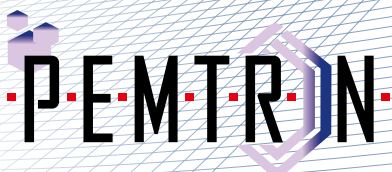


Color 3D SPI TROI-7700H Series

3D Inline Solder Paste Inspection System



Technology and Features

Dual Projection

Combination of 2D & 3D inspection eliminates common shadow problem with SPI systems.

64 bit Windows 7 Operation System

Fast & Stable Operating System for high density PCB.

User Friendly Graphical Interface

Self-developed Gerber Editor controls the main functions on one page which means it's eliminating the effort of switching between multiple screens. It is also possible to register or edit the data quickly and easily by any users.

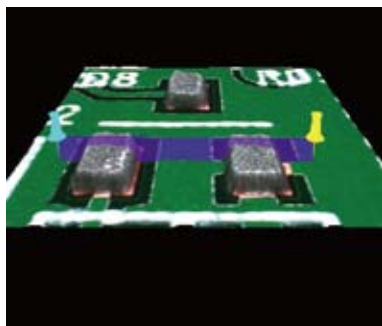
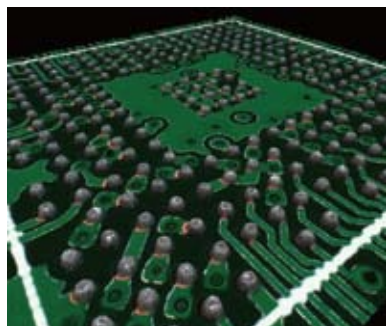
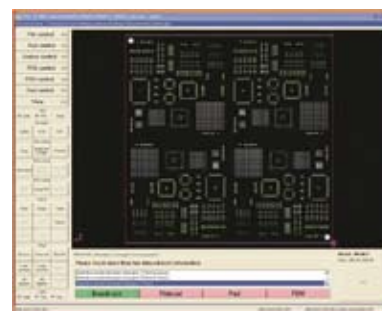
Color 3D SPI

Conventional SPI methods could only calculate heights above silk print levels, but by using patented color enhancing algorithm TROI™ could overcome these problems.

In addition, a fully rotational 3D view of the solder form is displayed. This enables users to view a "life like" image of the pad eliminating the need to extract the board from the line to view the defect under a microscope.

High Accuracy Linear Motor

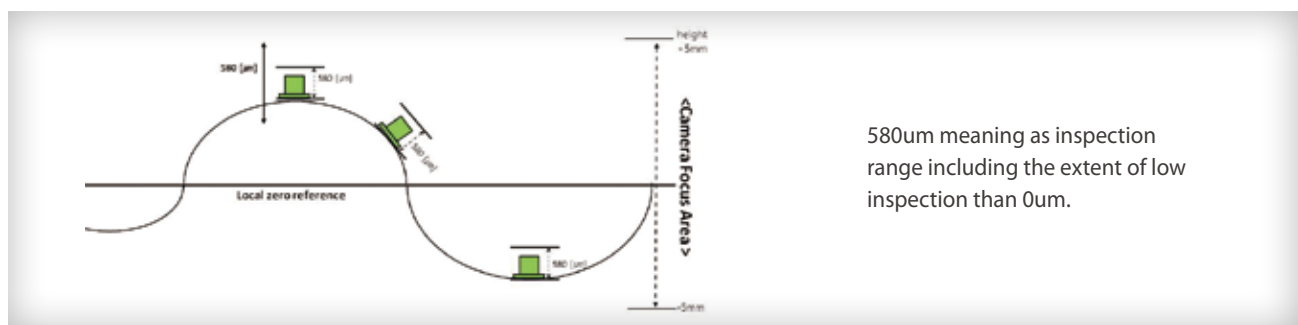
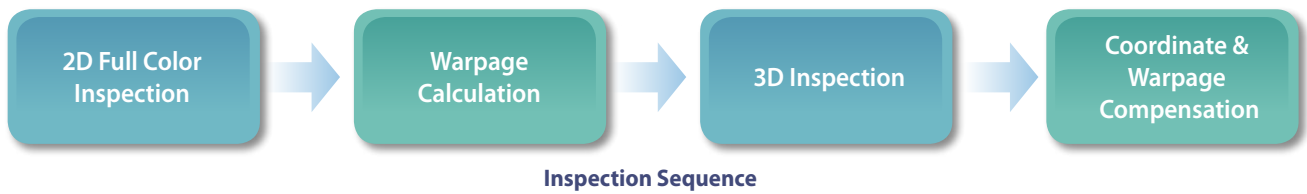
The use of Linear X and Y stages, TROI™ provides a high accuracy under $\pm 5\mu\text{m}$.



Warpage compensation

Wider range of reference point search area prevents less deviation of recognizing a zero reference point.

- Accurate height calculation
- Compare other pads within ROI
- Better repeatability



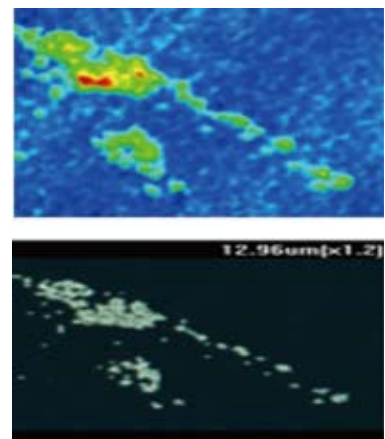
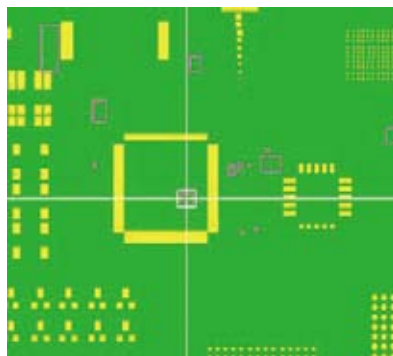
<div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block; background-color: #e0f2f1;">Good</div>	<p>160 100</p>	<p>Solder Past Reference PCB</p>
<div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block; background-color: #e0f2f1;">Bad</div>	<p>160.8 100.5</p>	<p>Solder Past Reference PCB</p>

The exact floor measurement and automation capabilities



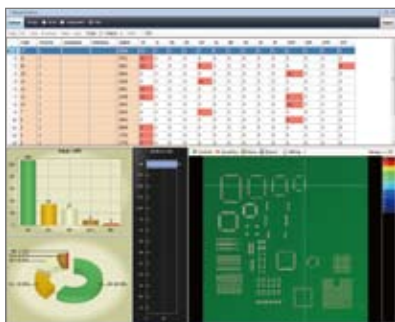
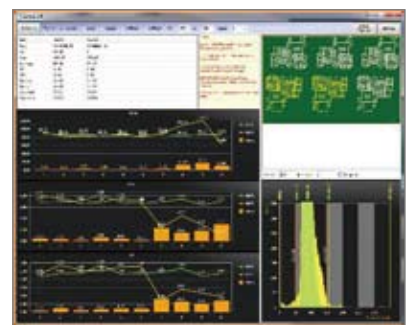
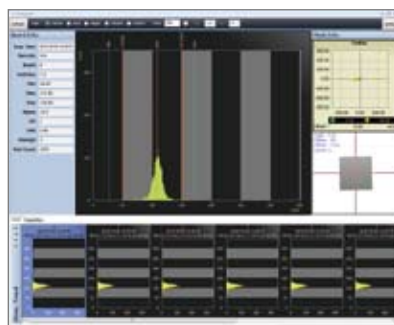
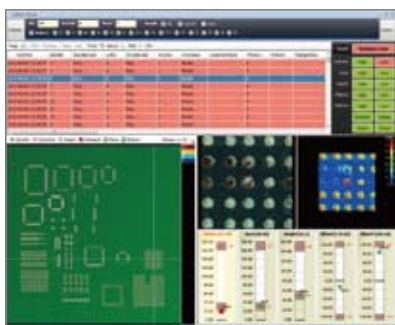
Foreign Object Inspection

Regardless of any PCB color, PEMTRON color X&Y is able to distinguish accurately between the foreign object and PCB



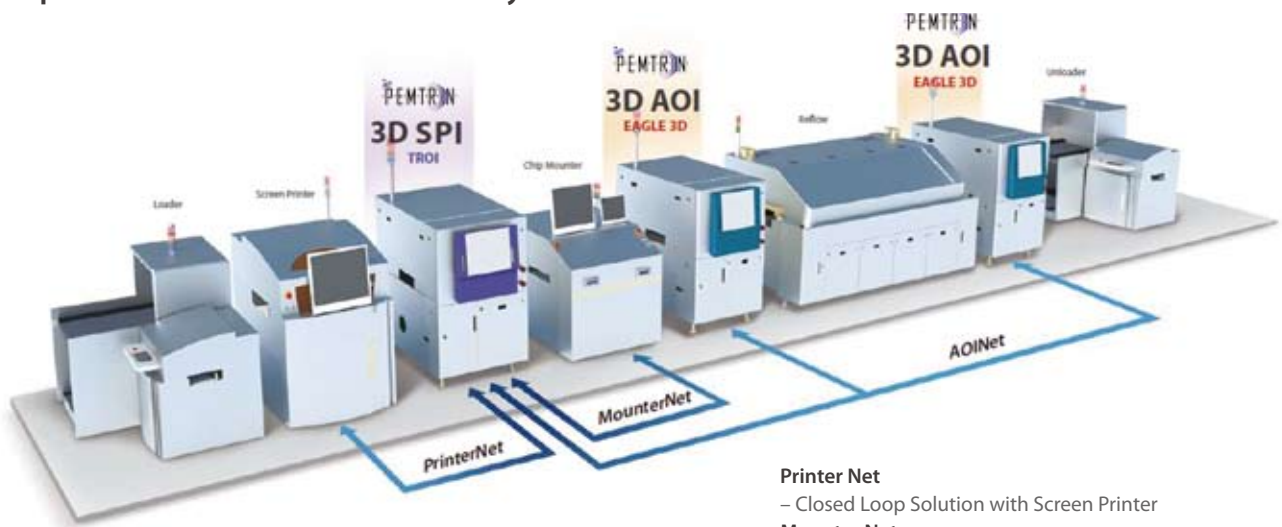
Enhanced SPC System

SPC system analyses the defective data and controls the process problems or the production rate at a look. SPC data can be saved in a various file format such as HTML, Excel, Image and etc as users like. Also with the enhanced SPC server function, data from multiple lanes can be controlled together or individually.



Real Time Process and Quality Control Solutions

Inspection Result Information Auto Sync.



Printer Net

– Closed Loop Solution with Screen Printer

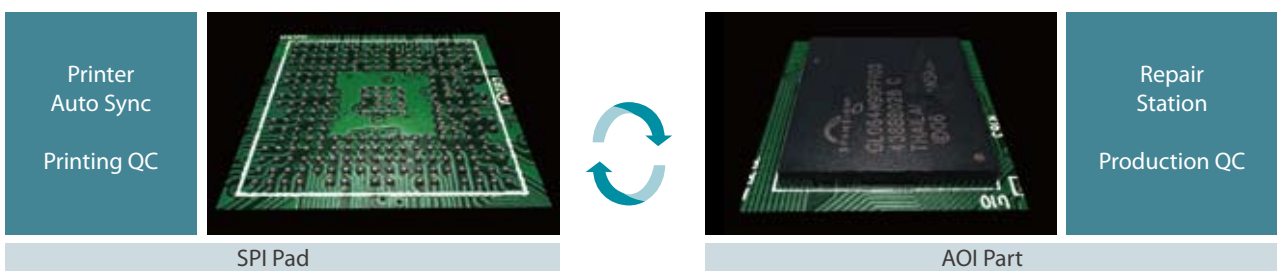
Mounter Net

– Closed Loop Solution with Mounter

* Bad Mark Mounter Sync and Adaptive Process Control

TROI SPI & EAGLE 3D AOI closed loop function

- Real time defect confirm



Inspection Result Information Auto Sync.



TROI™ Series (Solder Paste Inspection System)

SPECIFICATIONS

Model		TROI-7700H			TROI-7700HD			
2D/3D Vision Algorithm		2D : Vision Inspection Algorithm 3D : PMP (Phase Measuring Profilometry) Algorithm						
Measurements		Volume, Height, XY Position, Area						
Detection Types		Insufficient Paste, Excessive Paste, Shape Deformity No Paste, Bridge 2D&3D, Paste Displacement						
X/Y Pixel Resolution		4MP			9MP		12MP	
		10 μ m	15 μ m	18 μ m	10 μ m	15 μ m	18 μ m	15 μ m
Inspection Speed		15 cm ² /sec	35 cm ² /sec	49cm ² /sec	34 cm ² /sec	73 cm ² /sec	102 cm ² /sec	108 cm ² /sec
FOV (Field of View)		20 x 20mm	30 x 30mm	36 x 36mm	30 x 30mm	45 x 45mm	54 x 54mm	45x 60mm
Height Range		0.45mm						
Height Accuracy		2 μ m*						
Max. PCB Warp		\pm 5 mm						
Gantry Type		Linear Motor						
PCB Specification	Standard	Min. 50x50mm (2x2inch) Max. 330x330mm (13x13inch)	Single		Min. 50x50mm (2x2inch) Max. 330x500mm (13x20inch)			
			Dual		Max. 350x280mm (14x11inch)			
	Large	Min.50x50mm (2x2inch) Max. 510x510mm (20x20inch)	Single		Min. 50x50mm (2x2inch) Max. 510x600mm (20x24inch)			
			Dual		Max. 510x330mm (20x13inch)			
PCB Thickness		0.4 – 7.0 mm						
Bottom Clearance		27mm						
Electrical Requirements		200 – 240 VAC, 50/60 Hz						
Power Consumption	Standard Type	2.1kW(9.68A. Max @220V AC)			2.3kW(11A. Max @220V AC)			
	Large Type	2.3kW(10.9A. Max @220V AC)			2.6kW(11.65A. Max @220V AC)			
W x D X H / Weight	Standard Type	900 x 1200 x 1550mm(35x47x61inch) / About 700kg (1543 lbs)			870 x 1650 x 1550mm(34x65x61inch) / About 850kg (1873 lbs)			
	Large Type	1080 x 1370 x 1550mm(42x54x61inch) / About 800kg (1764 lbs)			1120 x 1700 x 1550mm(44x67x61inch) / About 900kg (1984 lbs)			

* Specifications subject to change without notice.



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