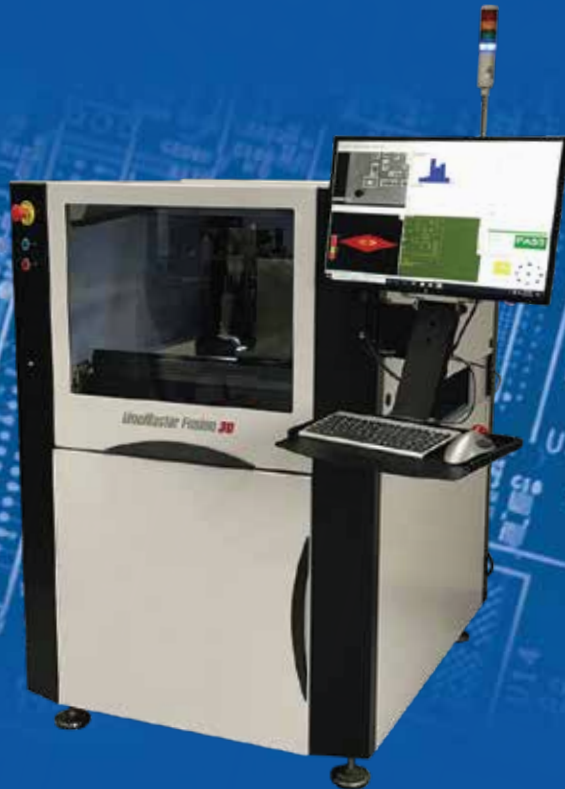




## PRODUCT AND SPECIFICATION

# *LineMaster Fusion 3D*

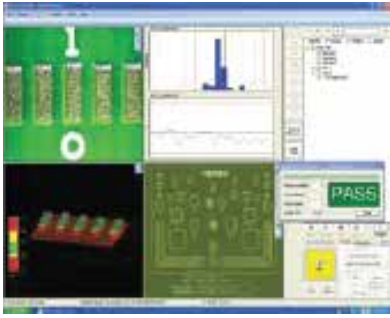
## INLINE SOLDER PASTE INSPECTION



***LineMaster Fusion 3D*** provides all of features required for 100% high speed inline 3D solder paste inspection. The ***Fusion 3D*** takes inline SPI to a new level with its unmatched price to performance value proposition. Industry leading high resolution sensor technology, Simple to learn and navigate user interface, 5 minute Gerber/CAD import programming with integrated SPC analytics makes the ***Fusion 3D*** an exceptional value for the electronics manufacturer concerned with improving production yields hindered by poor overall quality of their print process.

***System Features:*** 100% High Speed Inspection • Real Time Data Review of Height, Area, Volume, X-Y Displacement of Paste Registration, Bridge Detection and more • Qualitative Analysis of Solder Paste Deposition Utilizing Realistic 3D Rendering for Accurate Print Quality Detection

## Real Time Process Control



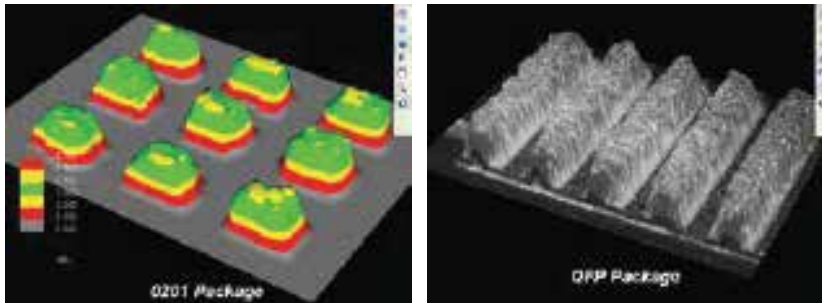
ASC International's ASCan Ultra measurement software creates a fully automated inspection routine in less than 10 minutes. In Run mode, the user loads the program, confirms fiducial alignment and the ASCan Ultra software automatically measures the Gerber imported programmed locations with a final "PASS" or "FAIL" message. A defect error review mode allows users to verify "Failed" locations and attach corrective action items for traceability.

## Advanced Statistical Analysis

Fusion 3D's ASCan Ultra measurement software includes on-board SPC analytics, a powerful tool to help operators control important parameters of the stencil printing process. Data collected by the system for each desired characteristic is calculated and charted in real-time. User-de-fined LSL, Target and USL • X-bar / R and histogram charting • Min / Max/ Median Values • Cp/Cpk /Cr and Lower Z values are all part of the advanced statistical analysis software.



## True 3D Color - Photo Realistic Profiling



The LineMaster Fusion 3D collects photo realistic 3D color profiles for fast and accurate paste analysis. Operators may use these profiles to help them determine the most accurate corrective actions needed to effectively resolve to the root cause of print process related defects.

### System includes:

- 610mm x 510mm (24" x 20") High Speed Positioning System
- PSI 1500 Sensor
- Intel I7 CPU - Windows 10 Pro OS
- Integrated SPC with Customer User Defined Reports
- Gerber / CAD Programming
- Simple to Use Quad Mode Interface

### Options:

- NIST Calibration Standard
- Extended PCB up to 1220mm x 610mm (48" x 24")

## MECHANICAL SPECIFICATIONS

### LineMaster Fusion 3D

#### General System Specifications

Maximum Object Thickness	5.1 cm (2.0 inches)
Standard PCB Size	610 mm x 510 mm (24"x 20")
Optional PCB Size System	1220mm x 610mm (48"x 24")
PC Controller Electrical Requirements	Windows 10 Pro OS
Ambient Operating Temperature	100-240 VAC, 50-60 Hz, 2 Amps
Ambient Operating Humidity System	15° - 28° C (60° - 82° F)
Weight (un-crated)	<90%W non-condensing
System Weight (crated)	432 Kg (950 lbs)
Measurement Characteristics	545 Kg (1200 lbs)
	Height, Area, Volume, X-Y
	Registration Bridging, Realistic 3D
	Shape Detection

SPC Charting/Data Reports: Fully Integrated Real-Time SPC  
Custom User Defined Reports

#### Sensor Specifications

Sensor Technology	Phase Shift Interferometry (PSI)
Measurement Range	441 um (18.0 mils)
Integral Video Camera	High Resolution CCD Camera
Field of View (FOV)	24mm x 26mm
Illumination	LED-based White Light

#### Sensor Specifications

Inspection Speed	.33 Sec./FOV
Height Accuracy	1µm (0.00004")
Gauge R&R	<<10% (+/- 40% Tolerance)
Z Resolution	1.78µm (.00007")
Lateral Resolution (X-Y)	8µm (.003")
Minimum Paste Deposit	51µm (.002")



#### Dimensions

H: 200cm (78.7") W: 98cm (38.6") L: 125cm (49.2")



### For More Information:

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