



# LineMaster Fusion 3D

*Inline Solder Paste Inspection*



## Ultimate Precision with State-of-the Art Usability



Unsurpassed  
Price-to-Performance



Best-in-Class Accuracy  
and Repeatability



5 Minute GerberPro  
Programming



OnBoard Real-Time  
SPC Analytics



Closed Loop Printer  
Feedback



Jetting Valves for  
Solder Paste & Adhesives



# Features & Specifications

## Product Overview

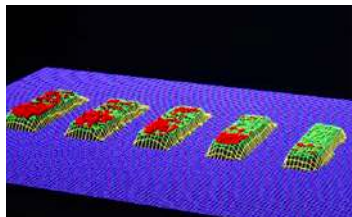
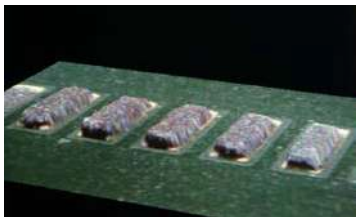
The LineMaster Fusion 3D® delivers high-speed 3D solder paste inspection at an unmatched price-to-performance ratio. Its simple-to-navigate user interface, rapid five-minute GerberPro® import programming, industry-leading sensor technology for the most accurate and precise results, and fully integrated SPC analytics make the LineMaster Fusion 3D the best choice for manufacturers looking to improve production yields and profits through an affordable post-print process control solution.

## Advanced Statistical Analysis

Fusion 3D's ASCan Ultra® software includes on-board SPC analytics, providing a powerful tool to help technicians control key stencil printing parameters. Data is collected, calculated, and charted in real-time for critical process analysis.

## Photo-Realistic Profiling

The LineMaster Fusion 3D® captures photo-realistic 3D color profiles for fast and accurate qualitative paste validation. Technicians may use these profiles to determine the root cause of the printing process-related defects and apply the appropriate corrective actions.



## Universal Jetting Valves

Optional jetting valves for Solder Paste, SMT glue, Adhesives, and more. From jetting solder paste for proto-type assembly to dispensing glue dots, the integration of the Vermes® valves provides an unbeatable value add proposition.

## Why Choose ASC

Established in 1992, ASC is the longest-standing independent SPI equipment manufacturer, providing cost-effective AOI/SPI solutions with unmatched customer service and support.

- Over 2700 successful machine installations worldwide
- Tailored solutions for maximum return on investment
- Commitment to 100% customer satisfaction
- Industry leading 3-year warranty

## LineMaster Fusion 3D

### System Overview

Standard PCB Size	510 mm x 510 mm (20.0 x 20.0 in)
Minimum PCB Size	25 mm x 25 mm (1.0 x 1.0 in)
Maximum PCB Size	1220 mm x 610 mm (48.0 x 24.0 in)
PC Controller	Windows 10/11 Pro OS
Electrical Requirements	100-240 VAC, 50-60 Hz, 2 Amps
Ambient Operating Temperature	15° - 28° C (60° - 82° F)
Ambient Operating Humidity	<90%W non-condensing
System Weight (un-crated)	432 Kg (950 lbs)
System Weight (crated)	545 Kg (1200 lbs)
Measurement Characteristics	Height, Width, Area, Volume, Registration, Bridge Detection, Realistic 3D Shape Detection
SPC Charting/Data Reports:	Fully Integrated Real-Time SPC Custom User Defined Reports

### Sensor Capabilities

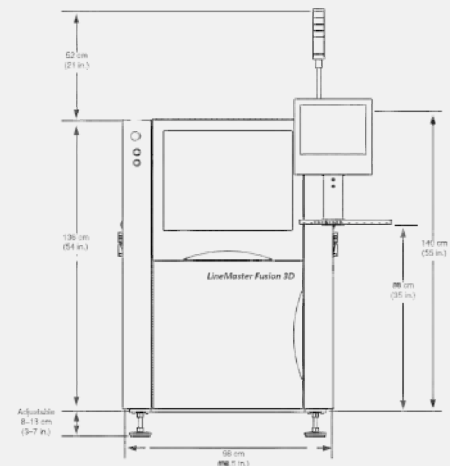
Sensor Technology	Phase Shift Interferometry (PSI)
Measurement Range	25-441 µm (1-18.0 mils)
Integral Video Camera	High Resolution CCD Camera
Field of View (FOV)	24 mm x 26 mm (0.95 x 1.05 in)
Illumination	LED-based White Light

### Inspection Performance

Inspection Speed	0.33 Sec/FOV
Height Accuracy	1 µm (0.04 mils)
Gauge R&R	<<10%, 6 σ
Height Resolution	0.125 µm (0.005 mils)
Lateral Resolution (X-Y)	8 µm (0.3 mils)
Minimum Paste Deposit	51 µm (2.0 mils)

### Options

Offline Programming, Calibration Target, Solder Paste and Glue Jetting Head



**System Dimensions:** H: 200cm (78.7") W: 98cm (38.5") L: 125cm (49.2")

