In-line 3D Solder Paste Inspection System

KY-8030 SERIES

KOH
YOUNG
TECHNOLOGY
INTELLIGENT
INSPECTION

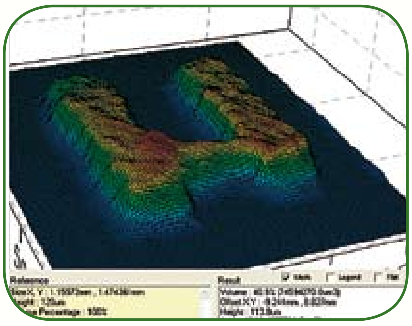
The Standard in 3D Measurement & Inspection

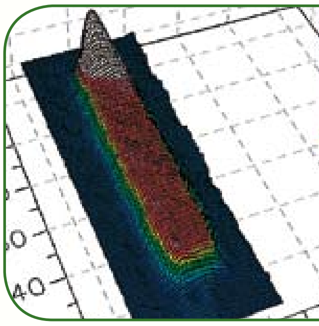
KY-8030 SERIES

Superb Performance and Value in Automated 3D SPI

The KY-8030 is an in-line, fully automated SPI system that uses patented Koh Young shadow-free inspection technology and software to deliver 100% 3D inspection of solder paste.

- **True patented 3D volume measurement**
- **No false calls – no escapes – no shadow problems**
- **Highest accuracy and repeatability**
- **No PCB color sensitivity**
- **Solder paste printing optimization - at its best**
- **Lower initial investment**
- **Low cost of ownership, fast ROI**
- **Shortest programming time**
- **Accurate, powerful SPC tool package**



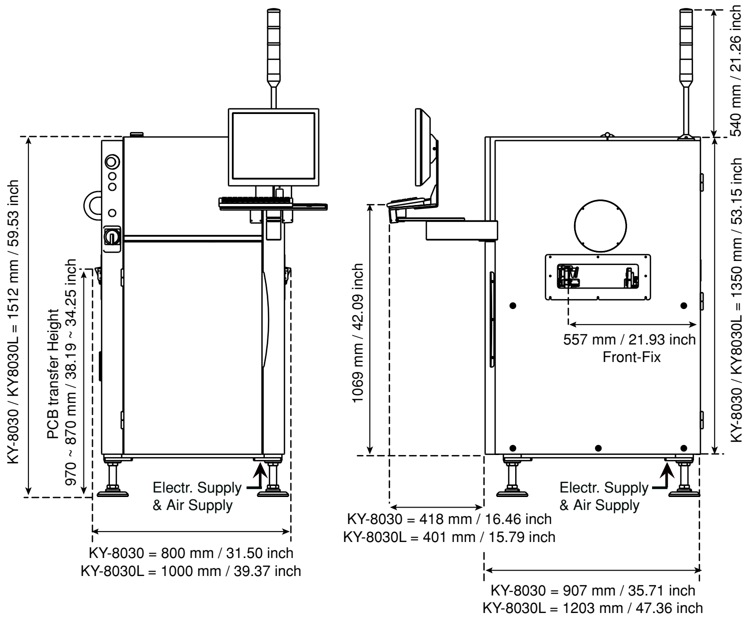


In-line SPI with no compromises

KY-8030 is designed for manufacturers who need in-line SPI with no compromises in high precision and accuracy.
With KY-8030, you buy the throughput capability that you need.

KY-8030 is a process optimization tool built with world-class Koh Young quality components and engineering.
It's the perfect complement to your manufacturing line, where precise, accurate, repeatable results cannot be compromised.

Medium-volume users will appreciate KY-8030's rugged dependability and all the benefits of in-line 3D SPI but at a lower initial investment.
It delivers superior value to the customer because it will out-perform costly competitive systems that don't offer true 3D SPI.



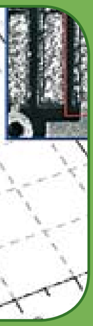
	Max. PCB Size	
KY-8030	330 x 250 mm	12.99 x 9.84 inch
KY-8030L	510 x 510 mm	20.08 x 20.08 inch
	Min. PCB Size	
8030 Series	50 x 50 mm	1.97 x 1.97 inch
	PCB Thickness	
KY-8030	0.4 ~ 4.0 mm	0.016 ~ 0.16 inch
KY-8030L	0.4 ~ 5.0 mm	0.016 ~ 0.20 inch
	Max. PCB Weight	
KY-8030	1.0 kg	2.2 lbs
KY-8030L	2.0 kg	4.4 lbs
	Machine Weight	
KY-8030	500 kg	1123 lbs
KY-8030L	550 kg	1210 lbs
	Bottom Side Clearance	
8030 Series	25.4 mm	1.0 inch

Rapid Programming

Less than 10 min. programming for a complete inspection file, with NO fine tuning needed.

Accurate Compliance Solution

The only way to guarantee correct solder joint volume per IPC 610 requirements.



Best SPI Measurement Performance

- <<10% GR&R at 6 σ
- Volume repeatability < 1% at 3 σ on a KY calibration target
- Average volume repeatability < 3% at 3σ on a PCB

PCB Warp? No Problem!

Unique real-time warpage tracking hardware and software ensures uninterrupted inspection of warped boards up to ± 3.5 mm.

Detect all Defects

Including insufficient and excessive deposits, shape deformation, missing paste, paste offset, smearing, bridging and more.

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Koh Young Technology
INTELLIGENT INSPECTION

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SPECIFICATIONS

Inspection Range			
Metrology Capability		Volume, Area, Height, Offset, Bridging and Shape Deformity	
Types of Defects		Insufficient/Excessive/Missing Paste, Bridging, Shape Deformity and Paste Offset	
Measurement Principle		3D Shadow Free Moiré	
Camera Technology			
Camera		2MPix	
XY Pixel Resolution		20 µm	0.79 mils
Z Resolution		0.37 µm	0.015 mils
Inspection Performance			
Inspection Speed at 20 µm	Shadow Free Mode	15.0 cm^2/sec	2.33 sq. inch/sec
	High Speed Mode	19.7 cm^2/sec	3.05 sq. inch/sec
Volume Repeatability (on a KY Calibration Target)		< 1% at 3σ	
Volume Repeatability (on a PCB)		< 3% at 3σ	
Height Accuracy (on a KY Calibration Target)		2 µm	
Gage R&R (± 50 tolerance)		<< 10 % at 6 σ	
Max. PCB Warp Compensation		± 3.5 mm	0.14 inch
Max. Paste Height		400 µm	15.75 mils
Min. Paste Deposit Size at 20 µm	Rectangle	150 µm	5.91 mils
	Circle	200 µm	7.87 mils
Min. Distance between Paste Deposit		100 µm (at 150 µm paste height)	3.94 mils (at 5.91 mils paste height)
PCB Handling			
Conveyor Width Adjustment		Automatic	
Conveyor Fix Type		Front/Rear Fixed (Factory Setting)	
Conveyor Height		970 ~ 870 mm	38.19 ~ 34.25 inch
System & Installation requirements			
Supply	Electrical	200 ~ 240VAC, 50/60 Hz Single phase	
	Air	5 Kgf/cm^2	
Operating System		Windows XP Professional	
S/W			
Statistical Analysis Tool		SPC Plus	
Inspection Program Generation		Import GERBER Data (274X, 274D)	
Options		• Zoom Head (15, 20, 30 µm Autozoom)	
		• Off-line SPC & Defect Review Station	
		• Off-line Programming Station	• ODB++ File Conversion
		• Barcode Reader (1D/2D)	• HDD Raid 1 (Mirrored)
		• Certified Calibration Target	• UPS

Above specifications are subject to change whithout notice.

CE