## 2D/3D REALTIME X-RAY INSPECTION SOLUTIONS ENGINEERING SCIENCES

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# Driving innovation and delivering solutions daily.

The Dage Quadra<sup>®</sup> 7 is a powerful addition to the ever-expanding fleet of EAG instruments. As components, systems and products get more complex, nondestructive inspection techniques like X-Ray and CT scanning help uncover issues and anomalies in our efforts to accelerate new product introduction and failure analysis. The Dage Quadra<sup>®</sup> 7 leads with features and resolution that help fuel our support of innovation. Coupled with EAG's electrical and physical FA tools, advanced microscopy, materials analysis and broad expertise, EAG is the choice for real-time and 3D X-ray investigation and insightful Failure Analysis. **Ask EAG. We Know How.** 

# Now offering the complete X-ray inspection solution

Quadra<sup>™</sup> 7 represents the cutting edge of X-ray inspection performance. 6.7 MP ultra high quality images are displayed at full oneto-one resolution over two 4K UHD monitors, ensuring you see the clearest features today, and for all your products in the future.



### WE KNOW HOW | 2D/3D REALTIME X-RAY INSPECTION SOLUTIONS

X-ray image of a

computer mouse

Bond wires in a

Microcrack in a BGA

solder ball

**BGA** device



#### SIMPLICITY AS STANDARD

Gensys<sup>™</sup> proprietary control and measurement software integrates advanced image acquisition and processing functions into an intuitive user interface so both routine measurements and advanced, high resolution investigations can be performed with ease.



Lead frame: High dynamic range makes it easy to identify wire bonds, voids and cracks

#### SEE THE FINEST DETAILS

QuadraNT<sup>™</sup>, Nordson DAGE's latest generation X-ray source ensures images are bright, and stable, allowing features down to 100nm to be resolved. Quadra series X-ray inspection takes you beyond optical imaging, allowing you to non-destructively inspect obscured areas inside devices and components at up to 68,000 times magnification.





x20

x500



X-ray image of a computer mouse



Reconstruction of a 4mm long inductor package



#### **RELEVANT INDUSTRIES**

- Microelectronics/ 

   Industrial/
   Semiconductor
   Commercial
- Medical Devices Manufacturing

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Pharmaceutical

Life Sciences

Geological

- Automotive
- Aerospace
  - Military/Defense Energy
  - Consumer Electronics

#### **RELEVANT APPLICATIONS**

- Failure Analysis
- Research & Development
- 3D modeling/CT scanning
- Manufacture Screening
- Design Validation
- Virtual Cross-sectioning
- Metrology/Dimensional Measurements
- Construction Analysis/ Reverse Engineering

#### SAMPLE EXAMPLES

- Solder, Weld, Brazed Joints
- Electro-mechanical Relay
- Printed Circuit Board Routing
- Medical Implant
- Competitor Product
- Connectors/Cables
- Embedded/Encapsulated Products

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EAG Laboratories is a global scientific services company serving clients across a vast array of technology-related industries. Through multidisciplinary expertise in the materials, engineering and life sciences, EAG helps companies innovate and improve products, ensure quality and safety, strengthen supply chains, protect intellectual property and comply with evolving global regulations.

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