VisionMaster HSi

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

VisionMaster HSi

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 **HSi** 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

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

- Pass/ Fail and Defect Recognition

System Includes

- 350mm x 450mm (14"x16") high speed /high-resolution positioning system

- 2.5+ GHz CPU, Windows XP/7 User Interface and SVGA monitor

- On Board SPC Charts and Data Reporting

Options

- Siemens® SPC Analysis Software

- NIST Traceable Standard

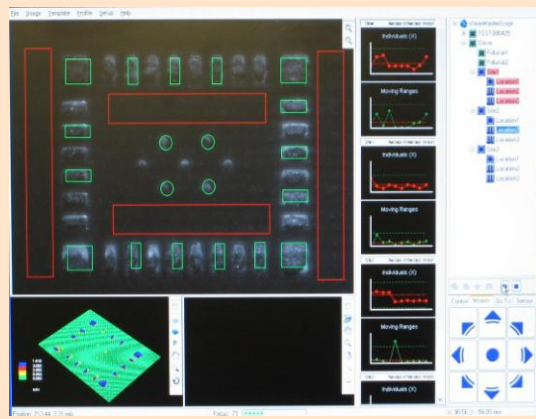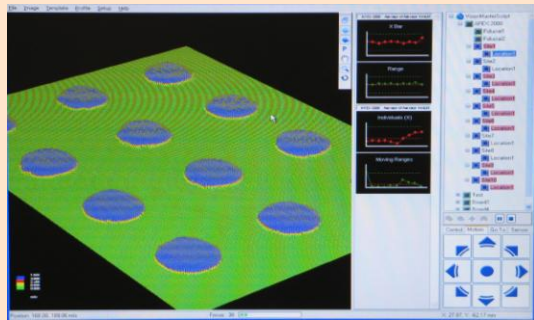- Extended board sizes up to 560mm x 660mm (21.5" x 26")

Automated Measurements

To obtain measurements on the HSi, 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 HSi 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")

- **Max Board Size**   350mm x 450mm (14" x 16")
  Large Configuration   560mm x660mm(21.5" x 26")

- **System Computer**   Windows XP/ 7 OS

- **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)   275 Kg (600 lbs)

- **System Weight*** (un-crated)   305 Kg (673 lbs)

Sensor Specifications

- **Measurement Range**   429 µm (16.9 mils)

- **Accuracy**   1.0 µm (0.04mil) on calibration target

- **Repeatability**   <10% on paste above 50um (2 mil) height minimum tolerance (+/- 50% Tolerance)

- **Integral Video Camera**   High resolution Megapixel Camera

- **Field of View (FOV)**   24 mm x 26 mm 0.33 seconds per FOV

- **Illumination**   LED-based white light

H =108cm (42.5")
W=76cm (29.9")
 L =138cm(54.3")   CE/UL Approved