



## CT-ALPHA

This system meets the most stringent demands in CT X-ray. With the CT-ALPHA, we offers the highest possible flexibility for individual customer requirements.

This space-saving system can be equipped with different X-ray powers, from 160kV for nanometer resolution through 225 kV, 320 Watts to the highest power of 320 kV, 800 Watts.

The variable focus-detector distance permits maximum contrast. As an option, the CT-ALPHA offers the Helix-Scan technique for longer objects as well as for the best avoidance of volume CT artefacts for optimum results in dimensional measurement.

Very large geometric magnifications permit real-time reconstructions in the submicron range. The CT-ALPHA system is ideal for nondestructive testing, materials investigations and, in particular, dimensional measurements of internal structures, undercuts and free form surfaces.

### 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, ...)
- ▶ Contactless metrology
- ▶ CT reconstruction in real-time
- ▶ Ring artefact suppression
- ▶ Helix CT
- ▶ Easy operation
- ▶ Radiation safety better than 1  $\mu\text{Sv/h}$

	Standard	Advanced	Metrology
<b>X-ray voltage</b>	160 kv	160 kv	225 kv
<b>Detector</b>	50 $\mu\text{m}$ , 1 K <sup>2</sup>	33 $\mu\text{m}$ , 9 K <sup>2</sup>	100 $\mu\text{m}$ , 8 K <sup>2</sup>
<b>Specimen</b>	70 mm, 5 kg	70 mm, 20 kg	300 mm, 50 kg
<b>Axes</b>	5	5	5
<b>Reconstruction</b>	1 K <sup>3</sup> , real-time	1 K <sup>3</sup> , real-time; 27 K <sup>3</sup> , off-line	1 K <sup>3</sup> , real-time; 32 K <sup>3</sup> , off-line
<b>Smallest 3D detail (voxel)</b>	1 $\mu\text{m}$	0.33 $\mu\text{m}$	0.25 $\mu\text{m}$
<b>System weight</b>	2100 kg	2300 kg	2600 kg