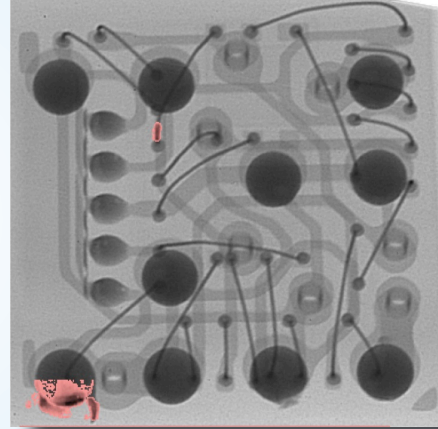


TruView™ ICARUS Software

The Image Comparison Algorithms for
Radiography Unified Software – ICARUS

ICARUS – is the convergence of over a decade of algorithm development into a unified software platform.

ICARUS combines several image comparison algorithms under one umbrella to give you the exact location in the x-ray images that differ from the reference image.

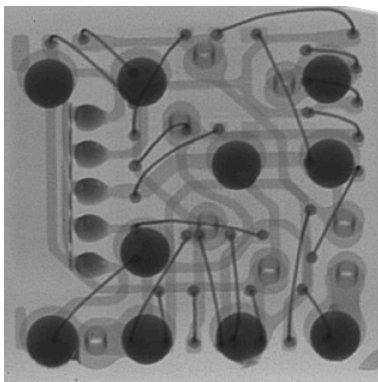


SPECIFICATIONS:

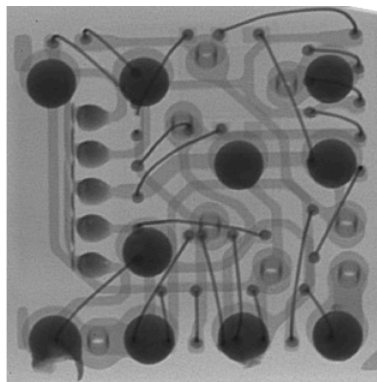
- ICARUS can find microscopic differences in the shape, size, and location of features, like broken or bent wire bonds.
- ICARUS allows you to select a comparison mask to focus analysis on regions of the image.
- ICARUS also outputs a complete report of all findings, including a PASS/FAIL result based on image similarity and a programmable threshold.

To illustrate the power of ICARUS, the following example shows two images with small differences between them. The reference image on the left shows a module without any defects. The acquired image in the center presents a couple of subtle defects: a broken wire bond and a damaged solder ball.

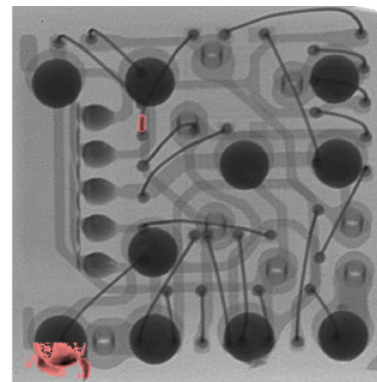
These defects were all correctly identified by ICARUS in the right image.



Reference Image - sample without defects.



Acquired image compared to reference using ICARUS.



ICARUS result image showing differences between reference and acquired images.

