

# CT-MICRO 80 & 100



When it is important to have a full micro CT-System in a limited space, PXR's benchtop-systems are the right choice. The application of CT allows one to conduct non-destructive testing to discover microscopic potential faults to optimise production.

This system grants the best performance for minimal cost.

The CT-MICRO is equipped with an 80 kV X-Ray source in the CT-MICRO 80, a 100 kV X-Ray source in the CT-MICRO 100, and a large 6.7 Megapixel Flat-Panel Detector in both models. The system is constructed with lighter weight materials and thus weighs ~250 kg. This enables application in every laboratory without the need for heavy load floors.

The CT-MICRO offers all options of the larger floorstanding models like Axial-Scans and Fast-CT.

## Key Facts

**Lightweight and smaller footprint:** optimised for laboratory and research environments

**Versatile application with no compromises:** wide range of options from fast scan applications to high-resolution scans

**Affordable:** the best performance in this price class

**Repeatable:** automate routine tasks with pre-defined scripts

**Application examples:** biological samples, cavities in cartridges, dental implants, plastics, 3D printed items

The 100 kV X-Ray-Source has a maximum power of 15 Watt and the minimum focal spot can be less than 5  $\mu\text{m}$ , which allows to resolve features smaller than 3  $\mu\text{m}$ . The combination with a large Flat-Panel-Detector with 50  $\mu\text{m}$  pixels, it allows the system to scan large objects in a very short time frame.

Like all benchtop systems, the CT-MICRO plus is ideal for non-destructive testing, materials analysis, metrology, rapid prototyping and further applications.

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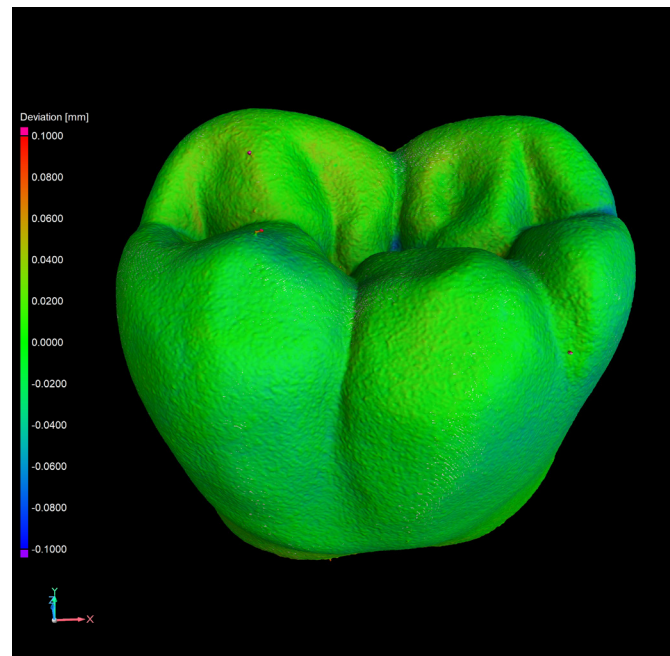
## Specifications

The CT-MICRO is available in 80 kV and 100 kV models

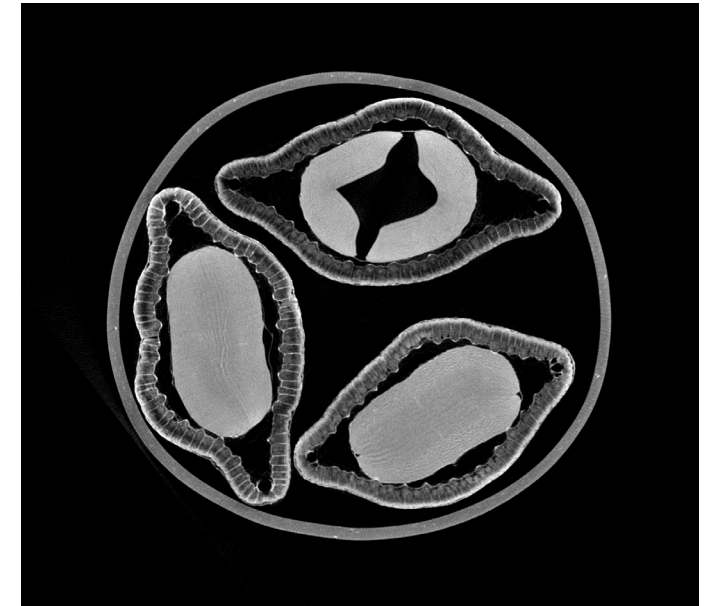
X-ray source	20 - 100 kV up to 15 W 5 µm min. focal spot
Detector	6.7 Megapixel 50 µm pixel size 2800 x 2400 pixel
Highest spatial resolution	< 3 µm
Smallest voxel size	< 3 µm
Max. object size	Ø 250 x H 230 mm
Max. object weight	10 kg
Max. scan size	Ø 107 x H 100 mm
FDD (both models)	300 mm
FOD (both models)	7 - 250 mm
Number of axes	3
System dimensions (L x W x H)	1090 x 500 x 450 mm
System weight	~250 kg
Power supply	100 - 240 V AC, 50/60 Hz

## Features

- ▶ Industrial X-ray Computed Tomography (CT)
- ▶ 3D volume CT
- ▶ Non-destructive testing (NDT) – 2D and 3D
- ▶ Quality control independent of material
- ▶ Defect recognition (voids, cracks, etc.)
- ▶ Contactless metrology
- ▶ Fast CT reconstruction
- ▶ Artefact reduction
- ▶ Easy operation & low maintenance needs
- ▶ Radiation safety better than 1 µSv/h



Quality assurance of dental products



Sunflower seeds and shells

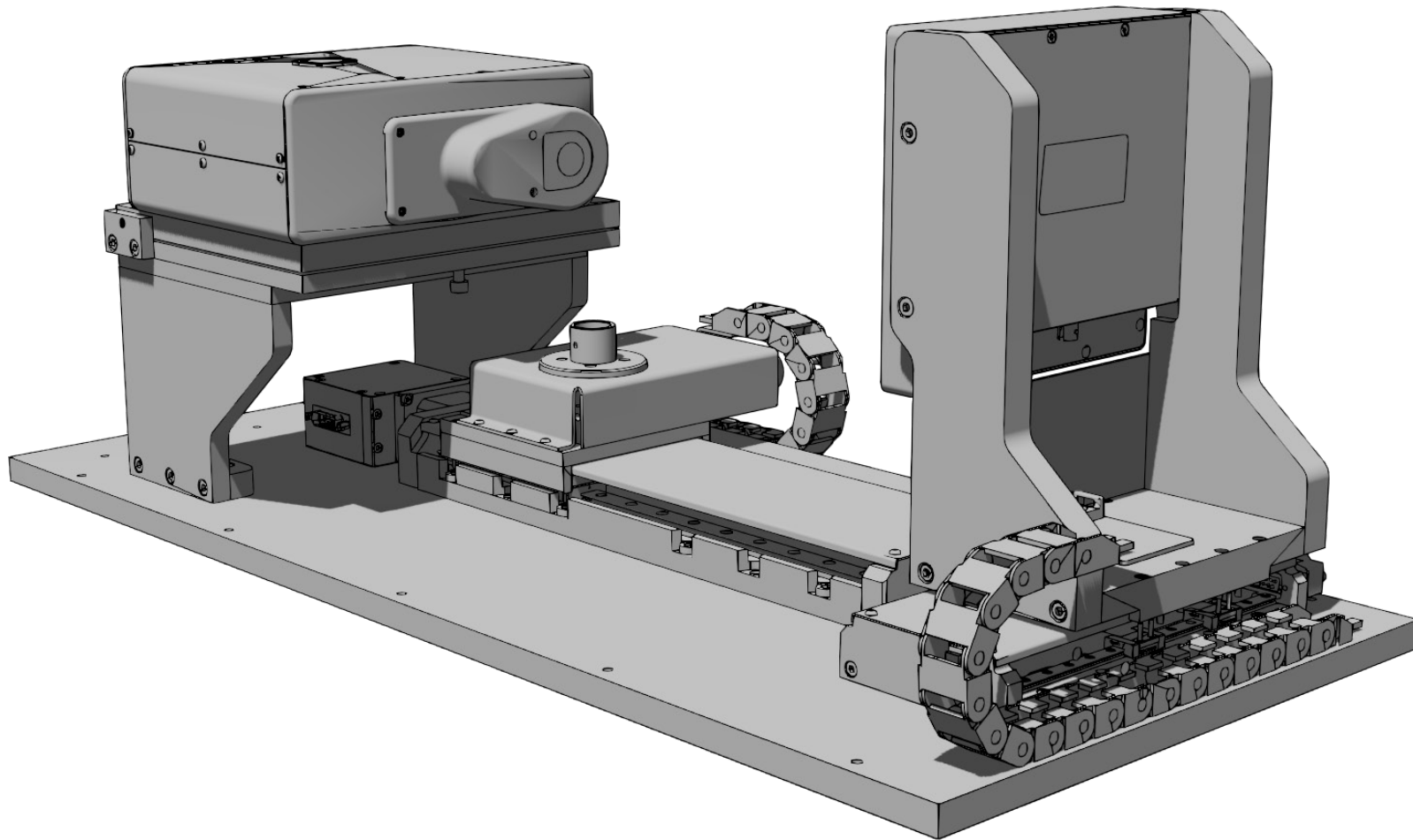
## Application Cases

Above: analysis of the shell structure of sunflower seeds for research purposes.

Left: actual nominal comparison of lab-made prosthetic teeth ensure a high quality product and guaranteed customer satisfaction.



To read more about this system, scan the code to visit our website.



Concept drawing showing the inside of the CT-MICRO. This system provides generous space for a broad range of samples.