

Process solutions
you can count on.



FX-940UV ACI / AOI

Automated conformal coat inspection

Conformal coatings used by electronic manufacturers contain UV indicators for the purpose of inspection. Since coatings are transparent, units must be viewed under black light in order to verify coverage and non-coverage. The Nordson ASYMTEK FX-940UV makes inspection of conformal coatings simple and convenient by automating the inspection process for quality and consistency of coatings.

Advanced High Power UV Lighting and newly available image processing technology integrate several techniques, including coverage inspection, color inspection, normalized correlation and rule-based algorithms, to provide complete inspection coverage with an unmatched low false failure rates.

With minimal programming, the inspection set-up is fast and intuitive typically requiring less than 30 minutes. A known good board is used to learn the coverage and non-coverage areas. The automated inspection typically takes only a few seconds with inspection results immediately displayed. These results can be stored and reviewed off-line. The FX-940UV also reads all common barcodes and captures board images for product traceability.

Features:

- Top down and optional side viewing cameras
- Proprietary UV lighting
- 100 mm clearance for tall components
- Traceability
- Optional thickness measurement

Automated Inspection for:

- Conformal coat coverage
- Micro Coatings / dispensed materials
- Flux coverage
- Selected areas of non-coverage
- Delamination / cracks and bubbles
- Part presence / Correct part / polarity
- SPC, barcode reading and archiving of board image with inspection results
- Includes SMT and THT component inspection

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Specifications

Inspection Capabilities

| | |
|---------------------|--|
| Throughput: | Up to 30 sq. in./ sec. (194 sq. cm) |
| Maximum Board Size: | 18.5" x 19" (470 x 482mm) |
| Clearance: | 4" (100mm) top and bottom |
| Optional Upgrade: | 4 side angle cameras, Board flipper |
| Defects Detected: | Coatings and dispensed material coverage, non-coverage, cracks and delamination, SMT and THT part defects. |

Software

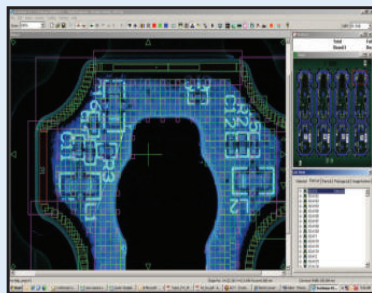
| | |
|--------------------------|--|
| Algorithms: | Conformal Coating Inspection Color detection, OCV, OCR, Barcode recognition, both image and rules based algorithms. |
| Data Requirements: | None |
| CAD Translation Package: | Not required |
| Programming Skill Level: | Technician or operator |
| Operating System: | Windows 7 |
| Off-line Software: | Optional - Rework, Review and Program Creation |
| SPC Software: | Real-time local and remote monitoring of first pass yield, defect trends, and machine utilization. |
| Data Outputs: | Text, SQL, ODBC, MS Access, XML |

Hardware

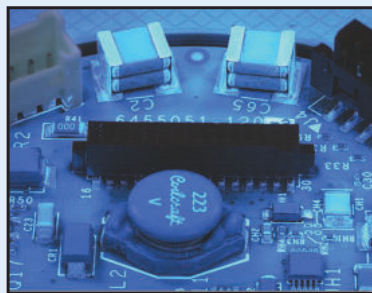
| | |
|---------|--|
| Imager: | Proprietary UV red and blue LEDs Up to 18 megapixel color imaging sensor 23, 12 or 8 micron pixel size |
|---------|--|

Facilities

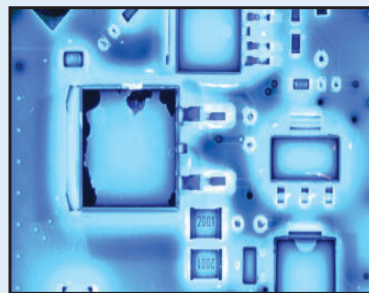
| | |
|-----------------------|--|
| Power: | 110-220 VAC, 50/60 Hz, 15 amps |
| Footprint: | 39" x 52" x 60" (1000mm x 1329mm x 1531mm) |
| Weight: | 950 lbs (430 kg) |
| Machine Installation: | < .5 hour |



Automated inspection for conformal coat.



Side angle viewing cameras.



Defect image of missing conformal coat.

For more information, visit our website to locate your local representative or contact your regional office:

nordsonasymtek.com
info@nordsonasymtek.com

North America

Headquarters
Carlsbad, CA

China

Shanghai
Beijing
Guangzhou
Taipei

EMEA

Deurne, Netherlands

S.E. Asia/Australia

Singapore

Korea

Seoul

Japan

Tokyo

India

Chennai

Nordson ASYMTEK

+1.760.431.1919
2747 Loker Avenue West
Carlsbad, CA, USA 92010

