X-Scope 1800
X-Ray Inspection System

The X-SCOPE 1800 X-Ray Inspection System is an entry level machine with high level features. A micro-focus x-ray source and CMOS digital flat panel image detector with tilting for oblique angle views are standard, all at an affordable price.

Applications
- Multilayer PCBs
- BGA, QFN, wire bond, etc.
- Semiconductor
- Over molded electrical connectors
- Encapsulated components
- Aluminum die casting
- Molded plastic
- Automotive assemblies
- Medical devices
- Pharmaceuticals
- Ceramics
- Agriculture

System Details

FEATURING
- Fully integrated, 90kV high power micro-focus closed x-ray tube
- Spot size down to 10μ from 5μ
- 4”x3” high resolution CMOS digital flat panel image detector
- 30° detector tilt for oblique angle viewing
- 19.6” x 14.75” 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 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 7 PRO, 24” LCD flat panel display
### MACHINE SPECIFICATIONS

#### X-Ray Tube
- X-Ray Source: Micro-focus, integrated (closed)
- Operating voltage: 90kV
- Current: 0.256mA / 0.18mA
- Minimum Focal Spot Size: 10 Micron
- Magnification up to: 500x

#### Digital Flat Panel Detector
- Grayscale: 14 bit (16,384 shades of grayscale)
- Speed: 30FPS
- Resolution: 99μm
- Detector Size: 4” x 3” high resolution

#### Work Area
- Sample Table Size: 496mm x 375mm / 19.5” x 14.75”
- Inspection Area: 450mm x 355 / 17.75” x 14”
- Oblique Angle View: ±30°

#### General Machine Specs
- Dimensions: 43.3” x 43.3” x 55” (70° including light tower) 1100mm x 1100mm x 1400mm (1800mm including light tower)
- Weight: 800kg / 1760 lbs. (steel lead welded construction)
- Power: AC 110 – 230 VAC 50/60 Hz
- Industrial PC: Microsoft Windows 7 PRO (64-bit)

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**24/7 SERVICE HOTLINE**

1(800)216-1800

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**THIS SYSTEM INCLUDES A 1 YEAR WARRANTY ON PARTS AND LABOR**

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**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 EMISION READINGS WILL NOT EXCEED 50 MICRO R/HRE 5 CM FROM ANY EXTERNAL SURFACE. THE X-SCOPE X-RAY INSPECTION SYSTEMS TYPICALLY HAVE A RADIATION EMISION READINGS OF LESS THAN 20 MICRO R/HRE 5 CM FROM ANY EXTERNAL SURFACE. ALL SCIENSCOPE X-SCOPE X-RAY SYSTEMS HAVE A CE APPROVAL. SCIENSCOPE X-SCOPE X-RAY SYSTEMS ARE CLASSIFIED AS "CABINET X-RAY SYSTEMS" AND REQUIRE NO EXTERNAL RADIATION SHIELDING. WELDED STEEL / LEAD-STEEL CONSTRUCTION, NO VISIBLE SHIELDING.