



DJK Europe GmbH

## X-eye 5100/ 3100 Series

High Performance X-ray Inspection System

Contributing to your global success



### Major Features:

- 100kV Micro-Focus Closed-tube (5 $\mu$ m Focal Spot Size)
- Flat Panel X-ray Detector Equipped
- Max. 4-axis manipulator configuration (X, Y, Z, Tilt)
- Auto Teaching (CNC Programming)
- Various Measuring Tool & Auto BGA Inspection Module

### The Ultimate Solution for X-ray Inspection

X-eye 5100/3100 Series are high-performance X-ray Inspection systems for general non-destructive testing and failure analysis. With 100kV micro-focus closed tube & High Resolution Flat panel Detector equipped, X-eye 5100/3100 Series provide high quality X-ray image at high magnification.

With programmable multi-axis control, X-eye 5100/3100 Series can inspect the object at any magnification with the ease of use. With Auto Teaching (CNC programming), the system can be used as a semi-automatic inspection system.

X-eye 5100/3100 Series come with user-friendly operating environment. Various measuring and annotation tools are Included.

### Application

- **SMT Assemblies Inspection**
  - BGA Void, Open, Missing, Bridging
  - General Solder Joint Inspection
- **Semiconductor**
  - Wipe Bonding inspection, Epoxy Voids
  - LED
- **Electronic Components**
  - Connector, camera Module
  - Internal Structure, Hidden Component
- **Storage Battery Inspection**
- **Plastic Components**



# X-eye 5100/ 3100 Series

## High Performance X-ray Inspection System

### Major Specification

Model	X-eye 5100	X-eye 3100
X-ray Tube	100kV Micro-Focus Closed Tube (5µm Focal Spot size)	
X-ray Detector	Flat Panel X-ray Detector	
Table size	460mm x 340mm	350mm x 270mm
Axis Control	X, Y, Z, T 4-axis	X, Y, Z, T 3-axis (T axis - Option)
Dimension	1,300(W) x 1,000(D) x 1,500(H)mm	900(W) x 1,000(D) x 1,500(H)mm
Power	220 V Single Phase 50/60Hz	
X-ray Safety	Leakage Dose less than 1µSv/hr	

### Software Features

#### User-friendly Interface

- Intuitive, flexible, workspace

#### Easy-to-use mouse manipulation and navigation

- "Click & Center" on X-ray image

#### Auto-teaching Function

- Inspection point CNC Programming
- Grid-teaching
- One-click OK/NG determination with image save
- Result Mapping
- Auto Scanning ( One-click multiple acquisition)

#### Image Processing

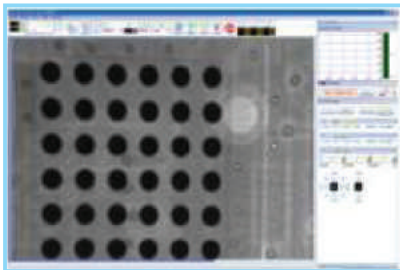
- Averaging, Contrast/Brightness, Inverse
- Histogram Adjustment
- Image Filtering: Sharpening, Enhanced Focus

#### Various measurement & Annotation Tool

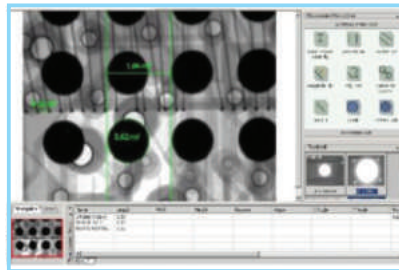
- Measuring: Line, Point to Point, Center to Center
- Annotation & Reporting

#### Auto BGA Inspection Module (Option)

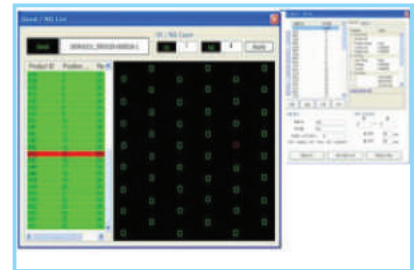
- Auto calculation of BGA diameter, Void Percentage
- Auto Pass/Fail determination



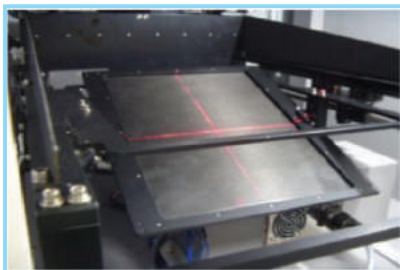
User Interface



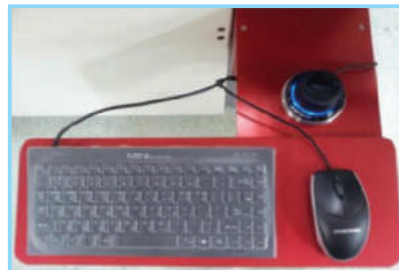
Messuring & Annotation



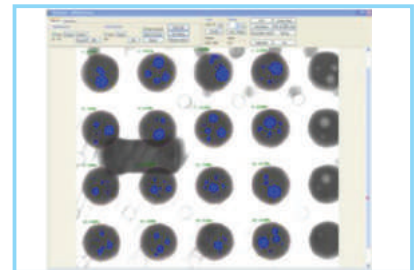
Auto Teaching & Result Mapping



Manipulator



Jong-stick Control (Option)



Auto BGA Inspection Module (Option)



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