DeskTom CT Scanner
3D Micro Computed Tomography
& Digital Radioscopy System

# Compact CT Scanner with Ultra 3D Accuracy and Resolution

#### **DeskTom Features**

- Real time high resolution digital radioscopy
- No maintenance (Sealed Micro-focus tube) 130-150 kV
- Precision motorized motions axes (X,Y, Z, Rotary)
- Customize automation control cycles
- Resolution: to 5μ Accuracy to: +/- 5μ
- Full inspection volume 18 cm (7") diam\* 23 cm (9")
- Full inspection 25 cm (9.8") long sample
- 4 to 400 μm/voxel resolution

## **Easy to Use Software**

- X-ACT CT acquisition software with multiple advanced plugins, semi-automated wizard plugin, macros for automated workflow, and CT reconstruction
- External and Internal Surface Geometry output as .STL for use with popular 3D Scan Data Processing Software
- Optional 3D Visualization and post processing software suites available to fit any application: Inspection, Reverse Engineering, Analysis, Porosity, Fiber Alignment, Wall Thickness, Comparison to CAD 3D Color Maps and much more



### Non-Destructive Scanning

The DeskTom CT Scanner is an x-ray inspection machine with computed tomography (CT) allowing collection of complex internal and external geometry. Parts fabricated from materials such as thermoset and thermoplastics, ceramics or composite materials, as well as magnesium, aluminum and steel can be measured and efficiently evaluated. Internal structures and assemblies as well as fiber analysis and porosity can easily be visualized, analyzed and documented.



	DeskTom CT Scanner
Safety Cabinet	<ul> <li>Footprint: 1250 x 800 x 1800 mm / 49.2"x 31.5" x 70.9"</li> <li>Lead / Steel construction and X-ray safety interlocks, designed to meet X-ray safety regulations,</li> <li>Door with automatic locker during X-ray emission,</li> <li>Total weight of the system: &lt;800 kg.</li> </ul>
Mechanics	<ul><li>High accuracy motorized rotation and translation axis</li><li>Maximum sample weight: 2 kg</li></ul>
X-Ray Generator	<ul> <li>Sealed micro-focus tube,</li> <li>Voltage up to 150 kV,</li> <li>Directional type,</li> <li>Down to 5 μm resolution.</li> </ul>
Imager	High resolution flat panel detector  • 1920 x 1536 pixels,  • Active area: 20 x 25 cm,  • 1-60 fps,  • 127 µm pixel size,  • 16 bits – 65 000 grey levels,  • Very low noise and geometrical distortions,  • Long life time.  Other images available on request
Computers	<ul> <li>Various powerful GPU(s) configurations available</li> <li>PC, High resolution display screen, Windows 10</li> </ul>
Softwares	RX Solutions X-ACT software:  • Multiple advanced plugins to drive generator, imager, axes  • Other plugins available for: metrology, video sequences acquisitions, image filtering and processing, image export  • CT acquisition:  - Semi-automated wizard plugin  - Advanced plugin with options (360° rotation, stack, helical, continuous rotation, laminography)  • Learning / Macros mode for automated workflow  • CT reconstruction: GPU implementation including various filters  Post-processing software: 3D visualization, metrology, CAD comparison, porosity and wall-thickness analysis modules (in option).
Analysis Software (Optional)	<ul> <li>Volume Graphics Studio Max</li> <li>3D Visualization and post-processing software with metrology, CAD comparison, porosity, and wall thickness analysis module</li> </ul>

#### Manufactured by RX Solutions SAS, Chavanod, France







