

# "Automatic Stencil & Screen Inspection"



### WHAT IS MaskINSPECTOR?

MaskINSPECTOR 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.

MaskINSPECTOR 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.

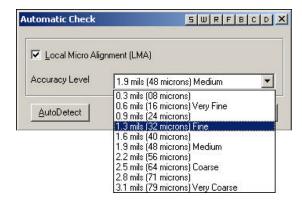
### **CREATE STENCIL FABRICATION DATA**

MaskINSPECTOR adds flexibility to the stencil and screen inspection process. Utilizing its calibrated scanner, MaskINSPECTOR inputs stencils, screens, silver or diazo film, mylar images, technical drawings, actual PCBs or original hand-taped designs. With these inputs, MaskINSPECTOR 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? MaskINSPECTOR 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 finished stencils, screens or Gerber files? Use MaskINSPECTOR'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**

MaskINSPECTOR 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.

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

### WHY USE MaskINSPECTOR?

Quality: 100% automatic inspection of

screen/stencils for absence/presence and

size of apertures.

• Accuracy: Detect aperture size error down to 0.0003"

(0.008mm) 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 0.0003" 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\* dpi)
- Calibrated Accuracy: <sup>±</sup> 0.0015" (<sup>±</sup> 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 III (1GHz) Personal Computer
- 60 GB HD, 512 MB RAM
- CD-ROM (CD-RW for archive purposes)
- Monitor (17" or larger)
- Printer

 Win 98SE//Me/2000/XP – Requires:

2 available USB ports

\*Recommended customer supplied minimum PC requirements.

### ADDITIONAL SYSTEM COMPONENTS

- Precision Glass Calibration Grid
- Scanner Interface Cards/Cables
- Software Protection Key
- Custom Transmissive Lighting Package
- Custom Desk
- Scanning Accessory Package

The following are trademarks of the indicated companies: Gerber, The Gerber Scientific Instrument Company; HP-GL, HP, Hewlett-Packard; Windows 98SE/Me/2000/XP, Microsoft®.

MaskINSPECTOR™ is a trademark of Unicraft.

Specifications subject to change without notice.



Partners: Avytechno Indonesia, Techlogic Thailand, Westek Malaysia, Tritronics Philippines, Utama Australia



### **AVI PRECISION ENGINEERING PTE LTD**

1, KALLANG SECTOR #04-03, SINGAPORE 349276. TEL: 65 67483866 FAX: 65 67484810

Email: avipre@avipre.com.sg Website: http://www.avipre.com
Company Reg No: 199300584 M Skype: avipre