True 3D now Powered by Intelligent Platform for Smart Factory

ZENITH UHS Ultra High-Speed

World-Fastest Full 3D Automated Optical Inspection

- **Ultra high detection speed**
- **Best full 3D inspection capability**
- **Package SMT includes 3D process CNC data system**

KOH YOUNG TECHNOLOGY
INTELLIGENT INSPECTION

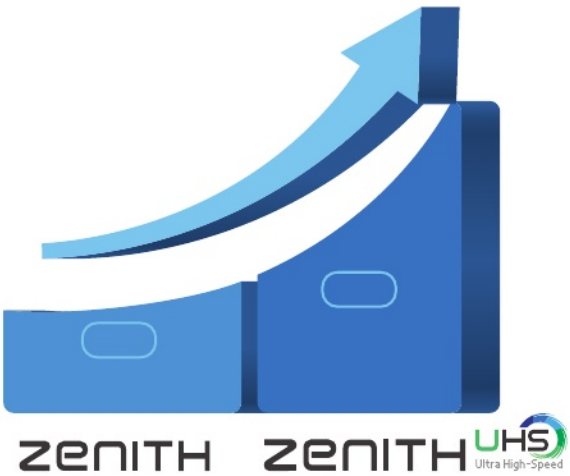
ZENITH UHS Ultra High-Speed

World-Fastest Full 3D Automated Optical Inspection

Koh Young的真实的 三维检测系统可以提供常规检查问题的解决方案

The best full 3D inspection performance

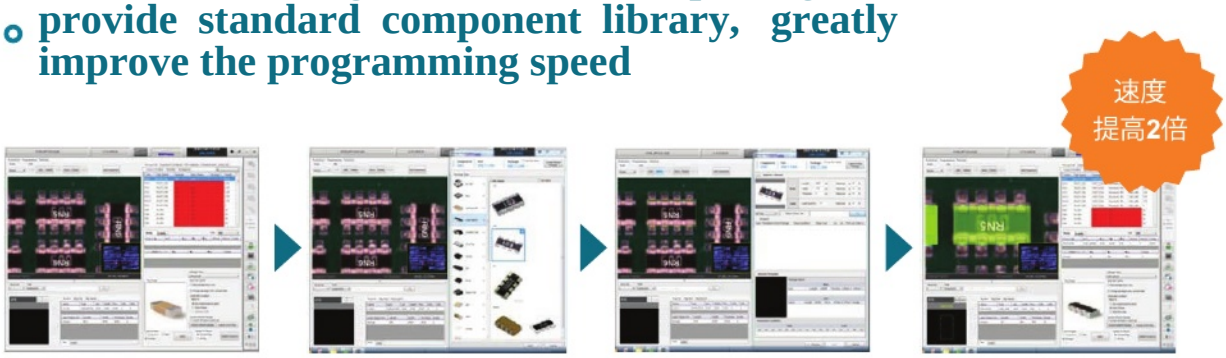
- **Measure and detect various defects**



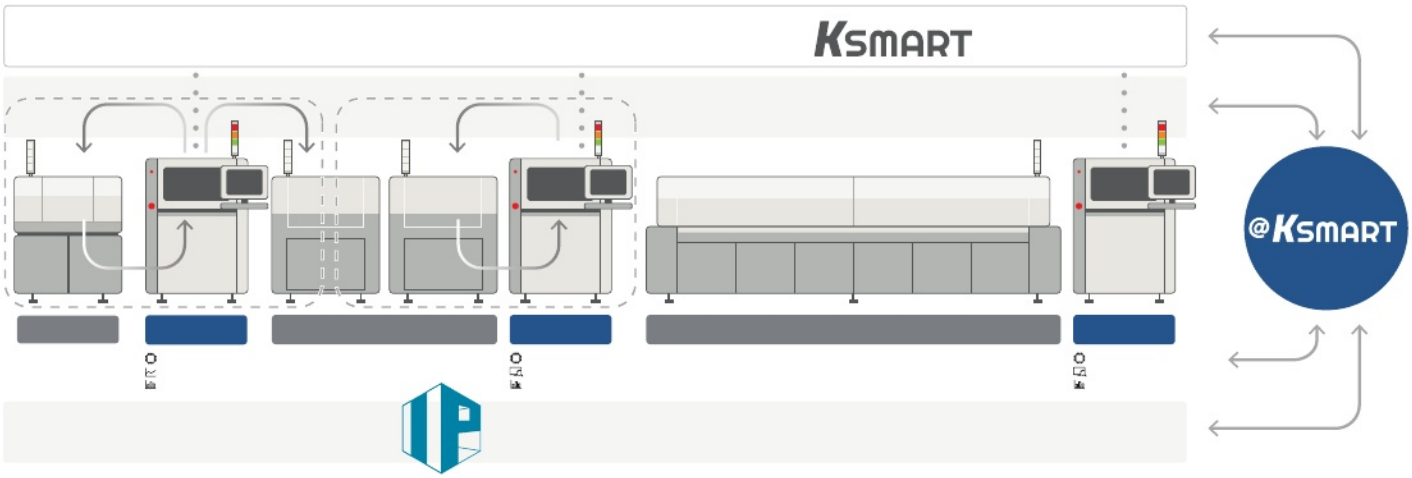
- Size, rotation, bridge, micro warped, missing piece, side stand, standing tablet, reverse piece, OCV/OCR, offset, 3D polarity, warped, side stand, poor welding, etc
- and can achieve the final solution to improve product yield

Fast and intuitive programming system: template mana

- **Based on quantified test results for easier test conditions setting and correction package to provide standard component library, greatly improve the programming speed**



: Select the component type



SPC@KSMART

Optional

SPC based on reliable 3D data

• Perform necessary analysis from an intuitive graphical interface • Speed up cause analysis to improve the normal operation of equipment

OLD (Off-Line Debugging/ off-line debugging) @KSMART

Optional

Minimize downtime when debugging your program

● The feed and check machine will synchronize and update the service function with the real time test

LM (Library Manager/ Database Administrator) @KSMART

Program management

Stream storage process and superior differentiation after the process of the order and change and maintenance test change bar is easier In the central management database → multiple AOI

User level permission management

• Different users can give different permissions • Each user's operation is automatic ally recorded in the history

Link @KSMART

Optional

Spi-aoi communication solution based on 3D data

• Browse, diagnose and optimize printing, mounting and reflow engineering • Use Koh Young 3D SPI and 3D AOI test results to identify the root cause of defects

3D AOI的必检项目

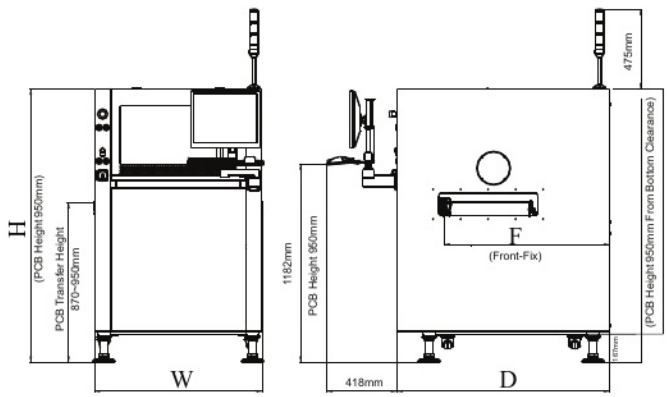
要求	解法方法
阴影问题解决方法	• 消除阴影的摩尔条文技术&八方向投射光系统
镜面问题解决方法	
小元件检测 (0402mm)	• 多频率莫尔技术
大测量范围 + 精确度 (测量范围问题)	
实时 PCB 偏差补偿	• 板弯补偿 (Pad Referencing + 多频率莫尔技术(选项))
深色元件和白体元件位置元件体	
焊錫微翘检测	
焊锡连接面检测	• 全3D 测量
3D极性检测	
元件裂缝检测	

检测项目	检测项目	• 缺件、偏移、旋转、三维极性、反件、OCV、翘立、侧立、立碑、焊接不良等	
检测性能	相机分辨率	15μm	20μm
	FOV尺寸	42×42mm (1.65×1.65 inch)	56×56mm (2.20×2.20 inch)
	全3D检测速度	27.6-51.9 cm²/s (检测速度因PCB和检测条件不同而异。)	
	高度精度 (校正模块)	• ±3%	
	相机	• 8百万像素相机	
	照明	• IR-RGB LED Dome Styled Illumination	
	最大测量高度	• 5mm / 25mm (选项)	
基板对应	轨道宽度调整	• 自动	
	轨道固定方式	• 前轨固定/后轨固定 (出货时固定)	
软件	可对应输入格式	• Gerber data (274X, 274D)、ODB++、Placement file、Mounter JOB file、Allegro、Zuken、Mentor (选项)	
	编程软件	• ePM-AOI、AOI GUI	
	统计管理工具	• SPC@KSMART (选项) • 返修站 (选项) • KSMART远程监控系统 (选项)	
	界面操作便利性	• Library Manager@KSMART • KYCal: 自动校准相机/照明/高度	
	操作系统	• Intel i7-3970X (6Core)、32GB、Window 7 Ultimate 64bit	

Add-on Solutions		
• 1D & 2D Handy Barcode Reader	• Offline SPC Pro Station	• Warp Compensation
• 1D & 2D Inline Barcode Reader	• Standard Calibration Target	• Foreign Material Inspection
• Offline Programming Station	• Remote Monitoring System	• Review Station
• SPC@KSMART	• OLD@KSMART	• Up to 25mm Height Inspection

※ 以上规格如有更改、恕不另行通知。

	M	L	DL	XL
PCB 最大尺寸	330X330mm (13X13 inch)	510X510mm (20X20 inch)	Dual: 510X320mm (20X12.6 inch) Single: 510X580mm (20X22.8 inch)	850X690mm (33.4X27.1 inch)
PCB 最小尺寸	50X50mm (1.97X1.97 inch)			70X70mm (2.7X2.7 inch)
PCB 厚度	0.4~5mm (0.015~0.20 inch)			0.5~8mm (0.02~0.31 inch)
最大 PCB 重量	Ring Belt : 2kg(4.4 lbs), Timing Belt : 5kg(11 lbs)			10kg(22 lbs)
机器重量	550kg(1212 lbs)	600kg(1322 lbs)	700kg(1543 lbs)	850kg(1874 lbs)
底侧间隙	50mm(1.97 inch)			
耗材	200~240VAC, 50/60Hz Single Phase, 5Kgf/cm²			
W	820mm(32.2 inch)	1000mm(39.3 inch)	1000mm(39.3 inch)	1350mm(53.1 inch)
D	1265mm(49.8 inch)	1265mm(49.8 inch)	1445mm(56.9 inch)	1445mm(56.9 inch)
H	1627mm(64 inch)			
F	985mm(38.7 inch)		1165mm(45.8 inch)	



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