

# X-Scope 2000 X-Ray Inspection System

The X-SCOPE 2000 X-Ray Inspection System is a full featured high-performance x-ray inspection instrument with an unbeatable price to performance ratio which includes all of the advanced features you would expect to find on a much more expensive x-ray inspection system.

### 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, 90kV high power closed micro-focus x-ray tube
- Spot size down to 5µ
- 4"x3" high resolution CMOS digital flat panel image detector
- 50° detector tilt for oblique angle viewing
- Automatic program inspection with fiducial & barcode
- 21.75" x 19.5" Inspection area
- 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 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: 90kV

Current: 0.160mA

Minimum Focal Spot Size: 5 Micron

Magnification up to: 1000x

### Work Area

Sample Table Size: 552mm x 496mm / 21.75" x 19.5"

Inspection Area: 552mm x 496mm / 21.75" x 19.5"

Oblique Angle View: +50°

# General Machine Specs

- Dimensions: 55.5" x 53.5" x 66" (81" including light tower) 1358mm x 1358mm x 1677mm (2057mm including light tower)
- Weight: 1100kg /2425 lbs. (steel lead welded construction)
- Power: 110-230 VAC 50/60 Hz (auto switching)
- Industrial PC: Microsoft Windows 10 (64-bit)

## Digital Flat Panel Detector

Grayscale: 14 bit (16,384 shades of grayscale)

Speed: 40FPS

• Resolution: 99µm

Detector Size: 4" x 3" 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.







