Ultrasonic Localization of Flaws in Joined Materials

Procedure

Ultrasonic C-scans allow a lateral localization of material separations. All type of junctions may be inspected such as adhesive sealing, soldering, diffusion bonding and welding.

Example: Adhesion Epoxy/Copper in Electronic Component

- Frequency = 50 MHz, immersion technique
- Evaluation: C-scan (Backwall echo of epoxy)



Example: Soldering Copper/Silicon

- Copper: 1.3 mm thick
- Frequency = 50 MHz, immersion technique
- Evaluation: C-scan (Backwall echo of copper)



Example: Glued Wood Lamellas

- Sample thickness = 10 mm
- Frequency = 100 kHz, transmission with air-coupling
- Evaluation: C-scan

