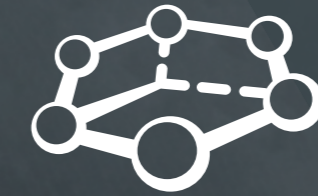
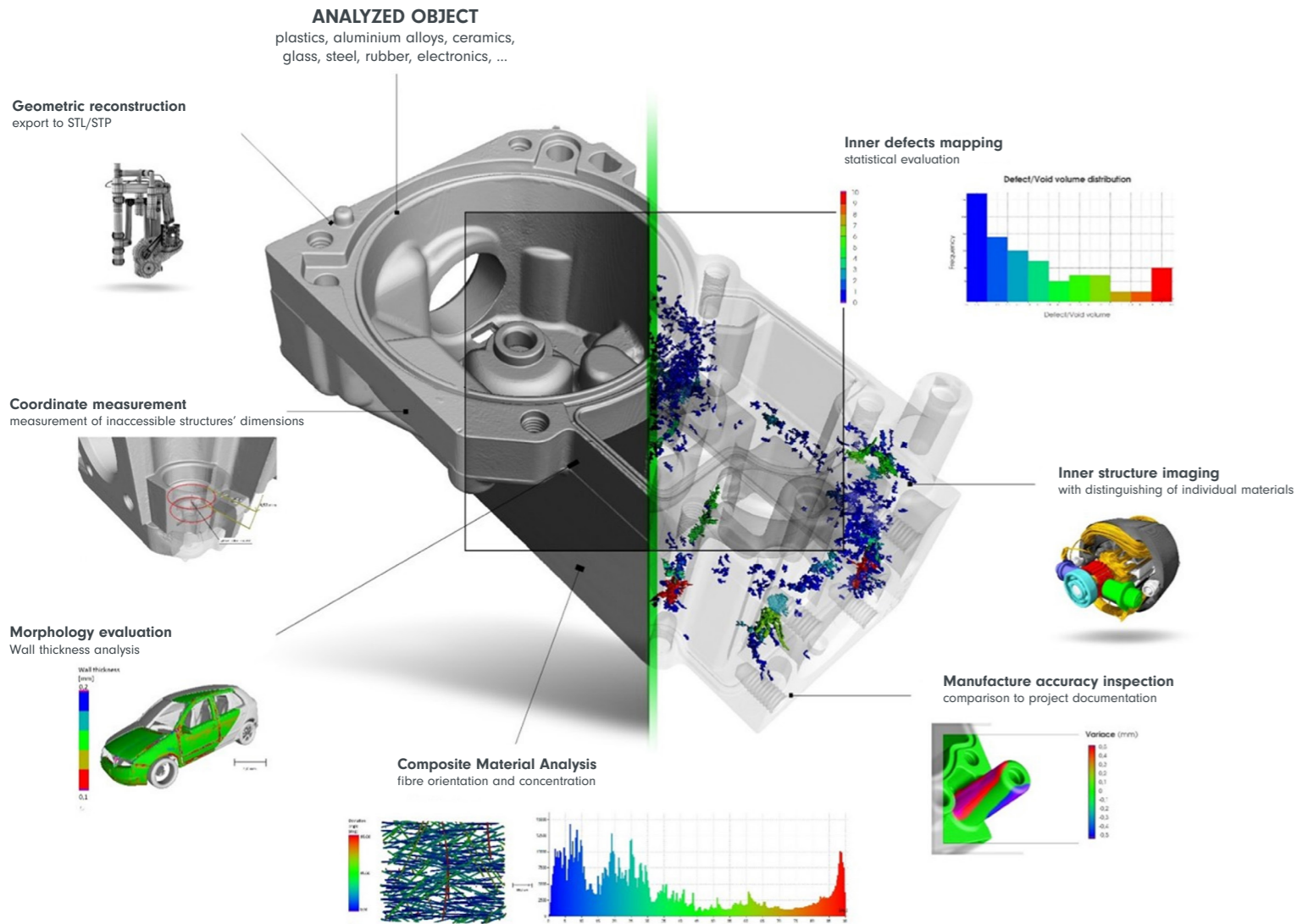


ANALYSES

CT DATA VISUALIZATION AND QUANTIFICATION



CEITEC
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NON-DESTRUCTIVE TESTING AND 3D SCANNING

FIELDS OF APPLICATION

Automotive
 Electronics
 Materials and composites
 Aerospace and Aviation
 Foundry industry
 Pharmaceuticals
 Plastics
 etc.

INDUSTRIAL COMPUTED TOMOGRAPHY



CT LABORATORY



Authorized testing laboratory
 by Czech Accreditation
 Institute according to CSN EN
 ISO/IEC 17025.



Application laboratory of
 Rigaku and Thermo Fisher
 Scientific, testing laboratory
 of General Electric.



Part of the biggest
 multi-disciplinary research
 centre in the Czech Republic.



Effective national and international
 cooperation in R&D.



Equipped with professional
 software tools.



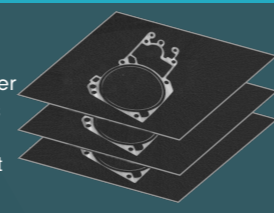
Special working regime
 driven by industrial needs.

SERVICES

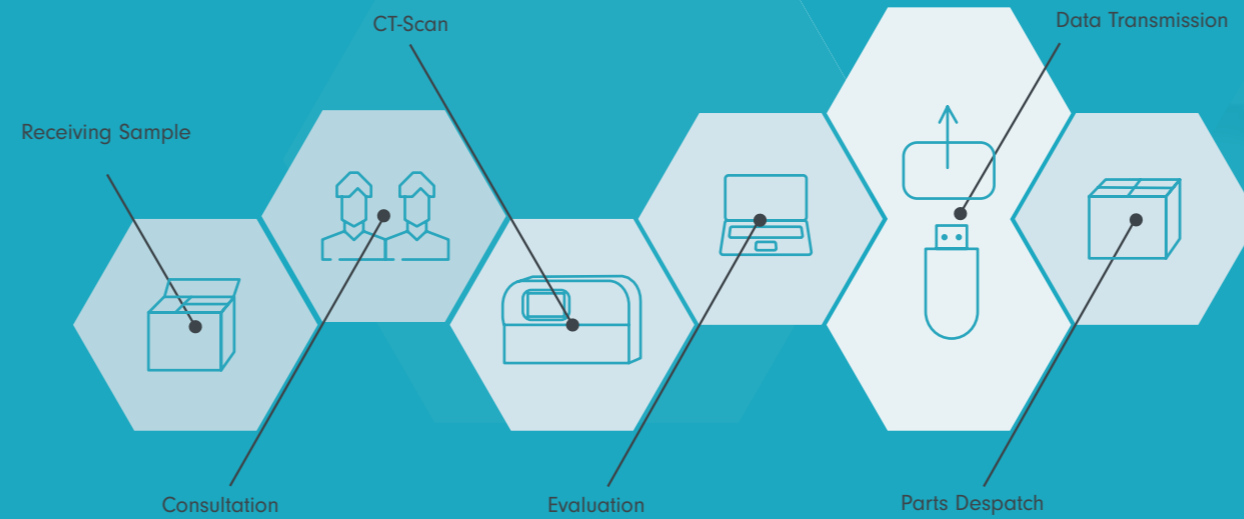
We offer world-class non-destructive testing using X-ray computed tomography and X-ray radiography. Our laboratory provides qualified and certified inspections complying with the international standards. A team of experienced professionals guarantees a rapid response and an effective analysis. Diverse state-of-the-art CT systems enable to analyze a wide range of parts and assemblies for numerous applications. A resolution ranging from hundreds of microns to hundreds of nanometers can be reached. Also, various shapes, sizes and materials (steel, aluminum, glass, plastics) can be analysed. Moreover, we provide feasibility studies, a long term cooperation in the development and design of innovative data processing.

OUTPUT

- Original CT cross-sections with viewer
- Images and videos of data analysis
- STL and STP model
- Results commented by expert report



QUICK AND PROFESSIONAL PROCESSING



COMMON EXPERTISES

- 100% Dimensional inspection.
- Leakage detection.
- Porosity evaluation.
 - P 201 / VW 50097 and P 202 / VW 50093
 - ASTM E505
- All dimensions measurement of the component.
- NOK/OK parts comparison.
- Position verification of assembly components.
- Material inspection.
- Measurement in working conditions.
- Reverse engineering (STL, STP).
- 3D printing optimization.

EQUIPMENT

4 complementary CT devices and professional software tools.

GE phoenix v|tome|x M300

- Max. sample size – Ø 360×600 mm
- Max. weight of the sample 50 kg
- Max. voxel resolution 2 µm
- **Microfocus X-ray tube 300 kV/500 W**
- Flat panel detector, 2048×2048 pixels active area (200 µm pixel pitch)

GE phoenix v|tome|x L240

- **Max. sample size – Ø 800×1300 mm**
- Max. weight of the sample 50 kg
- Max. voxel resolution 1 µm
- Microfocus X-ray tube 240 kV/320 W and nanofocus – X-ray tube 180 kV/30 W
- **Flat panel detector, 4000×4000 pixels active area (100 µm pixel pitch)**

RIGAKU nano3DX

- Max. sample size – Ø 7.2×5.4 mm
- **Max. voxel resolution 0.27 µm**
- X-ray tube with optional Cr, Co, Mo rotating target material
- CCD camera, 3300×2500 pixels active area (270 nm pixel pitch)
- **Phase contrast imaging** (for light materials)

Thermo Fisher Scientific Heliscan

- Max. sample size – Ø 240 x 100 mm
- Max. weight of the sample 3.5 kg
- Max. voxel resolution 0.8 µm
- Microfocus tube 160 kV/8W
- **High quality data and helical trajectory**

SOFTWARE

VGStudio MAX
 Avizo
 MATLAB
 GOM inspect
 MAVI

