

JewelBox-110T

*Precision X-Ray Imaging Essential for the Inspection
of BGA, Flip Chip, CSP, IC*



The JewelBox 110T delivers precision x-ray images of ultra high resolution and gray scale accuracy without the aberrations of Voltage Blooming and Pincushioning prevalent in other systems. The patented, award-winning x-ray camera technology, in conjunction with its 110 kv, 5-7 micron focal spot x-ray tube delivers precise x-ray images at magnifications from 7X to 1,200X with a resolution of 100 line pairs/mm. The broad energy sensitivity range of this camera permits x-ray imaging of both high density and low density devices.

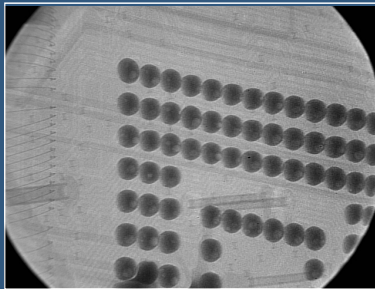
What's more, the JewelBox 110T saves you floor space. It's half the size of comparable systems, yet it provides the most extraordinary microfocus x-ray image quality at the highest magnifications. The JewelBox 110T offers five-axis control of the inspected product, including 360° rotation and tilt.

Applications for the JewelBox 110T include advanced electronic packages such as BGAs, Flip Chips, CSPs, IC Wire Bonds, die attachment, as well as critical medical devices.



Progressive magnification allows inspection of multiple details:

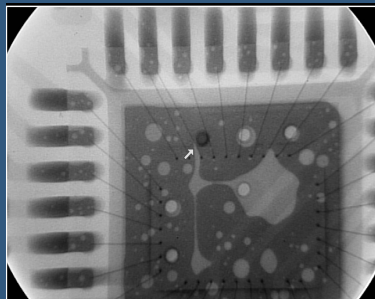
*BGA package
with angle
and rotation*



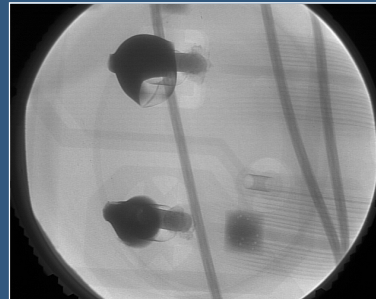
Wire sweep



*QFN package
with
solder voids*



*Lack of
Solder Fill*



Specifications

- Operating voltage: 120v/60 hz or 220v/50 hz
- Anode voltage: 110 kV, 5-7 micron focal spot x-ray tube
- Anode current: 0.227 mA (adjustable)
- Resolution: 100 line pairs/mm
- Magnification: variable from 7X up to 1,200X
- Focal spot size: 5-7 microns
- Focal spot to image plane distance: 9-12 inches (factory preset)
- Nominal exterior dimensions: 35 1/8"W x 43 1/8"D x 72 3/4"H
- Inspection compartment dimensions: 28 1/2"W x 30"D x 23 3/4"H
- Computer Console dimensions: 28 3/8"W x 29 3/4"D x 36 3/4"H
- Manipulator: five-axis joystick positioner and optional programmable motion control
- GTI-50 Image Processing Software and USB frame grabber

