

X-Spection 6000 X-Ray Inspection System

The X-SPECTION 6000 is our most technologically advanced X-Ray Inspection System. As with all X-SCOPE platforms, it includes every advanced s/w tool required for a wide variety of applications. With more tilt and a rotating work table, the X-SPECTION 6000 is the ultimate in flexibility.

Applications

- Molded plastic
- Automotive assemblies
- Medical devices
- Pharmaceuticals
- Ceramics
- Agriculture

- Multilayer PCBs
- BGA, QFN, wire bond, etc.
- Semiconductor
- Over molded electrical connectors
- Encapsulated components
- Aluminum die casting

FEATURING

- Fully integrated, 130kV high power micro-focus closed x-ray tube
- Automatic program inspection with fiducial & barcode
- Spot size down to 5µ
- 5" x 5" or 4" x 3" high resolution and ultra resolution CMOS digital flat panel image detector
- 55° camera tilt for oblique angle viewing
- 22" x 18" Inspection stage with 350° rotation
- Color mapping camera with zoom window provides easy location and identification of faults
- Z axis movement of the x-ray tube and detector
- Computer controlled kV and mA settings
- Computer controlled variable speed & rotation X-Y stage
- Simple point and click, intuitive GUI provides access to create advanced inspection routines

All software tools are standard including (but not limited to)

- BGA Void detection and automatic calculations
- Easy macro recording for intuitive step and repeat programming
- Various measuring tools for radius, area, perimeter, etc.
- Industrial PC with Windows 10, 24" LCD flat panel display







MACHINE SPECIFICATIONS

X-Ray Tube

- X-Ray Source: Micro-focus, integrated (closed)
- Operating voltage: 130kV
- Current: 0.32mA
- Minimum Focal Spot Size: 5 Micron
- Magnification up to: 800x

Work Area

- Sample Table Size: 560mm x 457mm / 22" x 18"
- Inspection Area: 360mm x 290mm / 14.2" x 11.6"
- Oblique Angle View: +55°

General Machine Specs

- Dimensions: 59" x 62.9" x 62.9" (78.6" including light tower) 1500mm x 1600mm x 1600mm (2000mm including light tower)
- Weight: 1600kg /3527 lbs. (steel lead welded construction)
- Power: 110-230 VAC 50/60 Hz (universal)
- Industrial PC: Microsoft Windows 10 (64-bit)

Digital Flat Panel Detector

- Grayscale: 14 bit (16,384 shades of grayscale)
- Speed: 10FPS (4x3 detector) or 30FPS (5x5 detector)
- Resolution: 49.5μm (4x3 detector) or 99μm (5x5 detector)
- Detector Size: 4" x 3" ultra-high resolution or 5" x 5" high resolution

THIS SYSTEM INCLUDES A 1 YEAR WARRANTY ON PARTS AND LABOR

Compliance

THE SCIENSCOPE X-SCOPE X-RAY INSPECTION SYSTEMS MEET THE FDA-CDRH REGULATION CFR 21 1020.40 SUBCHAPTER J FOR CABINET X-RAY SYSTEMS. THE FDA-CDRH STANDARD FOR CABINET X-RAY SYSTEMS STATES THAT RADIATION EMISIONS WILL NOT EXCED 50 MICRO R/HR 5 CM FROM ANY EXTERNAL SURFACE. THE X-SCOPE X-RAY INSPECTION SYSTEMS TYPICALLY HAVE A RADIATION EMISSION READING OF LES THAN 20 MICRO R/HR 5 CM FROM ANY EXTERNAL SURFACE. ALL SCIENSCOPE X-SCOPE X-RAY SYSTEMS HAVE A CE APROVAL. SCIENSCOPE X-SCOPE X-RAY SYSTEMS ARE CLASSIFIED AS "CABINET X-RAY SYSTEMS" AND RE-QUIRE NO EXTERNAL RADIATION SHIELDING. WELDED STEEL / LEAD-STEEL CONSTRUCTION, NO VISIBLE SHEILDING.



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