Automotive Engineering 2. Measurement Systems

Computer-Tomograph for Component Analysis (um-Range)

Ray Scan 200

- 2D and 3D material and structure analyzes
- Microstructure analysis
- Defect analysis
- Measuring tasks

Specifications:

- X-ray source: Micro focus 10-250 kV
- Burning spot: 3-250µm
- Object dimensions Ø / H: 1-600 mm / 1-1500 mm
- Max. Object weight: 80 kg
- Active area detector: 410 x 410 mm²
- Detector Pixels: 1024 x 1024 (2048 x 2048 optional)
- Digitization: 16 bit
- Measurement time incl. Reconstruction: 2 30 min.
- Detectability: 1µm
- Contrast: <1%
- Operating modes: 3D-CT and radioscopy

Scanning Electron Microscope with Element Analysis

JEOL JSM-6610 + EDX

Analysis of physically and chemically properties of components in nm-range

Specifications:

- Resolution of 3 nm at 30 kV
- Large sample chamber (350x340x230) mm with fully motorized sample table and a max. sample weight of 5kg
- Samples with a diameter of up to 208mm can be approached at any surface point
- Low-pressure operation with BSD allows high resolution
- Integrated element analysis (from boron to americium)





- 30 mm² active detector area
- Gold / Carbon sputter system



Thüringer Innovationszentrum **MOBILITÄT**

Page 25



