

VisionMaster AP450

VisionMaster **AP450** incorporates highresolution PCB positioning with sophisticated, **3-dimensional** high speed measurement technology found in ASC Internationals' popular VisionMaster450 provide electronics manufacturers' with the most automatic and accurate 3-D solder paste The AP450 measurement tool in its class. 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") highresolution positioning system
- 2.5+ GHz CPU, Windows XP/Vista User Interface and SVGA monitor
- LED Light Source
- Hardware/software reference manuals

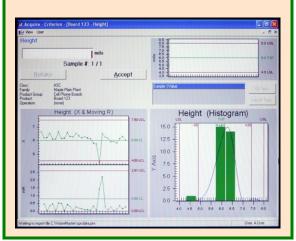
Options

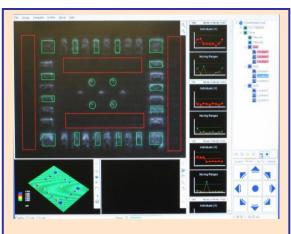
- Siemens® SPC Software
- NIST Traceable Standard
- Extended table and stage sizes up to 580mm x 580mm (23"x23") travel
- Extended Warranty
- Covered Cabinet

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:

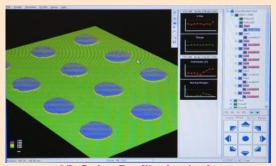
- X and Moving Range
- X-Bar and Sigma
- X-Bar and Range
- Histograms
- P Chart, np chart, c chart and u chart
- Pareto, weighted pareto for defects and corrective actions
- Variance and standard deviation
- Skewness, kurtosis and chi-squared for goodness of fit
- Min., max. and median values
- Cr, Cp, 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 µm (16.9 mils)

Accuracy 1.0 µm (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



For More Information:

ASC International 1799 County Road 90, Suite 6 Maple Plain, MN 55359 U.S.A.

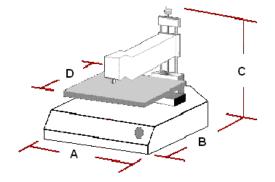
• Tel: USA 763-479-6210

• Fax: USA 763-479-6206

• E-mail: info@ascinternational.com

• Web: <u>www.ascinternational.com</u>

• Toll Free: 1-888-478-2912 (USA Only)



A: 56 cm (22")

B: 61 cm (24")

C: 46 cm (18")

D: 36 cm (14")

