



True  Smart Factory Solutions
Powered by the AI Platform

KY8080

Automatic Test and Inspection Equipment with Standard Accessories (3D Solder Paste Inspection System)

- ✓ Optimized for mobile phone applications
- ✓ The strongest printing process optimization tool
- ✓ The world's best measurement accuracy and reliability

 User-friendly Software

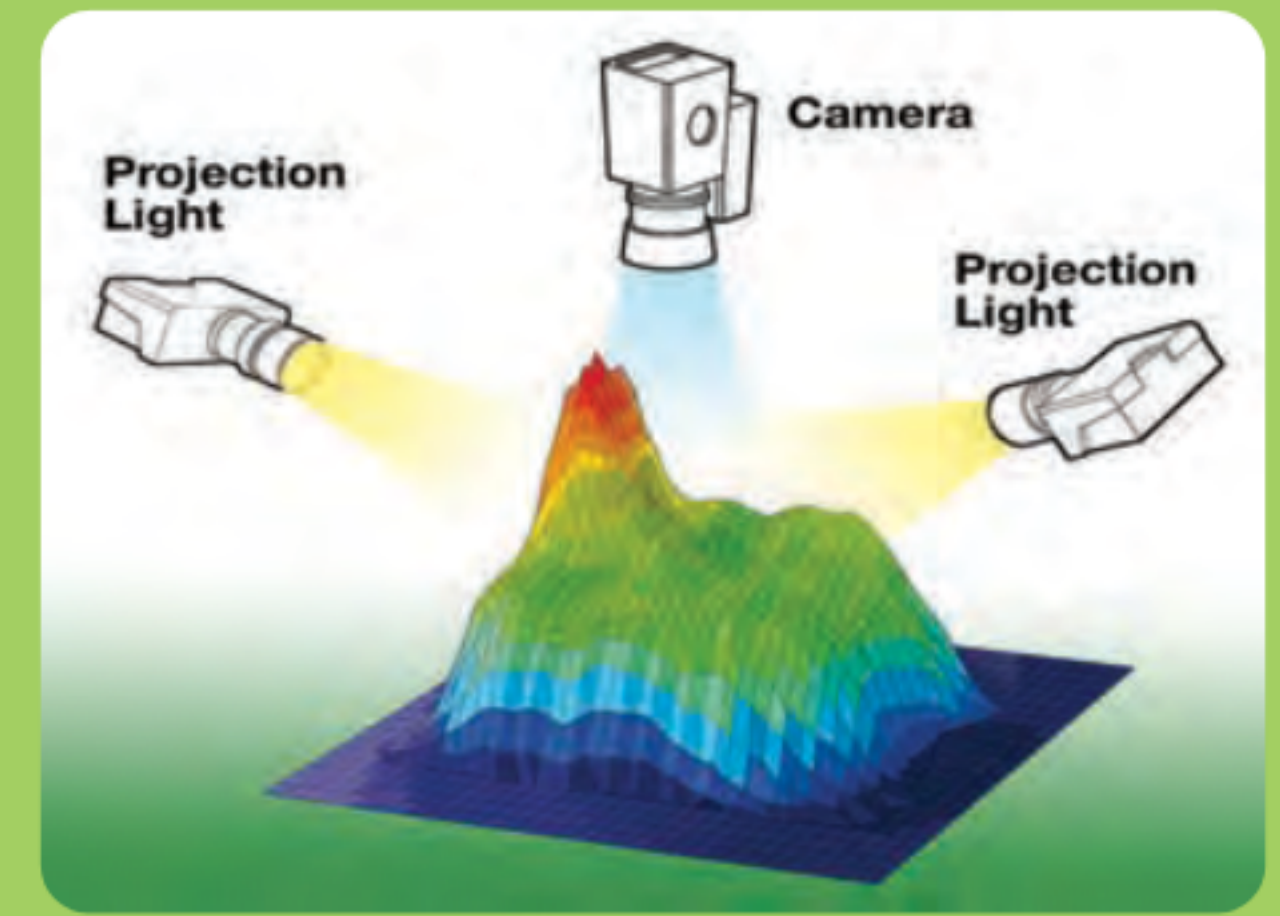
 3D Measurement based SMT Process Control System

 Real-time Multi Monitoring



KY8080

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➤ Dual Projection Technology

KY8080 delivers true 3D inspection without concern for inaccuracies resulting from shadowing.

“ 3D SPI, KY8080, is optimized for mobile phone applications and also helps enhance product quality, increase productivity and improve operational efficiency ”

World's most reliable Koh Young 3D SPI to help realize today's mobile phone innovation

No.1

Global market leader in SPI, 12 straight years*

4 of 5

4 of the top5 Chinese** smartphone brands in China use Koh Young 3D SPI Solutions

6 of 6

6 of the top 6 multinational** smartphone brands in Global use Koh Young 3D SPI Solutions

Inspect massive volumes of productions while simultaneously applying real-time analytics

High Performance

- High Accuracy

Process Optimization

- Multi-line monitoring system
- Real-time production analytics

Minimize cost and maximize productivity of manufacturing space



KY SPI Series



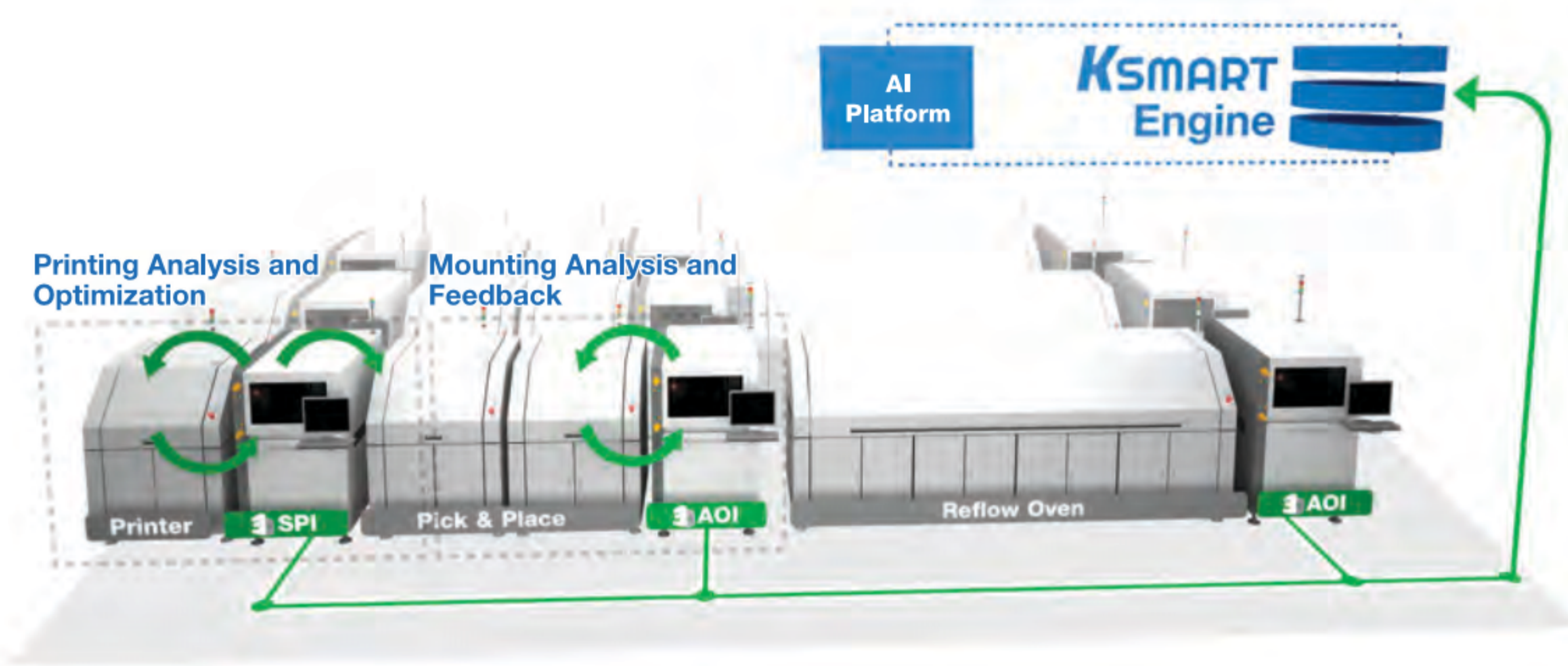
KY8080

- Smallest footprint in the KY 3D SPI portfolio
- Minimize cost and maximize productivity

*Source: 2016 PRG Report
** Source: 2017 TrendForce



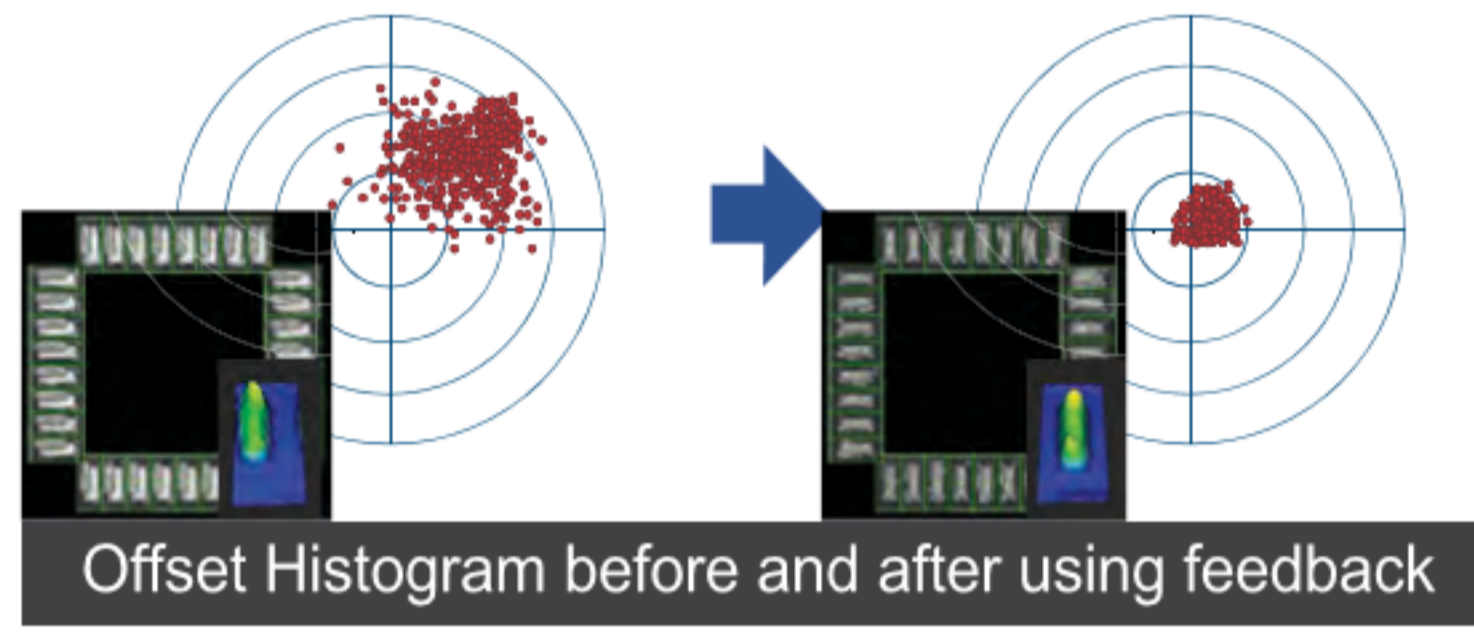
Intelligent Platform to Realize Fully Automated Process Optimization : Smart Factory



Printer Closed Loop

Optional

- Real time communication of printing process monitoring data with Screen Printers
- Supports pick-and-place process optimization by controlling panels containing defects



- Less Human Intervention
- Live Feedback without Sacrificing Cycle Time
- Printing Quality Improvement
- Yield Improvement

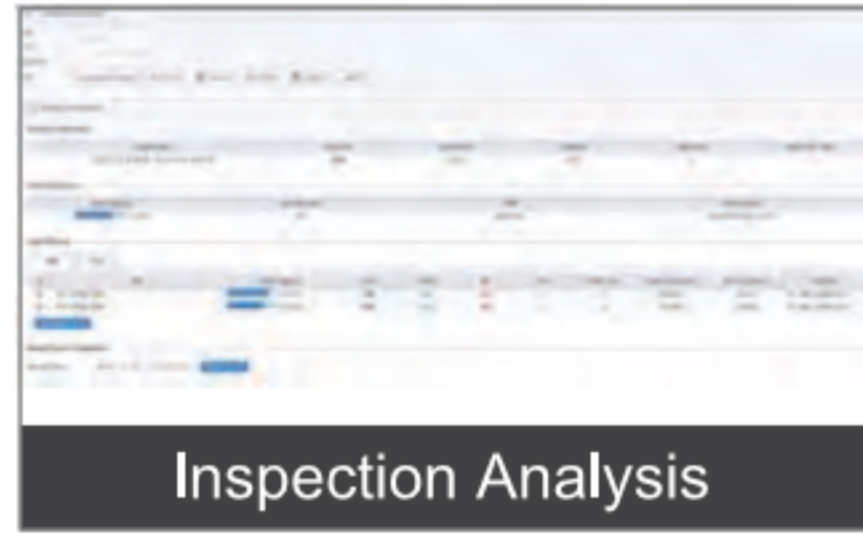


SPC @ KSMART

Optional

Reliable 3D Data based Statistical Process Control

- Carry out essential analyses from an intuitive graphical interface
- Accelerate root cause analysis for increased equipment uptime

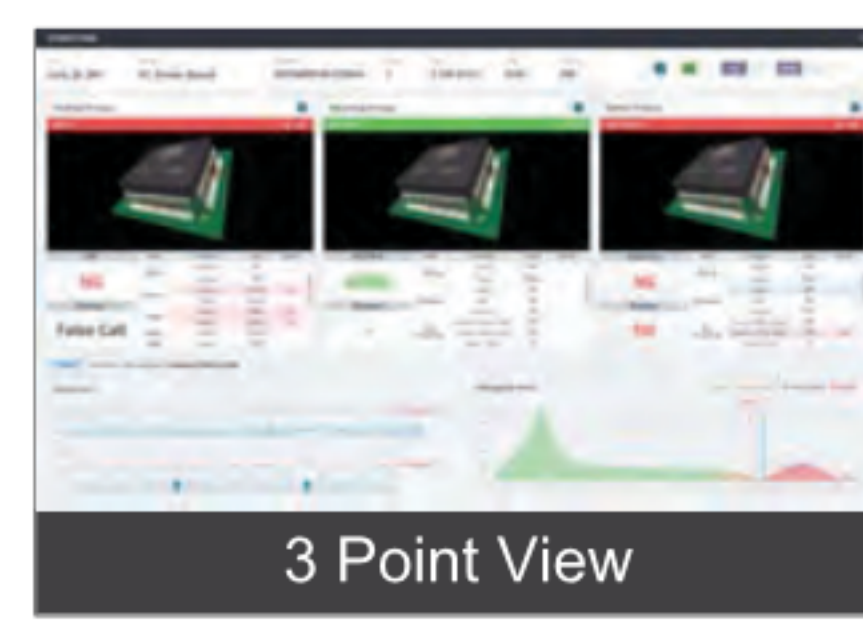


Link @ KSMART

Optional

3D data based SPI-AOI communication solution

- Review, diagnosis and optimization of printing, pick-and-place and reflow process
- Traces root cause of defects by storing and communicating inspection results from Koh Young's 3D SPI and 3D AOI Systems



➤ Must-check Requirements of 3D SPI System

Requirements	Solutions
Solution to shadow problem	· 3D Shadow Free Moiré Technology & Dual Projection
Real time PCB Warp Compensation	
Operator User-friendliness	· Renewal GUI, Real Color 3D Image
Inspection Items	
Metrology Capability	· Volume, Area, Height, Offset, Bridging, Shape Deformity, Coplanarity
Types of Defects	· Insufficient/Excessive/Missing Paste, Bridging, Shape Deformity, Paste Offset
Inspection Performance	
Camera Resolution	15 μ m
FOV Size	30 x 30 mm (1.18 x 1.18 inches)
Full 3D Inspection Speed	22.5 ~ 38.1 cm ² /sec (Inspection speed varies by PCB and inspection condition.)
Min. Distance between Paste Deposit	· 200 μ m (7.87 mils)
Camera	· 4M Pixel Camera
Height Accuracy (on KY Calibration target)	· 1 μ m
0603 Inspection Capacity Gage R&R (\pm 50% tolerance)	· < 10% at 6 σ
Max. Inspection Size	· 10 x 10 mm
Max. Inspection Height	· 400 μ m
	0.39 x 0.39 inches
PCB Handling	
Conveyor Width Adjustment	· Automatic
Conveyor Fix Type	· Front / Rear Fixed (factory setting)
Software	
Supported Input Format	· Gerber data (274X, 274D)
Programming S/W	· ePM-SPI
Statistical Process Control Tool	· SPC@KSMART: - Histogram, X-bar & R-Chart, X-bar & S-Chart, Cp & Cpk, %Gage R&R - Real Time SPC & Multiple Display - SPC Alarm
Operator User-friendliness	· Library Manager@KSMART
Operating System	· KYCal : Auto Camera Calibration, Illumination Calibration, Height Calibration · Windows 7 Ultimate 64bit

※ Above specifications are subject to change without notice.

	M		L	
	Single Lane	Dual Lane	Single Lane	Dual Lane
Max. PCB Size	350 X 330 mm (13.8 X 13 inches)	Single Mode: 350 X 580 mm (13.8 X 22.8 inches) Dual Mode: 350 X 320 mm (13.8 X 12.6 inches)	510 X 510 mm (20.1 X 20.1 inches)	Single Mode: 510 X 580 mm (20.1 X 22.8 inches) Dual Mode: 510 X 320 mm (20.1 X 12.6 inches)
Min. PCB Size	50 X 50 mm (2 X 2 inches)		50 X 50 mm (2 X 2 inches)	
PCB Thickness	0.4 ~ 4 mm (0.016 ~ 0.16 inches)		0.4 ~ 5 mm (0.016 ~ 0.19 inches)	
Max. PCB Weight	3kg (6.6 lbs)		3kg (6.6 lbs)	
Machine Weight	About 500 kg (1102 lbs)	About 550 kg (1212 lbs)	About 550 kg (1212 lbs)	About 600 kg (1322 lbs)
Bottom Side Clearance	30 mm (1.18 inches)			
Supplies	200~240 VAC, 50/60 Hz Single Phase, 5kgf/cm ² (0.45 MPa)			
W	800 mm (31.5 inches)		1000 mm (39.3 inches)	
D	1335 mm (52.6 inches)		1335 mm (52.6 inches)	
H	1627 mm (64.1 inches)		1627 mm (64.1 inches)	
F	1092.5 mm (43 inches)		1092.5 mm (43 inches)	

