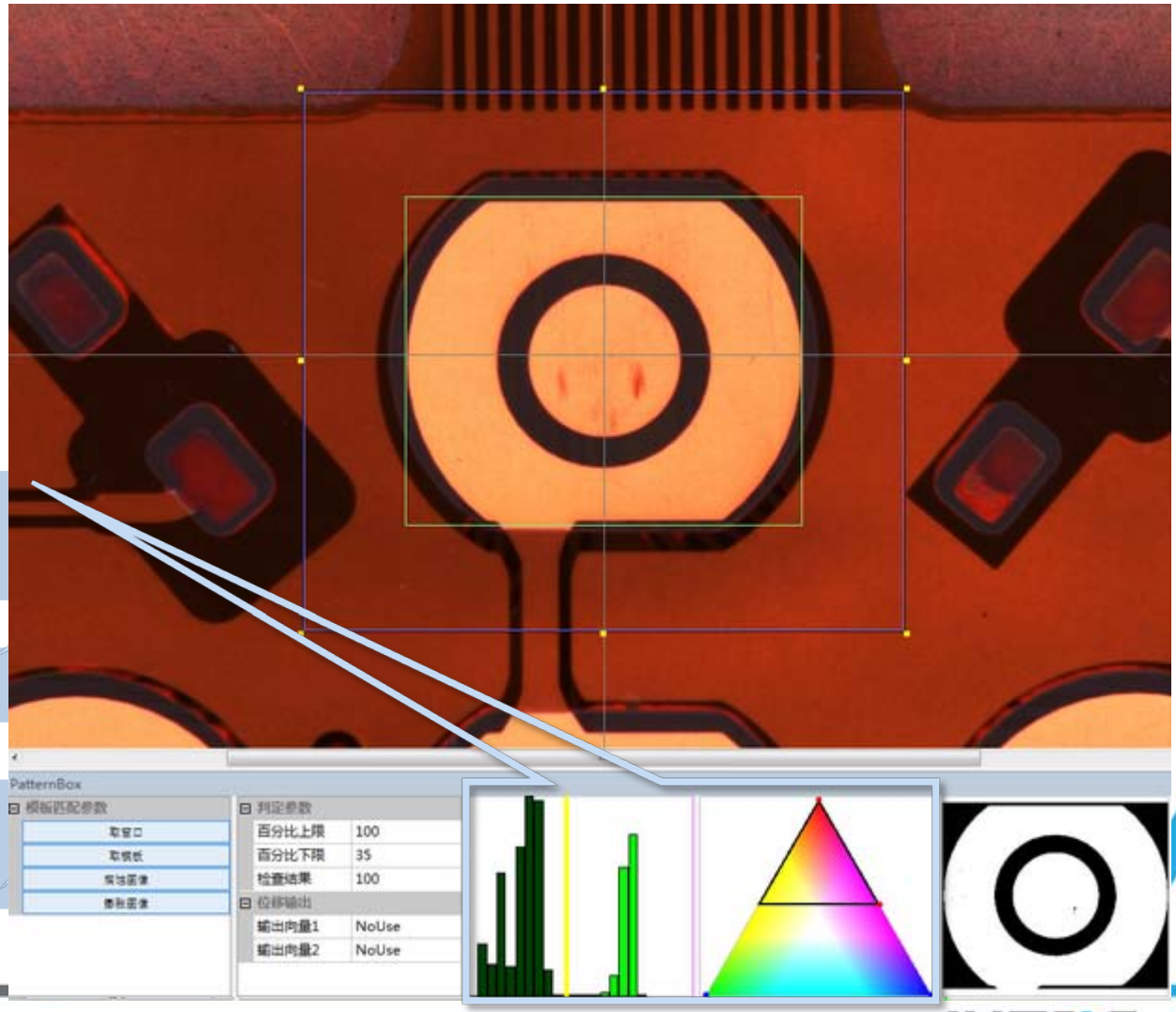
Algorithm: PatternBox

Concept comes from the irregular shape of the detect problems, out of the window concept, can detect objects of arbitrary shape to be detected, making detection easier, convenient, accurate.

Separate target by using scale and RGB

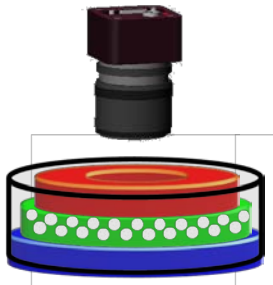
Pink area is the result

Easy detect any kind of NG without background



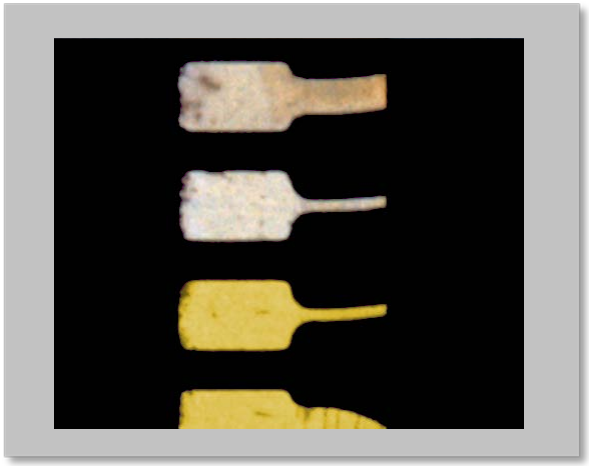
Multi-threading

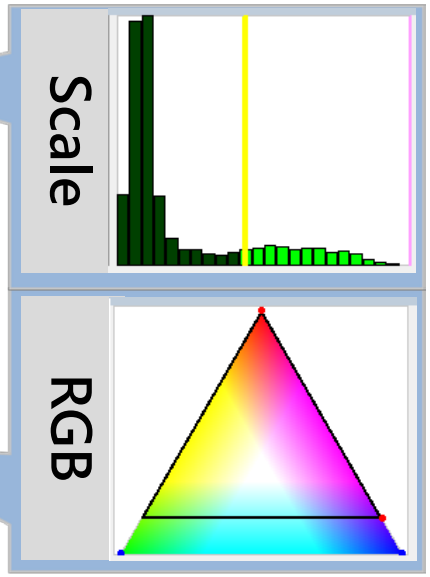
When capture finish is equivalent to inspect finish, also mean data output finish. So we can faster 30% than other brand AOI base on same level.

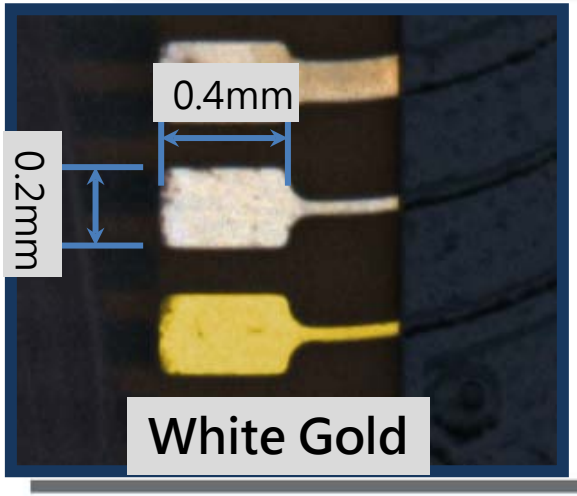


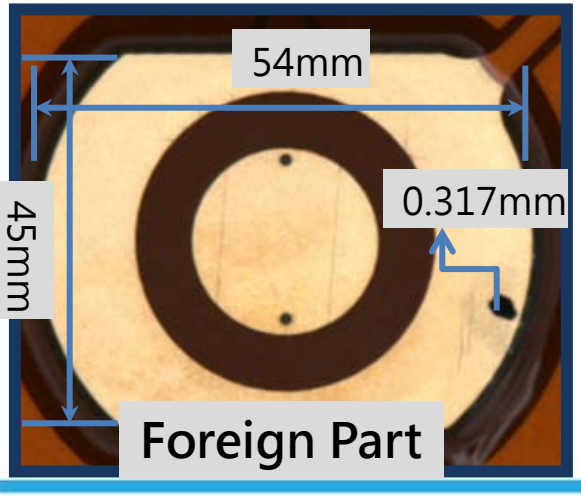
Golden Finger

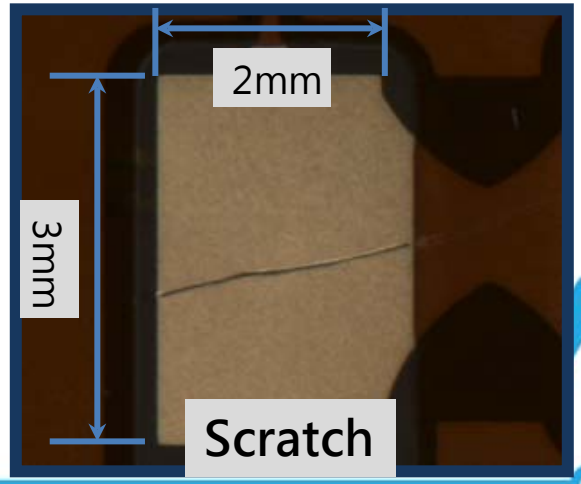
Using PatternBox separate background by using scale and RGB



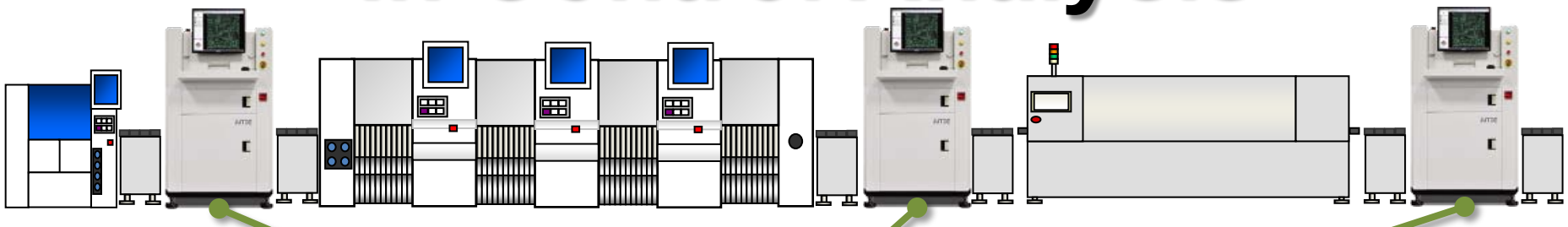








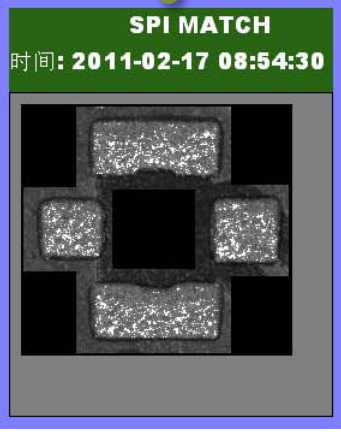
In Control Analysis

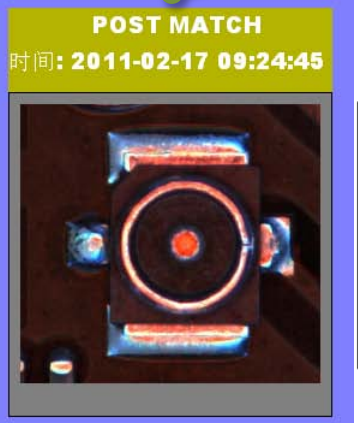


Parts Review

Process analysis

Improve process





Improve Production yields

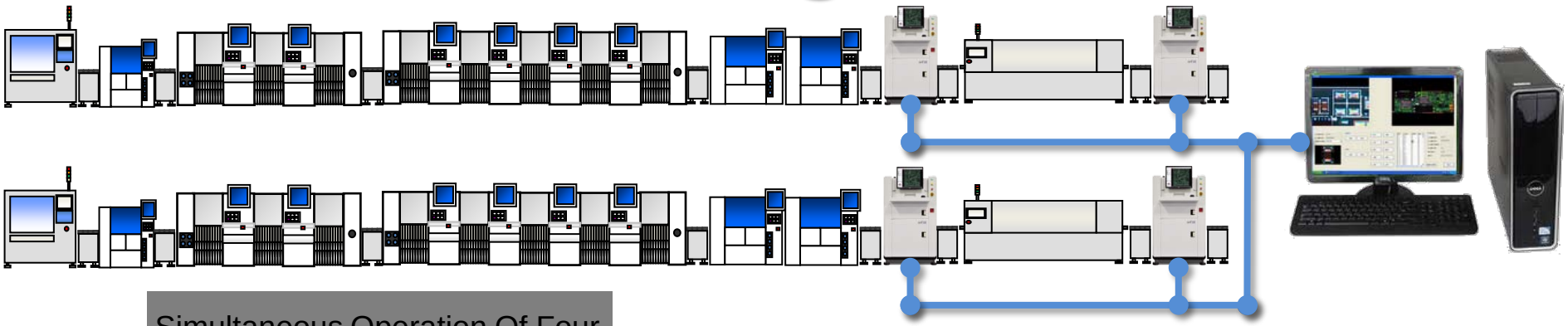
S P I

Pre-reflow A O I

Post-reflow A O I

Real-time control the image from NG components in the SPI, pre-reflow AOI and post-reflow AOI. Check the NG images from after printing, after mounting and post-reflow, to determine the causes of NG.

Centralized Management Software



Simultaneous Operation Of Four

One Operator Confirm Multi-Line

Reduce Operator

Operation Without Stopping Line

Reduce Costs
Improve Efficiency

Improve rate of production line automation, reducing labor and costs, to establishment of production lines fast feedback mechanism, can be multi-monitored SMT production line workers to help technology analysis process.

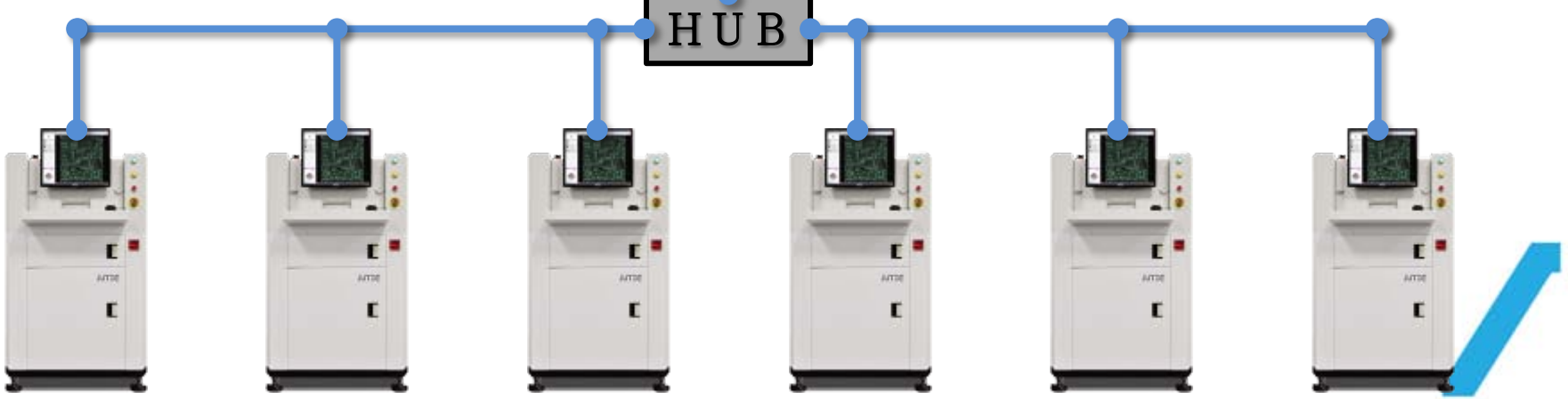
Remote Tuning

Can modify and update parameters real-time by contacting in-line AOI through net without stop product line. And also real-time update the new inspection data before next PCB comes.

Non-stop Production Line When Tuning

Non-stop Production Line when Update

AOI Always Working When using Remote Tuning

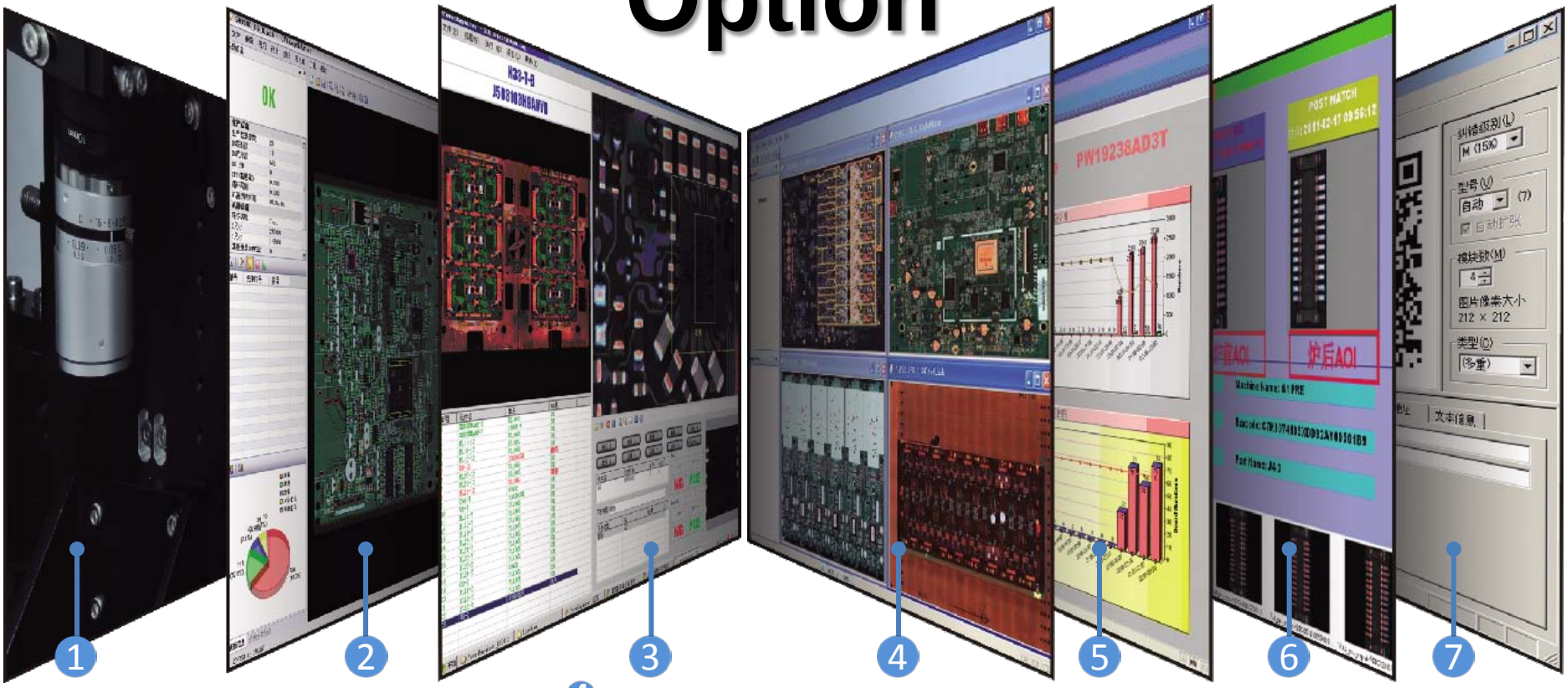


Maximize Production Efficiency

01005 Parts Correspond Exactly

To detect the NG of 01005 parts is standard of Jutze AOI

Option



❶ High Precision Image Systems
5M Pixel Camera

❷ Remote Tuning
Can modify and update parameters real-time by contacting in-line AOI through net without stop product line.

❸ Repair Terminal
Receiving the inspection results from in-line AOI at real-time will let user to make judgment quickly for defects. It also can connect multi in-line AOI, select PCB by hardware barcode scan function. Repair results can be output at statistics form.

❹ Centralized Management Software
Improve rate of production line automation, reducing labor and costs, to establishment of production lines fast feedback mechanism, can be multi-monitored SMT production line workers to help technology analysis process, identify the cause of the issue and thus enhance process capability.

❺ SPC
Powerful data analysis system, easy to operate, beautiful interface, can multi-machine real-time monitoring, search PCB by barcode, production statistics, false call analysis, a variety of report output functions

❻ In control analysis
In control analysis function, real-time control the image from NG parts in the SPI, pre-reflow and post-reflow AOI. Check the NG images from after printing, after mounting and post-reflow, to determine the causes of NG.

❼ Barcode
1D、2D Barcode correspondence

Service Network

Our Customers

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ASUS®

PEGATRON

FOXLINK

LITEONMOBILE

COMPEQ
華通電腦股份有限公司

SHARP®

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EMERSON.
Motor Technologies

DBG

YUDAFU

Panasonic

rapoo 雷柏

malata

Inventec

Sumitomo Corporation
住友商事株式会社

ECS ELITEGROUP

Chicony®
群光電能科技股份有限公司