



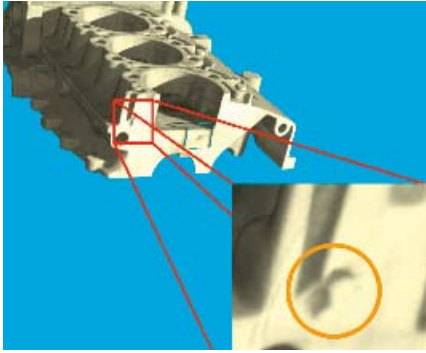
SGS AUTOMOTIVE
SERVICES

AUTOMOTIVE SERVICES

3D COMPUTER TOMOGRAPHY/RADIOLOGY

INSTITUT
FRESENIUS

SGS



3D COMPUTER TOMOGRAPHY/RADIOLOGY

You obtain information about the inner structure of your product, thus guaranteeing more transparency. Almost all types of three-dimensional faults are discovered without damaging the valuable components. Different magnifications and a wide choice of X-ray energies allow the investigation of many different materials and geometries. Computer tomography is used to test components for faults and also to measure the inside and outside geometry. By means of comparative CT measurements before and after stress tests we can evaluate the effects of such tests on your products.

Our range of services

With the help of a modern micro focus X-ray system, which is equipped with an innovative X-ray detector system in amorphous silicon technology, we produce high-resolution radiograms of materials and components. On this basis we prepare a three-dimensional, computer-tomographic reconstruction of the sample volume.

System specification

- 225 KeV micro focus tubes with a focal spot < 5 µm
- Flat panel detector with 2048 x 2048 pixels and 0.2 mm pitch
- Sample size: 10 x 10 x 10 mm³ to 260 x 260 x 500 mm³
- Resolution < 5 µm

Focuses

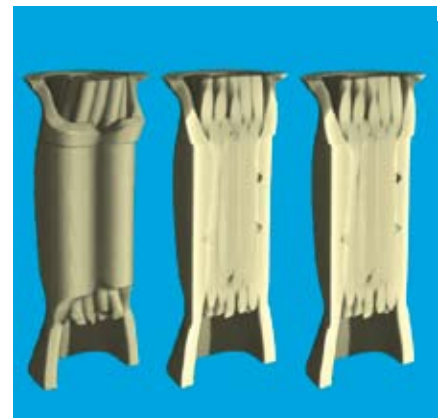
Non-destructive testing of

- Diesel soot filters/catalytic converters
- Electronic PCBs and BGA soldering points/bonding wires
- Cast components
- Ceramics
- Lightweight metal cast parts
- Injection moulded plastics
- Microstructures
- Batteries and rechargeable battery packs

Documentation of imaging data in conventional formats (TIFF, GIF, JPEG etc.), so that you can integrate this into your presentations. A 3D tomographic investigation can be carried out on the sample to provide a quantitative spatial record of its entire geometry.

Typical industries

- Automotive
- Lightweight metal casting
- Electrical engineering/electronics
- Microstructure technology
- Medical technology/pharmaceuticals
- Mechanical engineering
- Building materials/building industry
- Aerospace
- Mobile telephony



SGS INSTITUT FRESENIUS GmbH

Joseph-von-Fraunhofer-Str. 13

D-44227 Dortmund

t +49 231 9742 - 7301

f +49 231 9742 - 7349

de.aut.cts@sgs.com

www.sgs-auto.com/3DCT

SGS