

iSpector

SpectorBOX

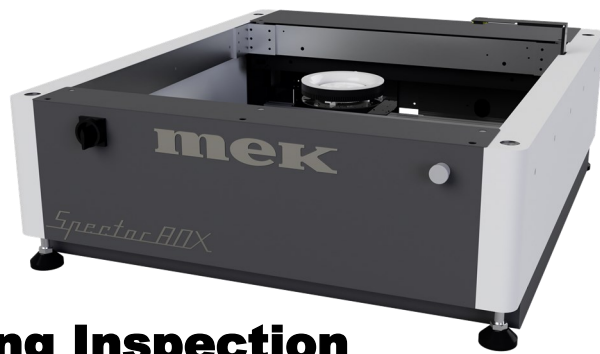
JUz 650L



JUz 520



SpectorBOX JUz 550



CCI Conformal Coating Inspection

√ Automatic optical inspection of conformal coating on PCB assemblies

√ Inspects:

- Components: missing, type, polarity, offset, text, colours etc.
- UV-fluorescent coating: absence, presence, and bubbles

√ Flexible classification and MES integration scenarios via SQL or XML (option)

√ Online self-training and installation via iMentor

√ 365 nm UV LED and white light

√ Low noise large CCD 24-bit colour camera with a high speed USB3 vision interface

√ Programmable from library, golden components or coated board

√ Multi mode lighting

Inspect coating, coverage, splashes, and bubbles

Full inspection coverage at an entry level price

Powerful algorithms to achieve an optimal balance between defect detection and false reject levels in the shortest possible time

Integrate AOI efficiently in your existing operations and factory IT systems

Comprehensive and easy-to-use online training suite

High intensity UV source tuned to the ideal UV fluorescence of 365 nm

Capture card-free design 1.5x faster than CameraLink

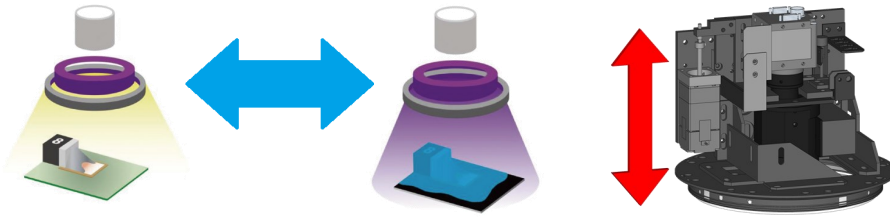
Be flexible; from manual till full library programming depending on your product

White only, UV only, white plus UV

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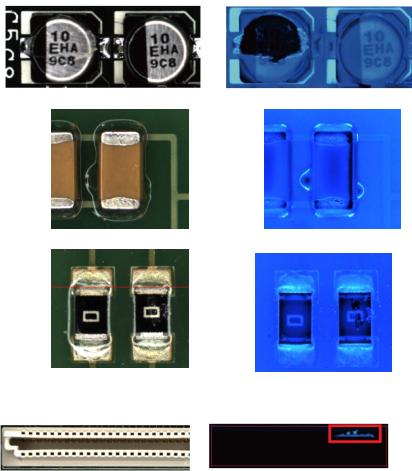
The latest generation Mek iSpector desktop inline and SpectorBOX CCI is designed to provide high detail and flexible conformal coating inspection. iSpector is able to inspect component bodies and Coatings by use of the Main White light and High intensity UV LED light sources. Our Coverage, Splash and Histogram analysis provides accurate and reliable inspection results, With low false calls.



Included Z axis allows the inspection of taller components and hybrid PCBs

Wide coverage of defects on Coating and component inspection

Conformal Coating



Coverage

Bubbles

Damage

Splash

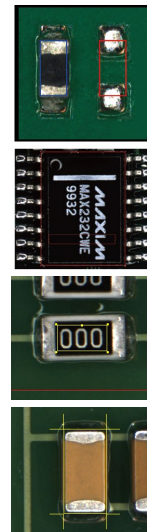
Component

Presence

Polarity

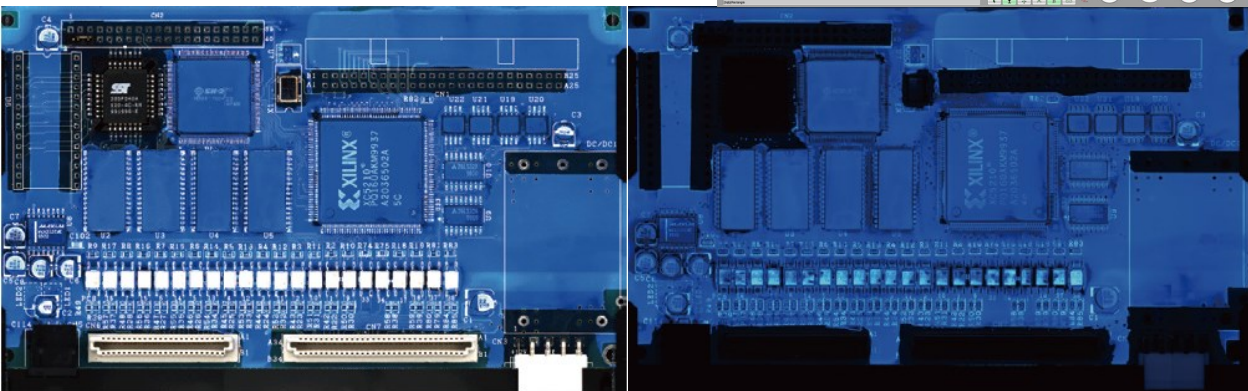
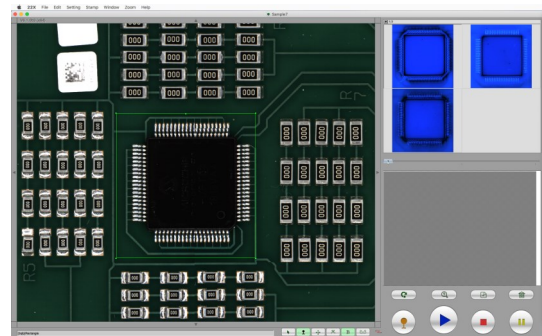
Text

Position



Clean and Simple Interface

With powerful features. Full programming capabilities, conformal inspection, component presence/absence, polarity and value. Super fast self learning programming. Import NC data from your pick and place system or most popular CAD/CAM software. Utilizing our extensive custom libraries to provide fast programming times and reliable results with low false fails.



Brilliant imaging on coating with depth of coating inspection by blue level.

because inspection matters

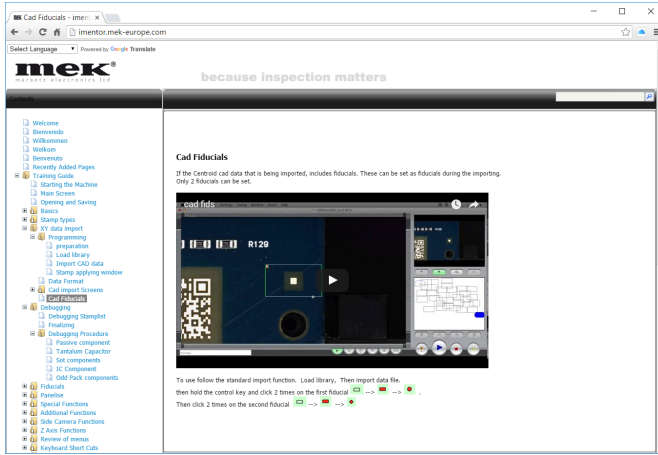
iSpector

Spector-BOX



imentor

iMentor is Mek's extensive and exclusive online training system that covers all aspects of the MEK AOI/CCI software. From basic to advanced operation including videos. It is frequently updated to covers new features in the latest software.



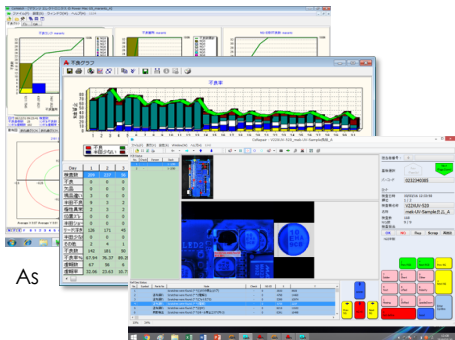
Instructions on how to install updates , make backups and special application notes. Latest software releases and inspection library updates. Searchable topics. Also available in multiple languages.

A unique login is provided for each customer. As well as access to our user forum.

Optional on site training is also available.

Optional data collection, Offline Repair/Review and SPC Analysis.

The **Catch system** which comprises **CSCenter** data collection and remote monitoring, **CSRepair** Offline defect review and repair software, and **CSAnalyzer** SPC and trend analysis. **PostgreSQL** enterprise grade database storage. Catch is a fully scalable solution from single AOI/CCI stations to 40 plus machines



As

Inspection can be tracked and recorded. Assigned to barcode read from the PCB's at the AOI or CCI. Base formats including Datamatrix, QRcode, Code 128 and Code 39, well as allowing multiple barcodes per panel.



Optional offline programming and debug. **OLT22X** uses images captured from the AOI to create full AOI/CCI programs and can also be used in conjunction with the AOI/CCI to do live offline programming debug.

The offline programming software simulates the machine and can therefore perform almost all the same functions during programming that are available on the AOI/CCI system.



because inspection matters

iSpector

Spector BOX

because inspection matters

Desktop Series Specifications	iSpector JUz 650L	iSpector JUz 350L	iSpector JUz 520	SpectorBox JUz 550 (T/B)
Maximum PCB Size	650x550mm (25.6"x21.6")	350x250mm (13.77" x 9.84")	520x460 mm (20.4" x 18.1)	550x500 (21.7" x 19.7)
Characteristics				
Product Type	Automatic Optical Conformal Coating Inspector			
In-line/Off-line	InLine		Desktop	Modular
Movement Type	Camera X, Y			
PCB Movement	Static Conveyor		Static Table	Integration
PCB Fixation	North South Clamping, PCB Edge Lift		North, South Clamping	Integration
Parts Inspection	Presence, Polarity, Offset, OCV, Conformal Coating, Presence, Absence, Splashes, Bubbles, Coverage			
Distinction Principle	Synthetic Imaging, Spectral Analysis, Greyscale Limits			
Distinction Parameters	Brightness, Hue, Saturation via Filters			
Camera Type	5MP CCD digital with USB 3 Vision			
Camera Field Of View/Resolution	47 x 39 mm (1.8" x 1.53") 19µm			
Lens	High Resolution Lens			
Lighting System	Dual LED :White Main , 365 nm UV LED			
Specifications				
Minimum Inspection Component Size	0401" (19µm resolution)			
Positioning Accuracy	Pixel Related Feedback Loop			
Component Clearance (Top/Bottom)	+60mm (1.6")/-60mm (-2.2")			
Movement Speed	720mm/s			
Inspection capacity typical	2500cps/min 4.45 FOV/sec			
Mains	100-240 Vac / 150W			
Interfacing				
Control PC type (not included)	Apple Mac Mini or iMac			
Control / Imaging Interface	USB / USB 3.0 Vision			
Programming Interface	CSV Centroid File (Placement Data)			
Repair/Monitor/SPC System/MES-interface	Mek Catch System (Windows 7/8/10) (Option)			
3rd party Interfacing (MES-if) & Data Storage	Enterprise SQL DB/XML Files/Socket (Catch System Option)			
General				
Operating Temperature	15-30 degr C			
Operating Humidity	15-80 % RH			
External Size	W1040 x D1077 x H1270mm (40.9" x 42.4" x 50.0")	W 698 x D 600 x H 1298 mm (W 27.5" x D 23.6" x H 51.1")	W 1030 x D 1060 x 410 mm (W 40.5" x D 41.7" x 16.1")	W900 x D1080 x H316 (35.5" x 42.5" x 12.4")
Weight	240kg (529lbs)	210 kg (463 lbs)	95 kg (529 lbs)	80kg (220lbs)

Marantz Electronics reserves the right to change the design and specifications without notice. © Mek Europe BV, October 2021. Rev4

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