

Veterinary CT Scanning Protocol

Adherence to the parameters specified in this scanning protocol is necessary to obtain correct segmentation and subsequent angular calculation results.

PARAMETERS

Matrix size	512 × 512
Slice thickness	0.625 mm
Increment	No more than 0.625 mm
Gantry tilt	0 — tilted reconstruction is prohibited
Scan region	Area of interest + 10 mm of adjacent space. For correct Bonabyte automatic segmentation and subsequent angle calculations, the CT scan must encompass the entire hind limbs from the pelvis down.
Reconstruction algorithm	B60s
Format	DICOM in a .zip or .rar archive

SCANNING GUIDELINES

- Scanning must use equal intervals between slices, less than or equal to the slice thickness.
- Only axial images are required; no additional image transformations are needed.
- Images acquired with a tilted gantry, as well as reformatted images, negatively affect accuracy. Use only primary axial images.
- All images must cover the same region and reconstruction center, and must be performed at the same table height.
- If the patient has metal implants or other metal objects, use the artifact suppression function.

NOT SUITABLE

- Cone-beam CT (CBCT) - due to distorted density values and artifacts.
- Scans missing the required area (e.g., without the TMJ, if required).

ONCOLOGY CASES

For visualization of the tumor for reference purposes only, an MRI with a slice increment of no more than 2 mm must be provided, in the same region coordinates as the CT scan. This service is not included in standard segmentation.