

# StencilScan™

## "Automatic Stencil and Screen Inspection"



### WHAT IS StencilScan?

StencilScan is a fully integrated, stand-alone measurement and inspection workstation for use after stencil and screen fabrication or other machined, etched or laser cut operations.

StencilScan 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.

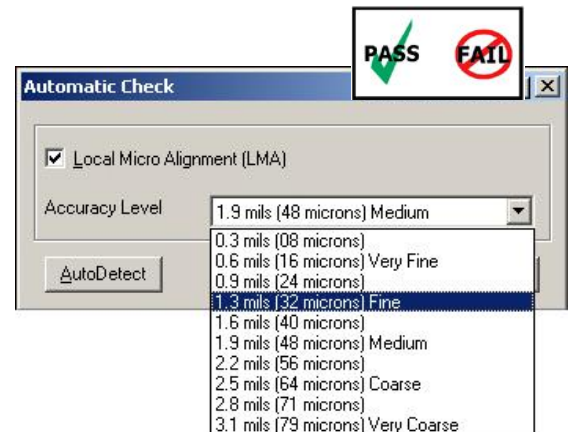
### CREATE STENCIL FABRICATION DATA

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

### AUTOMATIC FEATURES

Tired of using slow manual measurement and inspection methods? StencilScan 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/Screen
- Compare Stencil/Screen vs. PCB
- Confirm Proper Aperture Position
- Create Stencil Files from Boards/Films
- Automatic Inspection Accuracy Level Detection



### VERIFICATION

Worried about the quality of the new or used and just 'cleaned' stencil or screens? Use StencilScan's to verify the accuracy of the parts and (Gerber) data. The "Local Micro Alignment" (LMA) option allows for checking apertures as small as 0.002" diameter (0.050 mm).

### ADDITIONAL APPLICATIONS

StencilScan 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.

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

### WHY USE StencilScan?

- **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 Stencils and Screens against Gerber image or actual PCBs for errors
- Verify aperture absence/presence as small as 0.0002" 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
- Special SHAPE functions
- 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
- System log files in support of SPC
- 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
- Integrates with "ProWorks" Paperless Work Instruction system

## TECHNICAL SPECIFICATIONS

### SCANNER

- High-Resolution Color Flatbed Scanner, Size A3: (400/1000/2000/3200\*/4000\*/4800\* dpi)
- Calibrated Accuracy:  $\pm 0.0015"$  ( $\pm 0.0381\text{mm}$ )
- 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\*

- Multi Core Processor - 3 GHz
- 1 TB 7200 RPM HD, 8 - 16 GB RAM
- CD/DVD ROM
- Flat Panel Monitor
- Ethernet Connection

Windows 7 or 8, 64-Bit w/ 2 avail. USB2 or USB3 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

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