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, easy to use software interface 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

FEATUREING
- Fully integrated, 90kV high power micro-focus closed x-ray tube
- Spot size down to 7µ
- 4” x 3” high resolution CMOS digital flat panel image detector
- Automatic program inspection with fiducial & barcode
- 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 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: 0.256mA / 0.18mA
- Minimum Focal Spot Size: 7μ

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 100 – 240 VAC 47/63 Hz
- Industrial PC: Microsoft Windows 10 (64-bit)

Digital Flat Panel Detector
- Grayscale: 14 bit (16,384 shades of grayscale)
- Speed: 25FPS
- Resolution: 99μm
- Detector Size: 4” x 3” high resolution

Compliance
THE SCIENSCOPE X-SCOPE X-RAY INSPECTION SYSTEMS MEET THE FDA-CDRH REGULATION CFR 21 1000.40 SUBCHAPTER J FOR CABINET X-RAY SYSTEMS. THE FDA-CDRH STANDARD FOR CABINET X-RAY SYSTEMS STATES THAT RADIATION EMISSIONS WILL NOT EXCEED 20 MICRO R/H 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.

THIS SYSTEM INCLUDES A 1 YEAR WARRANTY ON PARTS AND LABOR

1(800)216-1800
info@sciencescope.com
5751 Schaefer Ave
Chino, CA 91710, USA
WWW.SCIENCESCOPE.COM