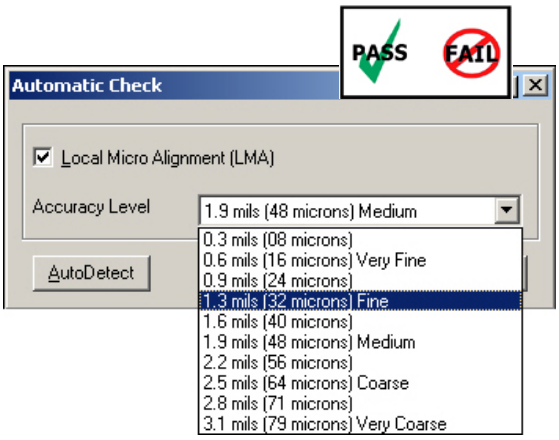
ScanSTENCIL™

"Automatic Stencil & Screen Inspection"



WHAT IS ScanSTENCIL?

ScanSTENCIL is a fully integrated, stand-alone process control, measurement and inspection workstation for use after solder paste stencil and hybrid emulsion screen fabrication or other machined, etched or laser cut operations.

ScanSTENCIL uses a PC Windows based software package integrated with a high-resolution, calibrated, A3 size flatbed scanner. This combination allows inspection of both stencils and screens for accuracy and the ability to inspect 100% for absence/presence and correct size of apertures.

CREATE STENCIL FABRICATION DATA

ScanSTENCIL adds flexibility to the stencil and screen inspection process. Utilizing its calibrated scanner, ScanSTENCIL inputs stencils, screens, silver or diazo film, mylar images, artwork, technical drawings, actual PCBs or original hand-taped designs. With these inputs, ScanSTENCIL is able to verify cut stencils & screens for accuracy, size and blockage, stretch, as well as producing necessary Gerber data for stencil & screen production.

AUTOMATIC FEATURES

Tired of using slow manual measurement and inspection methods? ScanSTENCIL offers various functions that quickly and automatically create necessary Gerber and verification data:

- Absence/Presence of Apertures
- Confirm Proper Aperture Shape and Size
- Compare Stencil & Screen vs. Gerber
- Compare Stencil & Screen vs. Stencil or Screen
- Compare Stencil & Screen vs. PCB
- Confirm Proper Aperture Position
- Create Stencil Files from Boards or Films
- Automatic Inspection Accuracy Level Detection

VERIFICATION

Worried about the quality of the finished stencils, screens or Gerber files? Use ScanSTENCIL's "check functions" to verify the accuracy of the data. The new LMA option allows for checking apertures as small as 0.002" diameter (0.050 mm).

ADDITIONAL APPLICATIONS

ScanSTENCIL creates Gerber files as well as other data used in stencil production, including: Silkscreens, Soldermasks, Padmasters, Stencil Files, Panelized Images, DXF and Gerber-274x files, etc.

ScanSTENCIL permits fast and accurate comparison of stencils/screens to bare PCBs bringing automation and increased productivity to QC departments.

WHY USE ScanSTENCIL?

- **Quality:** 100% automatic inspection of screen & stencils for absence/presence and size of apertures.
- **Accuracy**: Detect aperture size error down to 0.0005" (0.0125mm) at 3200 dpi.
- **Usability:** Supply production with required Gerber data.
- **Flexibility:** Use one software product to create data required by the stencil production process.

SYSTEM FEATURES

SCANNING

- Scan Stencils, Screens, Film or PCB's
- Verifiable Image Alignment
- Automatic Raster to Gerber Alignment

MEASUREMENT AND INSPECTION FUNCTIONS

- Compare new Stencils and Screens against Gerber image or actual PCBs for errors
- Verify aperture sizes to 0.0005" and aperture absence/presence as small as 0.002" (0.050mm)
- Highlight D-Codes
- Check Gerber Image against Scanned Image
- Compare Gerber Image against Gerber Image
- Design Rule Check

AUTOMATIC FUNCTIONS

- Pad Recognition: Circle, square, oval, rectangle
- Pads on Grid
- Local Micro Alignment (LMA)

EDITING

- Multi-Color Display
- Multi-Level Zoom Function
- Edit Accuracy: 0.0001" (0.00254mm)
- Customized Aperture Tables
- Snap-to: Pad Center
- Snap-to-Grid: Pads
- Multi-Layer Display
- Macros: Create & Store
- Automatic Text Function
- Metric or Inch

OUTPUT

- Pass/Fail Inspection Report
- Rework File Generation
- Gerber Files (274D & 274X)
- Comprehensive Aperture Tables
- Stencil Files
- Solder Mask
- Pad Master
- Silkscreen
- HP-GL
- DXF
- PCX and TIFF
- Panelized Images

TECHNICAL SPECIFICATIONS

SCANNER

- High-Resolution Color Flatbed Scanner, Size A3: (400/1000/2000/3200*/4000*/4800* dpi)
- Calibrated Accuracy: $\pm$ 0.0015" ($\pm$ 0.0381mm)
- A3-Scanning Bed Area: 11.7" x 16.5" (297mm x 419mm)
- Maximum Work Area: 32.0" x 32.0" (813mm x 813mm)

*Reduced scanning area for 3200 & 4000 dpi

COMPUTER*

- Pentium (3GHz or higher) Personal Computer
- 80 GB HD, 2 GB RAM
- CD-ROM (CD-RW for archive purposes)
- Monitor
- Printer
- Win XP Service Pack 2
- 2 available USB ports

*Recommended customer supplied minimum PC requirements.

ADDITIONAL SYSTEM COMPONENTS

- Precision Glass Calibration Grid
- Software Protection Key
- Custom Transmissive Lighting Package
- Custom Desk
- Scanning Accessory Package

(**All specifications and designs subject to change without notice.)**

ScanCAD INTERNATIONAL

12779 W. Belleview Ave.
Littleton, CO. 80127 USA
T: 303.697.8888 F: 303.697.8580
E: info@scancad.com www.scancad.com