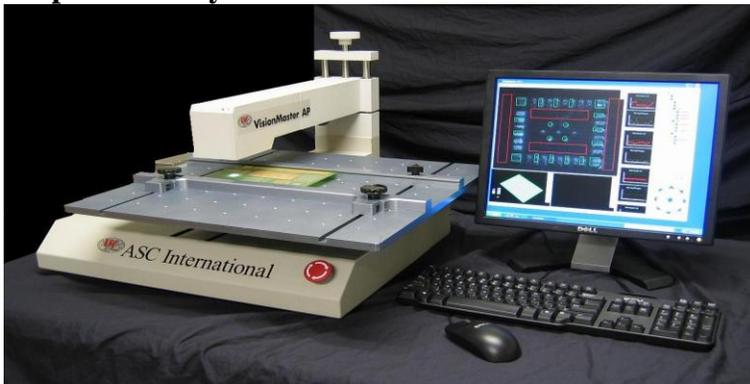




# VisionMaster AP450

**VisionMaster AP450** incorporates high-resolution PCB positioning with sophisticated, high speed 3-dimensional measurement technology found in ASC International's popular VisionMaster450 to provide electronics manufacturers' with the most automatic and accurate 3-D solder paste measurement tool in its class. The **AP450** eliminates operator handling problems associated with other off-line measurement and inspection systems, improving repeatability and reproducibility. This makes the **AP450** an exceptional value for the electronics manufacturer concerned with improving production yields.



**VisionMaster AP450**

## System Features

- Automatic calculation of 7 different characteristics, including Height, Volume, Area and Standard Deviation
- Off-line programming (CAD or Gerber File)
- The best Gage R&R in it's class (based on the ANOVA GR&R Testing)
- Color 3-D profiles with definable color zones
- Flexible ASCII data output
- One-year, end-user warranty including technical support.

## System Includes

- 30cm x 30cm (12"x12") high-resolution positioning system
- 2.5+ GHz CPU, Windows XP/Vista User Interface and SVGA monitor
- LED Light Source
- Hardware/software reference manuals

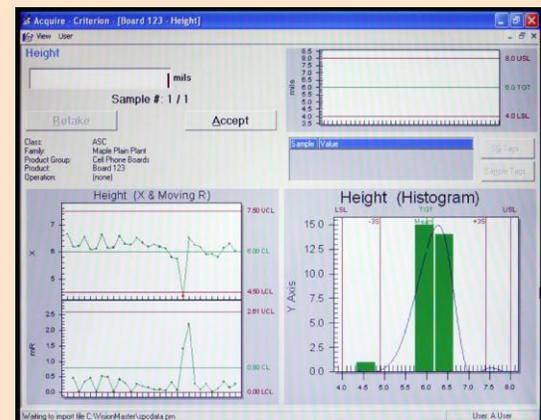
## Options

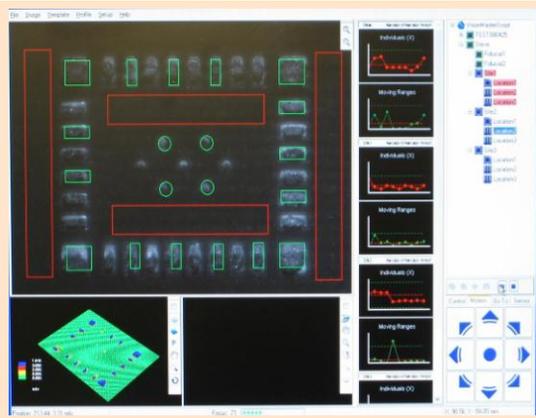
- Siemens® SPC Software
- NIST Traceable Standard
- Extended table and stage sizes up to 580mm x 580mm (23"x23") travel
- Extended Warranty
- Covered Cabinet

## SPC Software (Optional)

The optional Siemens® Criterion SPC software is a powerful tool that helps operators control the critical stencil printing process. Data collected by the **AP450** is instantly charted by the Criterion Software. Calculations crucial to understanding printing performance are reported, including:

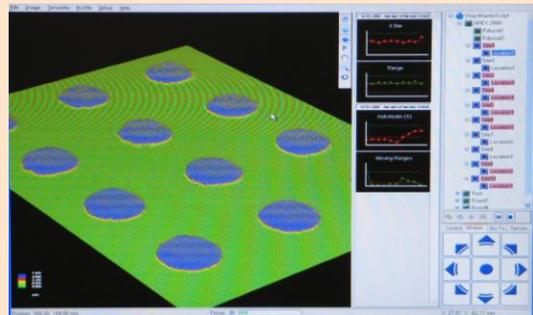
- X and Moving Range
- X-Bar and Sigma
- X-Bar and Range
- Histograms
- P Chart, np chart, c chart and u chart
- Pareto, weighted pareto for defects and corrective actions
- Variance and standard deviation
- Skewness, kurtosis and chi-squared for goodness of fit
- Min., max. and median values
- Cr, Cp, Cpk and lower Z values





### Automated Measurements

To obtain measurements on the AP450, a board is programmed once for the desired locations. After that, the user only needs to load the program, confirm the fiducial alignment, and click run. Measurements are then automatically taken at all pre-programmed locations.



### 3D Color Profile Analysis

The AP450 allows operators to obtain 3D color profiles for fast and accurate paste analysis. Operators may use these profiles to help them determine what corrections are needed in their solder paste printing process, thereby reducing down time.

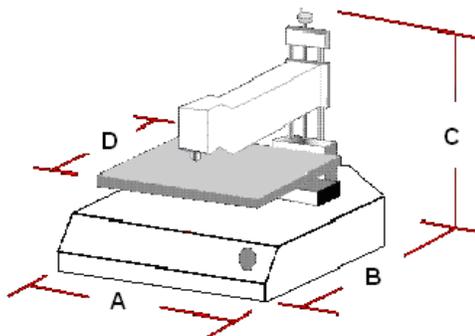
## System Specifications

- **Maximum Object Thickness** 5.1 cm (2.0")
- **Standard work Surface (L\*W)** 35 cm x 35 cm (14" x 14")
- **Throat depth** (sensor to support) 41 cm (16")
- **System Computer** 2.5+GHz – 1MB RAM
- **Electrical Requirements** 100-240 VAC, 50-60 Hz, 2 Amps
- **Ambient Operating Temperature** 15° - 28° C (60° - 82° F)
- **Ambient Operating Humidity** <90% non-condensing
- **System Weight\*** (crated) 59 Kg (130 lbs)
- **System Weight\*** (un-crated) 43 Kg (95 lbs)

\* Weight not including system pc and monitor

## Sensor Specifications

- **Measurement Range** 429  $\mu$ m (16.9 mils)
- **Accuracy** 1.0  $\mu$ m (0.04mil) on calibration target
- **Repeatability** <10% (+/-20% Tolerance)  
50um (2 mil) minimum tolerance
- **Integral Video Camera** High resolution CMOS Camera (1 megapixel)
- **Field of View (FOV)** 6.2 mm x 8.2 mm  
(242 mils x 323 mils) 0.33 seconds per FOV
- **Illumination** LED-based white light



A: 56 cm (22")

B: 61 cm (24")

C: 46 cm (18")

D: 36 cm (14")



*For More Information:*

### ASC International

830 Tower Drive

Medina, MN 55340 U.S.A.

- Tel: USA 763-479-6210
- Fax: USA 763-479-6206
- E-mail: [info@ascinternational.com](mailto:info@ascinternational.com)
- Web: [www.ascinternational.com](http://www.ascinternational.com)
- Toll Free: 1-888-478-2912 (USA Only)

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