True 3D Smart Factory Solutions
Powered by the AI Platform

KY8080

True 3D SPI Solution for Mobile Application

- Optimizd for mobile phone applications
- The strongest printing process optimization tool
- The worlds best measurement accuracy and reliability

User-friendly Software

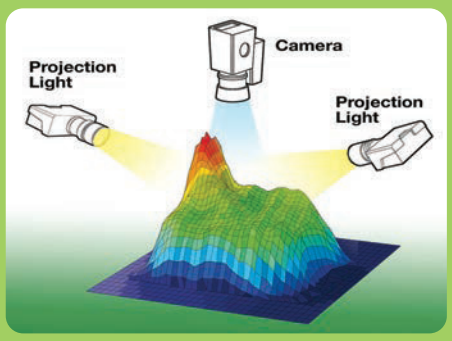
3D Measurement based SMT Process Control System

Real-time Multi Monitoring

Koh Young Technology
INTELLIGENT INSPECTION

KY8080

True 3D SPI Solution for Mobile Application



↗ Dual Projection Technology

KY8030-3 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 messive volumes of productions while simutaneously applying real-time analytics

High Performance

- High Accuracy

Process Optimization

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

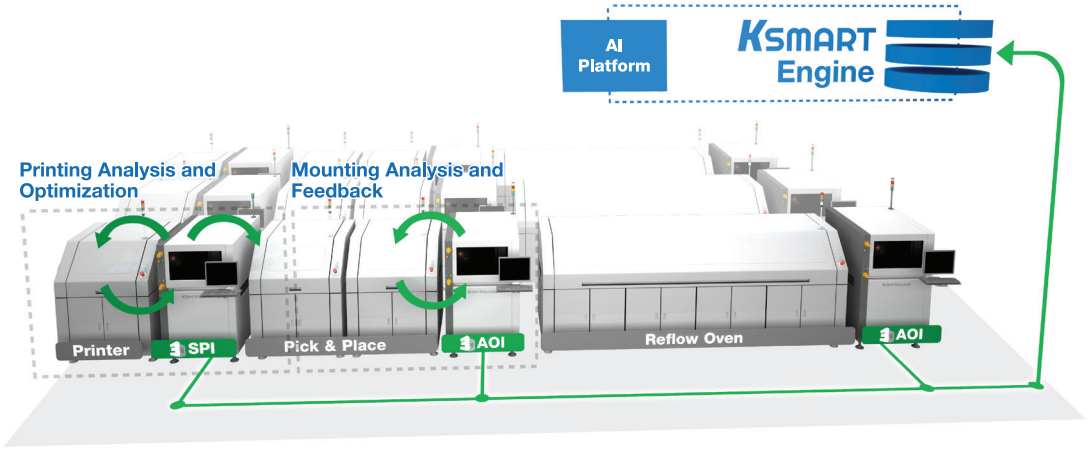
Minimize cost and maximize productivity of manufacturing space

KY SPI Series → KY8080

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

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

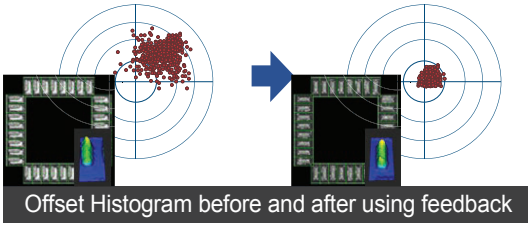
Intelligent Platform to Realize Fully Automated Process Optimization : Smart Factory



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


Offset Histogram before and after using feedback


Defect Panel View

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

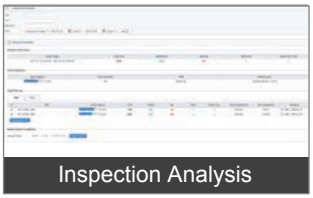
SPC @KSMART

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


SPC Dashboard

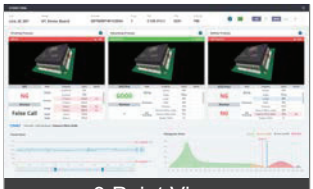

Inspection Analysis

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


3 Point View

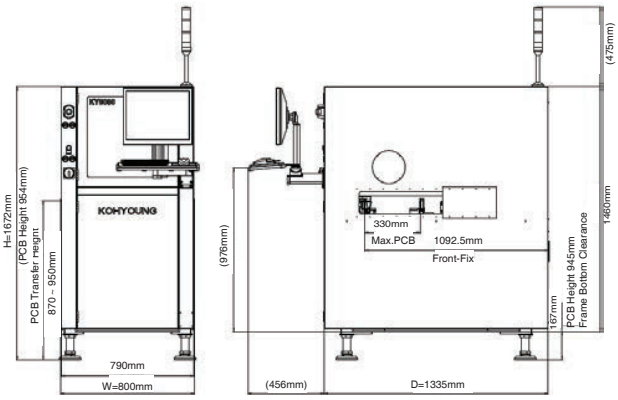
Must-check Requirements of 3D SPI System

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 um	20 um
	FOV Size	30 x 30 mm (1.18 x 1.18 inches)	40 x 40 mm (1.57 x 1.57 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 μm (7.87 mils)	
	Camera	· 4M Pixel Camera	
	Height Accuracy (on KY Calibration target)	· 1 μm	
	0603Inspection Capacity Gage R&R (±50% tolerance)	· < 10% at 6σ	
	Max. Inspection Size	· 10 × 10 mm	0.39 × 0.39 inches
	Max. Inspection Height	· 400 μm	
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 · KYCal : Auto Camera Calibration, Illumination Calibration, Height Calibration	
	Operating System	· 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 X13 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)	



14th & 15th Floor, Halla Sigma Valley Building, 53, Gasan Digital 2-ro, Geumcheon-gu, Seoul 08588 Korea
Tel. +82-2-6343-6000 Fax. +82-2-6343-6001 E-mail. info@kohyoung.com