

3D PRO 3300C Specifications

MEASUREMENT	3300C	3300CL	3300CXL
Measurement Principle	Phase Shift Profilometry		
Measurement Items	Height, Area, Volume, Bridge, and XY Position		
Inspection Items	Missing, Excess, Insufficient, Bridge, Shape Deformity, and Paste Displacement		
Camera	4M Color Camera		
Field of View	Scan Width 30 x 30 mm		
Max. Inspection Range	F.O.V Size		
Scanning Speed & Resolution	0.35 sec/FOV at 10 µm		
Paste Height Range	400 µm		
Height Resolution	0.4 µm		
Height Accuracy	2 µm		
Height Repeatability	Calibration Target (at 3 Sigma) < 1% on Certification Target		
Volume Repeatability	Calibration Target (at 3 Sigma) < 1% on Certification Target		
GR&R on O1005 pads	(10% at 6 Sigma (±50% tolerance))		
Fine Pitch Capability	100 µm		
BOARD SPECIFICATION			
Max. PCB Size	300(W) x 250(L) mm	650(W) x 400(L) mm	800(W) x 610(L) mm
Max. Board Weight	1 kg	2 kg	2 kg
Min. PCB Size	50(L) x 50(W) mm		
Board Warp	±3 mm		
Board Thickness	0.4 - 5.0 mm		
Board Edge Clearance	2mm should be handled without affecting the process		
PCB Clamping	Required throughout the PCB length		
Underside Clearance	30 mm		
SYSTEM DIMENSIONS			
Dimensions (W x D x H)	870 x 1,050 x 1,500 mm	1,220 x 1,200 x 1,500 mm	1,370 x 1,400 x 1,500 mm
Weight	800 kg	850 kg	900 kg
Conveyor Height	900 ± 10 mm		
PCB Flow Direction	Left to Right (Standard)		
Conveyor Width Adjustment	Manual or Automatic as per Program (Step Motor)		
Power Supply	AC 220 V/10 A, Single Phase		
Air Pressure	0.5 MPa		
SOFTWARE SYSTEM			
Input Format	Gerber Format (274X, 274D)		
SPC Program	SPC Pro		
OS	Window 7 64-bit		
OPTION	Conveyor Direction : Right to Left / Barcode Reader (1D, 2D) / PCB JIG Laser / Calibration Tool		



AMS ADVANCED MECHATRONICS SOLUTIONS, INC
 AUTOMATION, SMT & LEAN MANUFACTURING

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3D PRO 3300C High Speed 3D Solder Paste Inspection System

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With technical rigor and exceptional quality, we provide the optimal SMT solution you seek.

Up to 50-60% of all defects in surface-mounting are due to problems related with the amount of solder used, whether it is excessive, insufficient, bridged, or open solder.

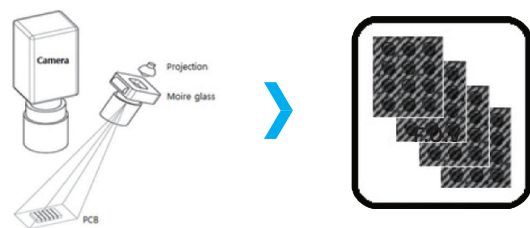
Our product detects and rectifies in real time the defects that can occur during the printing process while providing optimal solutions for your SMT quality.



1 Four-step Phase Shift Profilometry Method

It provides quick and precise inspection with a state-of-the-art optical system including ultra LEDs, gratings and a PZT (piezoelectric transducer).

Inspection Method

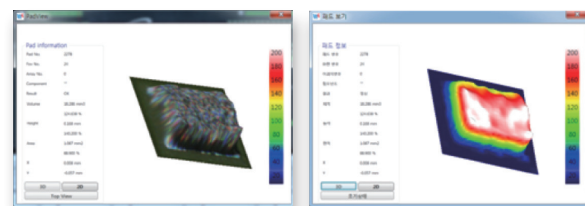


3 4M Full Color Camera

3D Pro3300C is a unique SPI machine with a full color camera adapted.

The inspection results can be easily reviewed through the real 3D viewer.

Improved false detection rate by PCB color. Also, silk line and foreign material, which it is very difficult to identify in mono cameras.



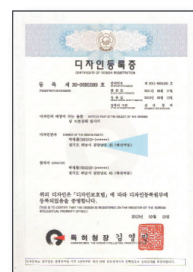
2 Dual Projection (2-way)

Shadow effect is completely removed through dual projection.

4 Monitor-Embedded Smart Design (Design patent No. 30-0685599)

Simple and compact design

Optimized for work space and operator movement.



5 Windows 7, 64-bit OS

GUI with a docking platform type.

Easy to setup inspection conditions.

Operator can freely arrange the window tabs as needed.

64-bit OS provides two times faster image data processing than its predecessors.

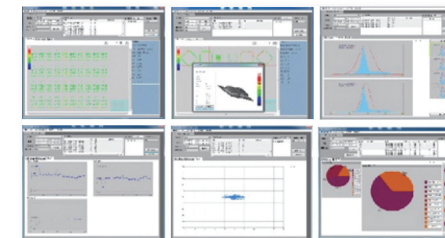


7 Simple and Easy SPC

SPC is easily customizable and adaptable for varying requirements by customers.

Quickly defines the complex causes of defects and provides data for process optimization.

SPC Data: Cp, Cpk, Cpm, Cr, Chart-X Bar/R, S, Shift X Y, Histogram, BarCode Viewer, and 3D Real Image Viewer for σ G analysis and σ G point.



SPC Statistics Tool

10 PCB Free Bypass

The Bypass function allows normal in-line operation when PC hangs or crashes.

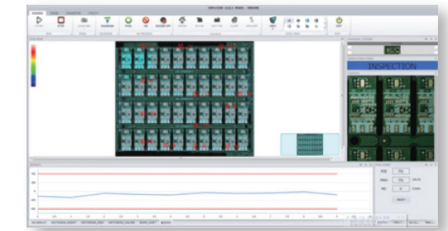


Bypass Switch

6 PCB JIG Warpage Measurement [Option]

Enables continuous management of JIG warpage.

Early prevention of defects related to JIG through real-time laser detection of JIG warpage as well as that in PCB.



Flexible PCB JIG Inspection

8 Upgraded Barcode Function

Specialized for the production of automobile E/E components

Data can be saved and sorted by Global Barcode and/or Array Barcode for easy management of production history.

9 Auto Closed Loop System

The screen printer gets automatically corrected data based on SPI's results to improve the printing quality.

Transfers PCB bad mark info to Pick & Place to improve the production yield rate.

11 Remote Control Features

Quick customer service through its remote control program.

Simultaneous control over several machines through network.