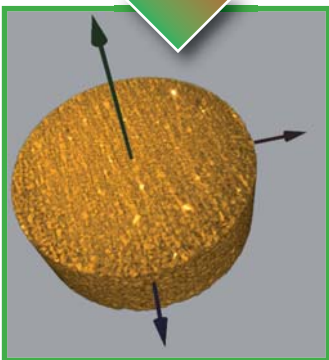
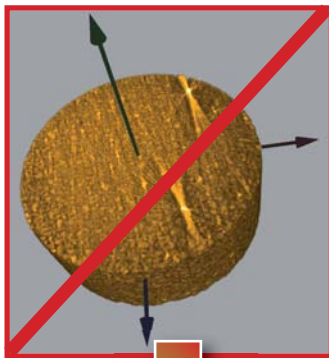
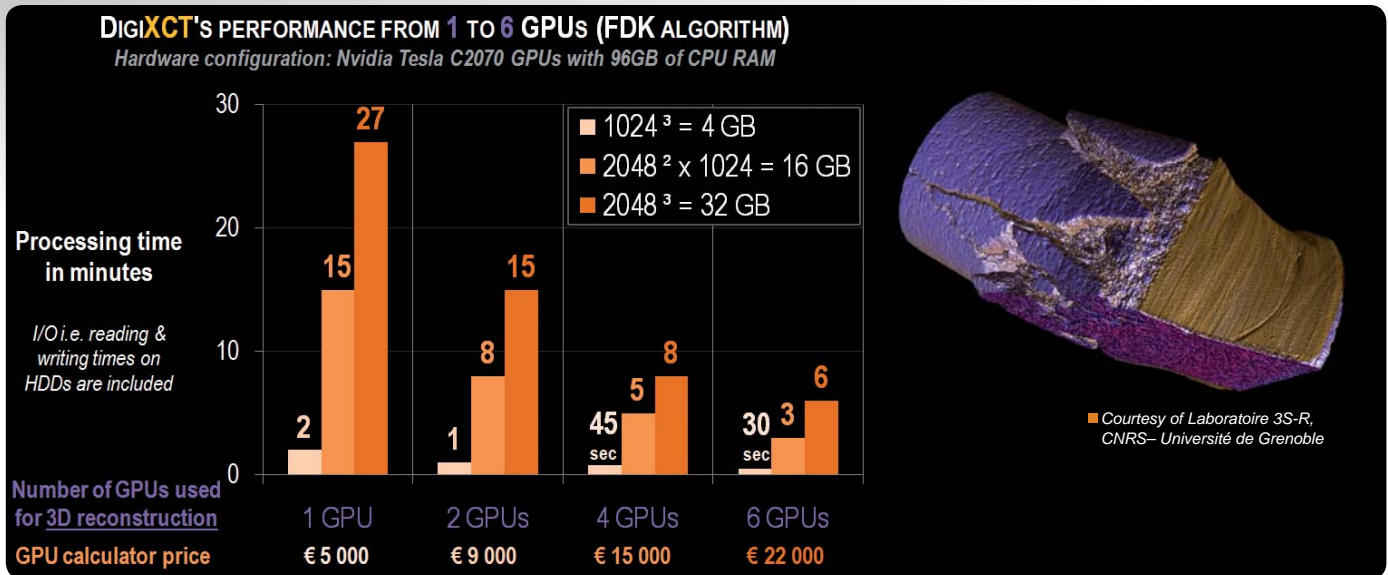


Calibration, reconstruction (FDK, SART, SIRT, OS-SART) and visualisation  
 Ergonomic, user-friendly and expert visualisation for high-quality data export  
 Fully compatible with most existing X-ray CT equipments + synchrotron sources

**Your X-ray CT equipment deserves now a DigiXCT upgrade to deliver excellence !**



**Star Artifact Reduction by Digisens**

### ➔ Easiest and fastest workflow available for large data

- 1 - Scanner independent : **select your geometry files in one click:** microCT, nanoCT or synchrotron data
- 2 - **Optimise acquisition parameters:** rotation axis & center adjustments... and **preprocess data in 2D:** beam hardening correction, ring artifact removal...
- 3 - **Reconstruct in 3D volumes up to 4096<sup>3</sup> voxels** or slices with several GPU boards using FDK, iterative algorithms or phase contrast
- 4 - **Postprocess data in 3D:** metal artifact reduction...
- 5 - **Display your data: volume & surface rendering** and start your investigations in a few minutes!

### ➔ Why upgrading your Computed Tomography software?

Computer hardware and software evolve way faster compared to the core components of a CT scanner. X-ray tubes, detectors and rotation stages are indeed simple and robust and cannot be much improved.

To get most of your CT system, added-value moves now towards complex software for optimal performance.

This idea is more and more shared by all expert users/OEMs throughout the world. That's why Digisens – as a pioneer in CT software development on the GPU – has an extensive track record of successes in Europe, North America and Asia.

# → All-in-one software with calibration, reconstruction and visualisation

**Calibration** Flexible plug-in which reads and optimise all the geometry parameters of your system in cone-beam, fan-beam or parallel-beam

- Totally integrated, compatible with all major brands of CT equipment manufacturers + custom-made scanners
- Straightforward “drag & drop” of scanner’s geometry details recorded into TXT, PAR, PCA... files
- Improved corrections: tilt-series alignment procedure and 3D-recalculation of rotation axis if drifts occur

**Reconstruction** Fast 3D-reconstruction module based on FDK analytical algorithm specifically optimised for mono- and multi-GPUs computation, intended to avoid all bottlenecks during the overall process

- Choose your configuration according to your needs and budget: 1, 2, 4 or 8 GPU boards or many more (HPC)!
- Supported image formats: TIFF, RAW, VFF, DICOM, BMP, PNG, JPEG...
- Ultrafast 2D and 3D previews, GPU-accelerated pre- & post-filtering treatments
- No datasize limit and real-time results for small volumes e.g.  $512^3$  voxels

**Visualisation & Export with DigiOBS** Simple, user-friendly and intuitive visualisation tool

- Uppermost quality volume rendering with volumetric ray casting, high-resolution slices viewing
- Seamless export in numerous file formats to analyse data in expert software

**Support and Maintenance** All our software updates are available during the year following DigiXCT acquisition and appropriate training is provided

- ✓ Supported operating systems: Microsoft Windows XP or 7 (64 bits)
- ✓ Works with Nvidia GPU boards: Tesla and Quadro or GeForce series
- ✓ Totally compliant with GPU clusters for High-Performance Computing (HPC)



## → Premium options

**Star (or Streak, Metal) Artifact Reduction** State-of-the-art 3D algorithm from Medical CT imaging

**NEW**

- 3D dynamic segmentation of the materials causing streak-patterns to cut off them during 3D reconstruction
- No more streaks around materials that block most X-rays, such as metal or bone + better contrast in images

**R&D Iterative algorithms** Expert CT reconstruction methods (SART, SIRT, OS-SART) on mono- and multi-GPUs

- Superior image quality : less artifacts and enhanced results with low contrast and/or low S/N projections
- Dose reduction: decrease the acquisition time and achieve the same results with less projections

**DigiMEAS** Toolkit for informative measurements, oriented slices extraction, advanced surface rendering and analysis

- Angle, circle and segment measurements ; visualization and export of oriented cut-planes
- Certified mesh export (triangles with perfect shapes, no missing ones) in SURF, STL, POINTS and OBJ

### Contact details

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