

# YTX X1 X-Ray

## Automated In-line X-Ray Inspection System



- **Highest Defect Detection**
- **Low False Calls**
- **Fast Throughput**
- **Quick Set-up**
- **Cost Effective**

YESTech's versatile X1 Automated X-Ray Inspection System ( AXI ) offers complete inspection of solder joints and other critical hidden features found in electronic assemblies, PCB's and packaged semiconductors. Ideal for in-line or off-line operation, the X1's proven algorithms enable fast and reliable automated inspection and real-time monitoring of critical process information.

Programming the X1 is fast and intuitive. Operators typically take less than 30 minutes to create a complete inspection program. The X1 utilizes a standard package library to simplify training and insure program portability across manufacturing lines. Newly available image processing technology integrates several techniques and inspection algorithms to provide complete inspection coverage with an extremely low false failure rate.

The YESTech X1 Automated X-Ray system is an effective inspection tool for ball grid array devices, components under shields and complex high density boards. When integrated with YESTech AOI systems, the X1 can increase fault coverage to include nearly all process defects.

Optional remote programming and SPC software can be utilized to provide a comprehensive yield enhancement solution.

### **AUTOMATED X-RAY INSPECTION FOR:**

- **Component presence and position**
- **Electronic and sealed assemblies**
  - **Visible and hidden solder joints**
    - **BGA / Flip Chip**
    - **Leads**
    - **Voids**

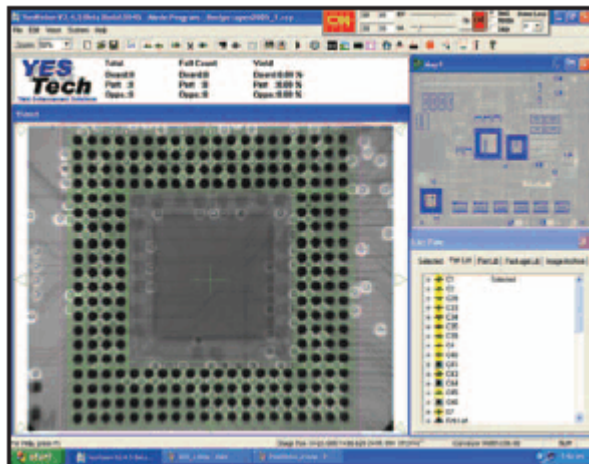
**YESTech**

*"World Leader in Automated Optical Inspections and X-Ray Inspection Systems"*

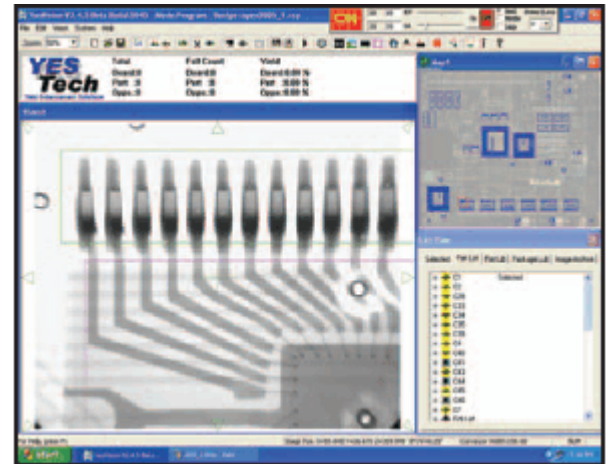
## SPECIFICATIONS\*

<b>X-Ray Tube</b>	Maintenance free Sealed reflection target 130 Kv, 5 micron spot size 39-watt max. output
<b>Software</b>	CAD Input: Pick and place data, CAD x-y data CAD Translation Package: Excel, Circuitcam, Unicam, CIMBridge, Fabmaster Programming Skill Level: Technician or operator Operating System: Windows XP
<b>Inspection Capabilities</b>	Throughput: 250ms per frame Maximum Board Size: 18" x 20" (450mm x 508mm) Clearance: 2" (50mm) top and bottom Minimum Component Size: 01005 Defects Detected: Component: position, missing, wrong, skew, tombstone Lead: bent, lifted, bridging Solder: open, insufficient, short, solder balls BGA: shorts, voids, position, missing ball
<b>Facilities</b>	Power: 110 VAC (220 optional) Single Phase 50 / 60 Hz 15amps Footprint: 59w" x 66d" x 63h" (1,500mm x 1,664mm x 1,600mm) Weight: 4,000 lbs. (1,820Kg) Machine installation: < 1 hour Compressed Air: 80 psi
<b>Safety</b>	<i>YESTech x-ray systems are manufactured to comply with the federal standard for cabinet x-ray equipment as established in Title 21, Subchapter J of the code of federal regulation sections 1020.40. Lead is used to line the cabinet and door, with lead doped glass for the viewing window. Interlock switches ensure that x-ray radiation can not be generated with any part of the cabinet open or removed.</i>

\* Specifications subject to change



Fast, accurate and quick to program, the YTX X1 inspects for ball presence, size, shape, shorts and voids.



Complete inspection for leads and solder; including toe and heel fillets.



**Vietnam's leading supplier of semiconductor interconnect assembly equipment.**

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