Cone Beam 3D Imaging
NewTom VET
what's next

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NewTom 5G XL
VET.VISION

ADVANCED 3D VETERINARY IMAGING

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what's next

CUTTING EDGE PERFORMANCE FOR ADVANCED DIAGNOSTICS.

Outstanding quality and innovation, exceptional features.

NewTom 5G XL, a CBCT device incorporating unique technology, guarantees advanced top-level diagnostics by maximising patient stability and providing a broad selection of FOVs, resulting in 3D and 2D images of the very highest quality.

CBCT technology combines low X-ray doses with high spatial resolution: the outstanding quality of 5G XL images allows veterinary specialists to identify pathologies and fractures that would otherwise be unidentifiable. Patient health - enhanced by the ECO Dose mode and exclusive SafeBeam™ technology - is a key design priority.

The native 21 x 19 cm FOV and numerous smaller high resolution FOVs constitute a 'toolbox' that is perfect for veterinary diagnostics, which demand sharp and extremely detailed images.

SUPERIOR DIAGNOSTIC QUALITY

Very high resolution 3D and 2D images and a broad range of FOVs make the device suitable for a vast selection of clinical applications.

MOTOR-DRIVEN PATIENT TABLE

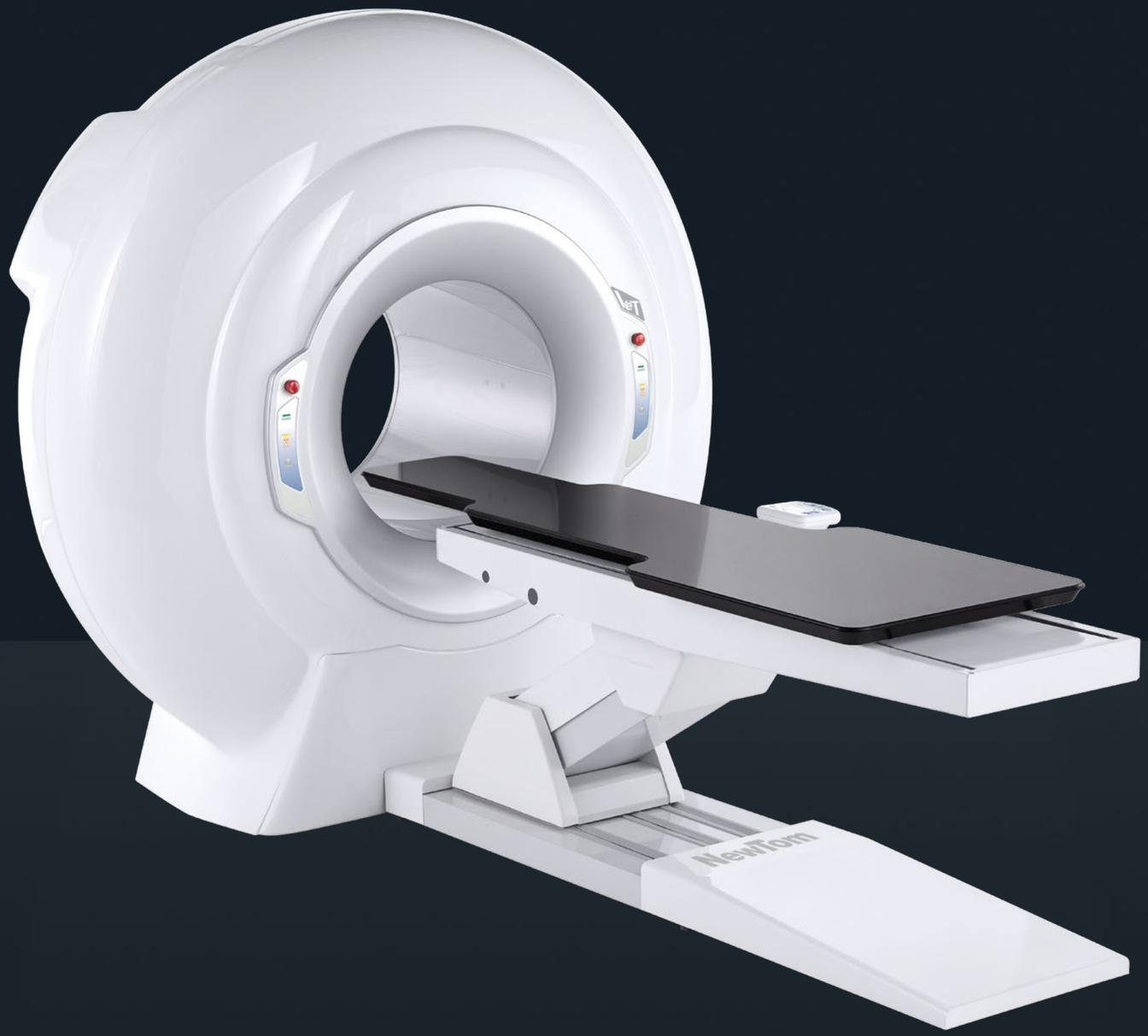
A CBCT system with an open gantry and motor-driven patient table allows remote-controlled patient positioning, ensuring stability and fast completion of examinations.

MINIMUM TIMES, MAXIMUM USER-FRIENDLINESS

Minimum scan times and automatic calculation of X-ray doses ensure fast acquisition of detailed images and maximum diagnostic capacity.

VETERINARY SOFTWARE

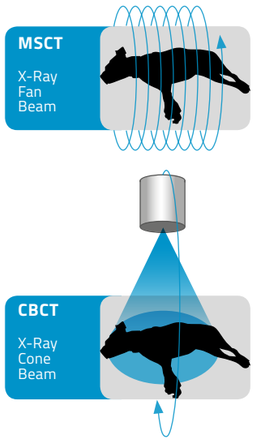
The dedicated interface allows users to display images and access innovative 3D and 2D analysis functions for fast, accurate diagnoses and optimal workflow.



SUPERIOR DIAGNOSTIC QUALITY.

Superior standard 3D examinations with a device designed for excellent performance.

Ultra-high definition volumetric images with native isotropic voxel resolution and minimal artifact presence. Thanks to CBCT technology, 5G XL offers fast scanning and extremely contained X-ray doses, increasing safety for both operator and patient and ensuring a more efficient workflow.
The outstanding versatility of 5G XL makes it the perfect device for otorhinolaryngological and muscular-skeletal diagnoses, with or without radiocontrast agents, for complete upper airway analysis and for the investigation of dental and maxillofacial pathologies.



COMBINING TECHNOLOGY, PERFORMANCE AND SAFETY

5G XL offers outstanding results with low radiation doses for the patient, all thanks to undeniable constructive excellence:

- The X-ray generator, the only one of its kind in the world, with rotating anode and a 0.3 mm focal spot, optimises performance by adapting emissions to the specific needs of the examination. It also provides high filtration levels to protect the animal from more harmful radiation types.
- The large Flat Panel sensor with high signal-noise ratio improves final image quality, while collimation limits exposure to the specific regions of interest.
- Innovative volumetric reconstruction algorithms allow the user to control the 'image chain' and maximise diagnostic potential while minimising the presence of artifacts.

360° reconstruction

The 360° scan acquires the entire volume with a single rotation.
5G XL rapidly generates a complete dataset of axial, coronal and sagittal images as well as 3D renderings.

eXtra FOV vision

The eXtra FOV function allows the user to examine large anatomical districts longitudinally (Ø15 x 22 cm). The availability of multiple 3D FOVs, from a minimum of Ø6 x 6 cm to a maximum native FOV of Ø21 x 19 cm, optimises image acquisition.

HiRes analysis

The ultra-high spatial resolution of 5G XL returns extremely clear, detailed images, allowing for the clear display of micro-fractures and micrometric anatomical details.

MOTOR-DRIVEN PATIENT TABLE.

The NewTom 5G XL is characterised by a motor-driven, carbon fibre patient table. Controlled via a panel on the machine, it ensures comfortable, easy access to the gantry for operator and patient alike.

Motor-driven table control is even easier when performed via the PC as it allows the user to adjust patient positioning directly from the workstation. The open gantry makes access to the scan area easy and simplifies, along with the three reference lasers, the management of initial patient positioning (dorsal, ventral, rostral, cranio-caudal or caudo-cranial).

MINIMUM TIMES, MAXIMUM USER-FRIENDLINESS.

Simplicity and speed of use for outstanding quality in the veterinary field.

SafeBeam™ is an exclusive function that uses the patient's anatomy as a starting point for automatic calculation of the dose needed to obtain optimal image quality. Thanks to SafeBeam™, obtaining ultra-high quality diagnostic images has never been easier and faster.

Moreover, dedicated protocols such as ECO Scan and Ray2D allow for fast performance of examinations in specific modes, thus preventing any loss of time or energy.

Minimum scan times and automatic calculation of X-ray doses thus ensure veterinary specialists can acquire detailed images quickly to maximise diagnostic results.

ECO Scan

X-ray emission times reduced to as little as 0.9 seconds in the case of standard examinations. The ECO Scan protocol is ideal for post-surgery follow-ups and macro-structure analysis.

SafeBeam™

Exclusive SafeBeam™ technology eliminates the risk of exposing the patient to an unnecessarily high dose by automatically adapting radiation levels to the patient's anatomical characteristics.

Ray2D

The Ray2D function allows the user to perform a preliminary low dose 2D X-ray examination; if necessary, this can be followed by a high resolution 3D examination of the specific area of interest for further in-depth diagnostics.

VETERINARY SOFTWARE.

Versatile, powerful imaging software to perform the examination, process the data and share the diagnosis.

NNT is an indispensable tool for processing and managing 2D and 3D images and X-ray videos created using the CineX function.

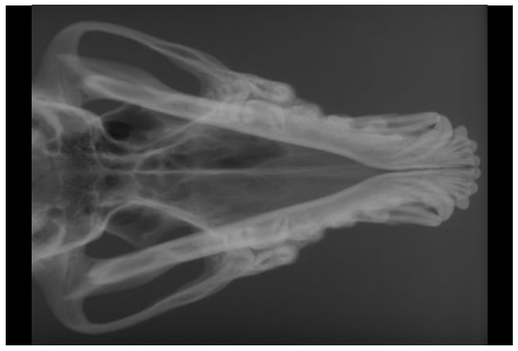
With its dedicated veterinary application interface, NNT software has been designed to meet the specific needs of veterinary radiologists and specialists, ensuring they have the flexibility needed for a full range of diagnostic requirements. Volume reconstruction algorithms and advanced filters - the result of NewTom's extensive experience and ceaseless work with the industry's key experts - optimise final image quality and reduce the presence of artifacts and the time needed for image reconstruction.

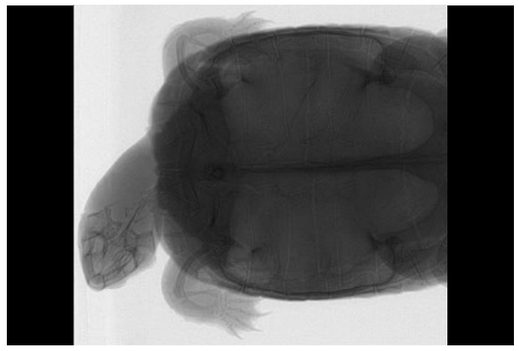
3D volumes, 2D images and videos processed with the CineX function, which are compatible with the DICOM 3.0 (IHE) standard, can be printed in 1:1 scale via fast, personalised reports or easily shared via the NNT Viewer (allowing those who receive them to use NNT software functions and tools).

SPECIALIST TOOLS.

Ray2D

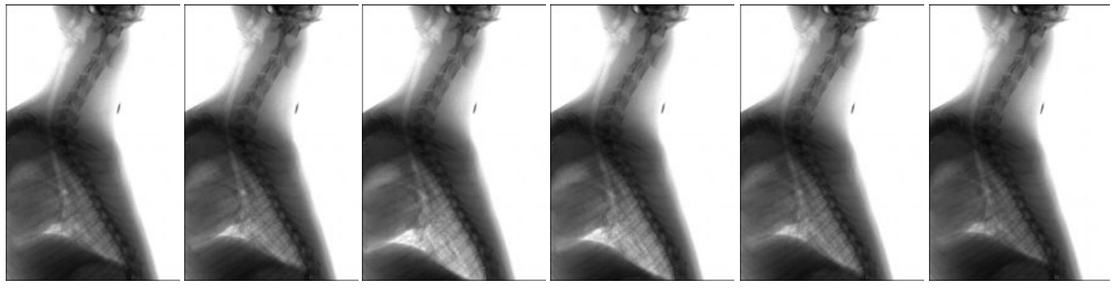
With the innovative Ray2D function, it's possible to generate 2D X-ray images (FOV 18 x 19 cm) that are suitable for both preliminary and post-surgery follow up examinations. Being able to select the image acquisition angle adds a further layer of simple-to-use diagnostic utility to this function.



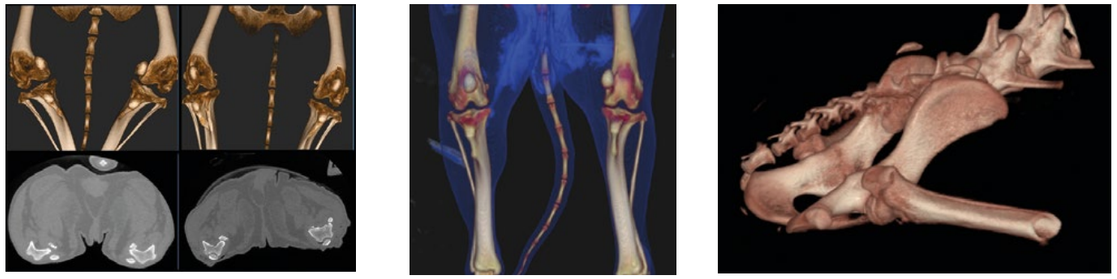


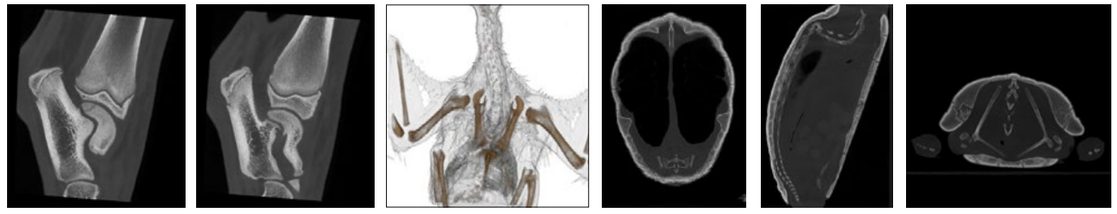
CineX

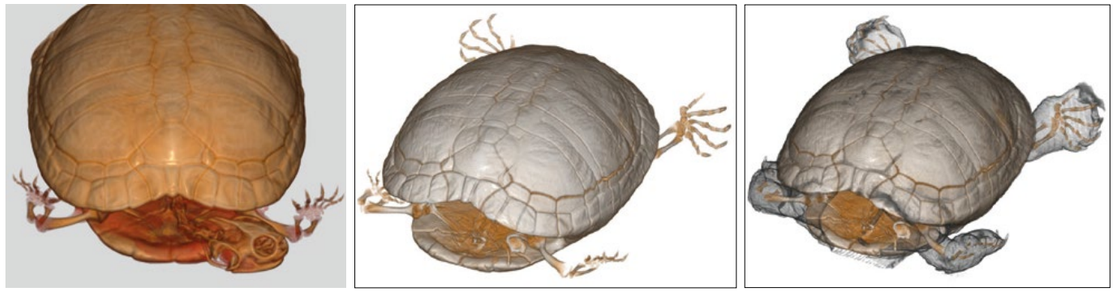
Right on the cutting edge of X-ray imaging, NewTom 5G XL includes the exclusive CineX function for the analysis of moving anatomical structures. A sequence of X-ray images, with FOV 18 x 19 cm, is used to produce a video of the patient that can be exported in proprietary, .avi or DICOM 3.0 format.



ORTHOPAEDIC APPLICATIONS.

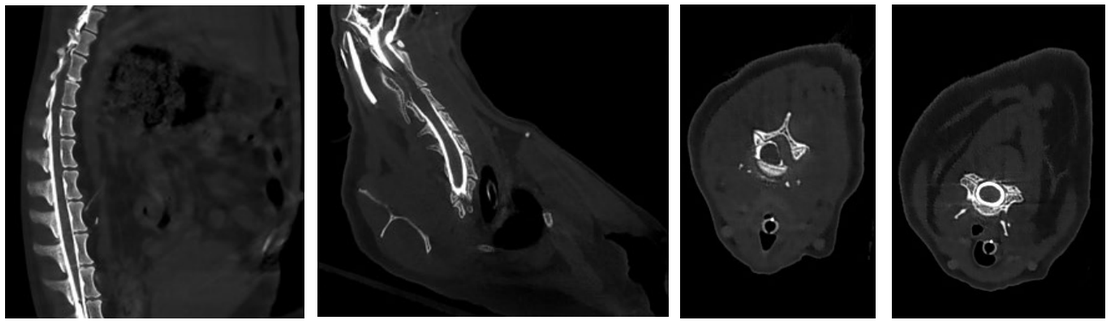




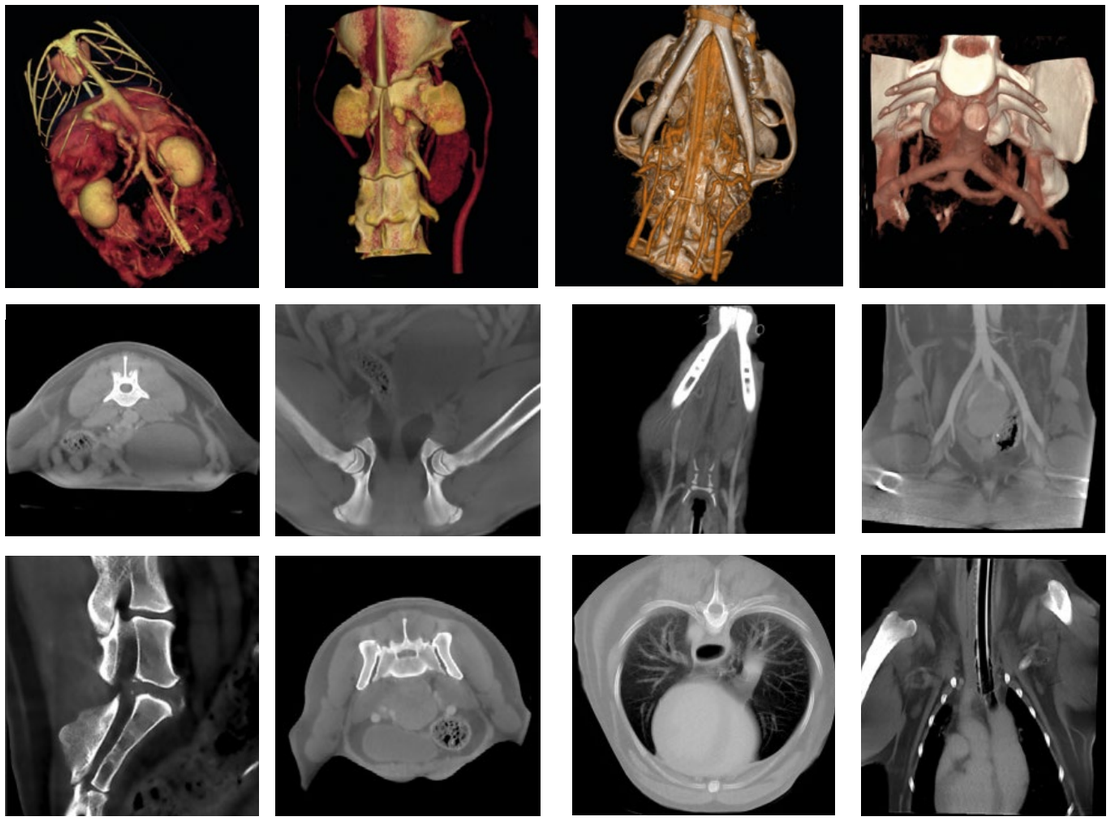


APPLICATIONS WITH RADIO-CONTRAST AGENTS.

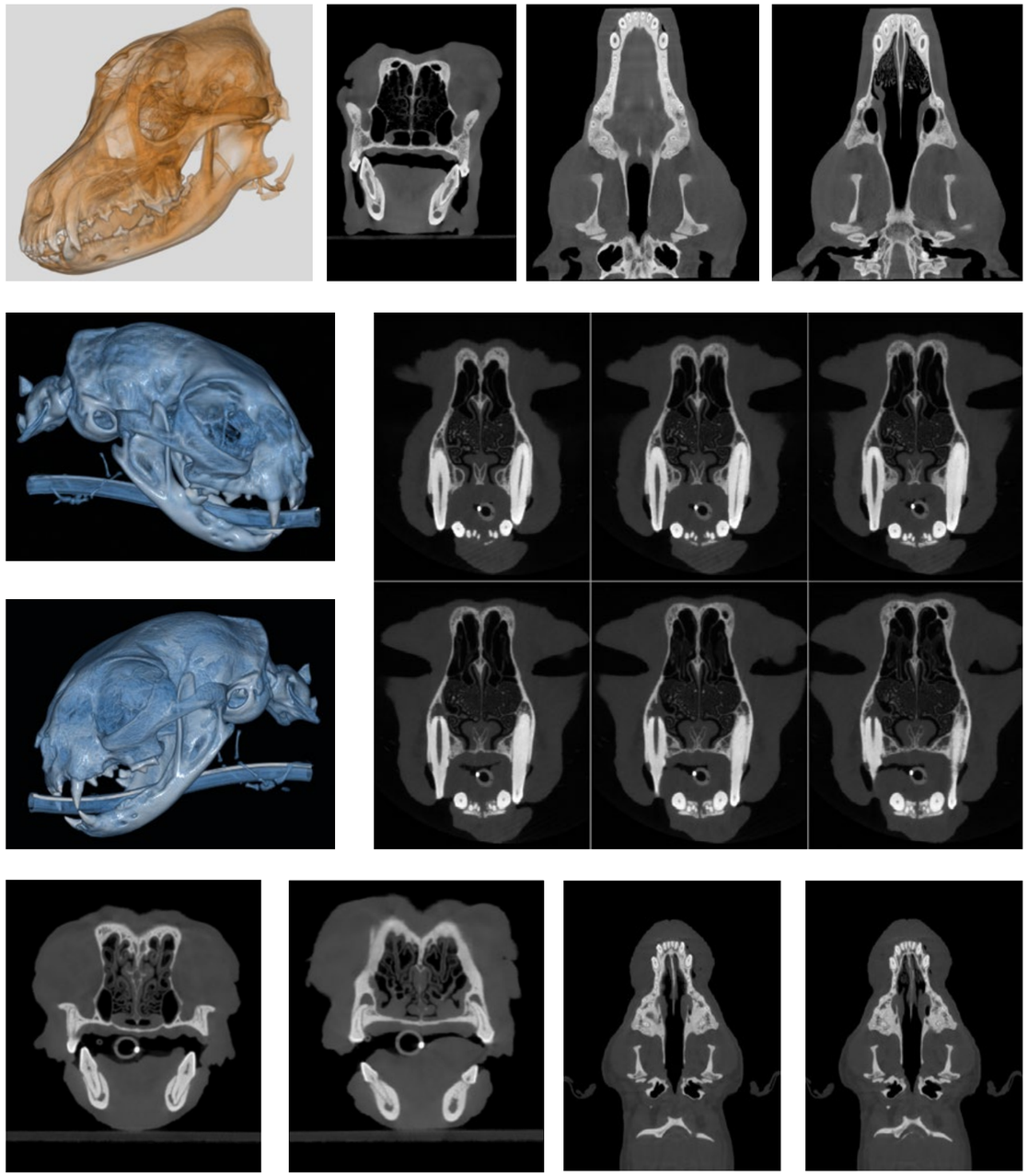
MYELOGRAPHY



EXAMINATION OF SOFT TISSUES

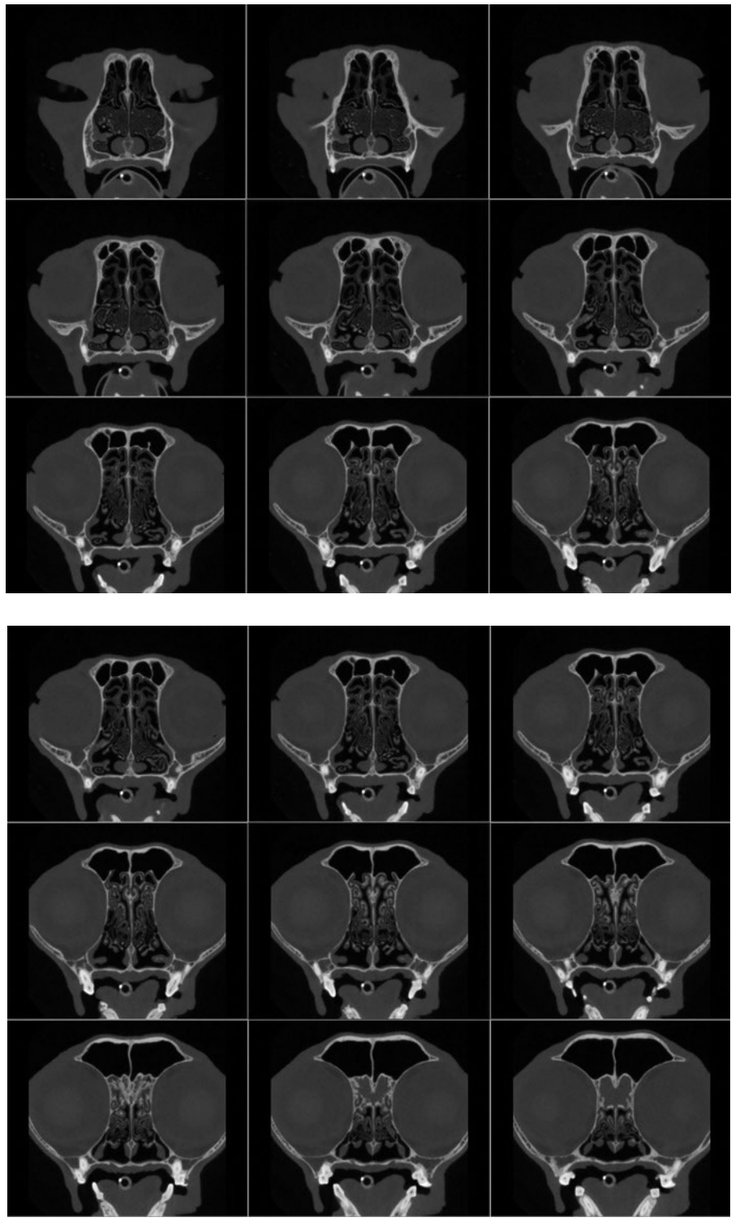


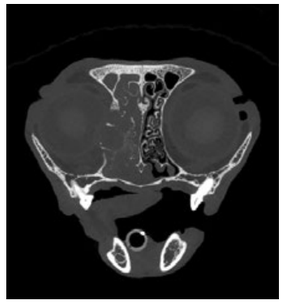
DENTAL APPLICATIONS.

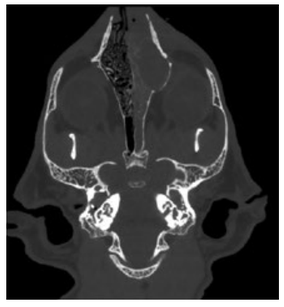


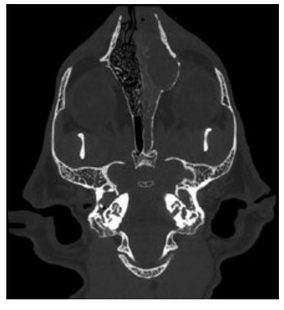
ENT APPLICATIONS.

EXAMINATION OF AIRWAYS

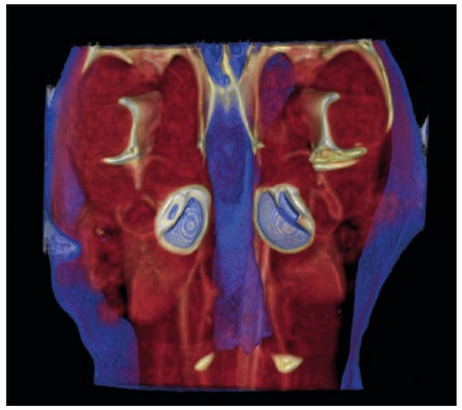


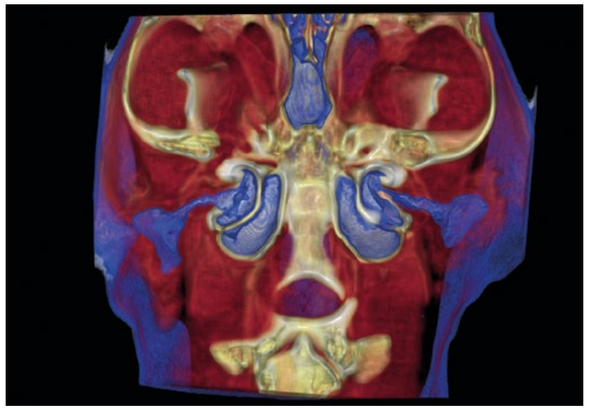


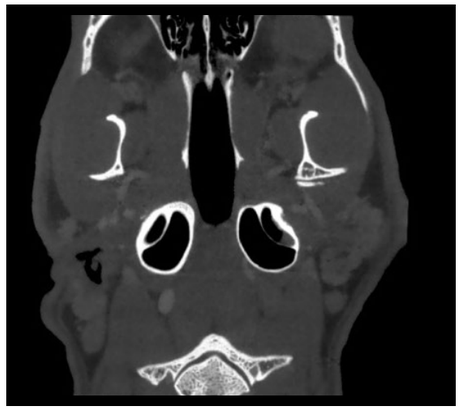


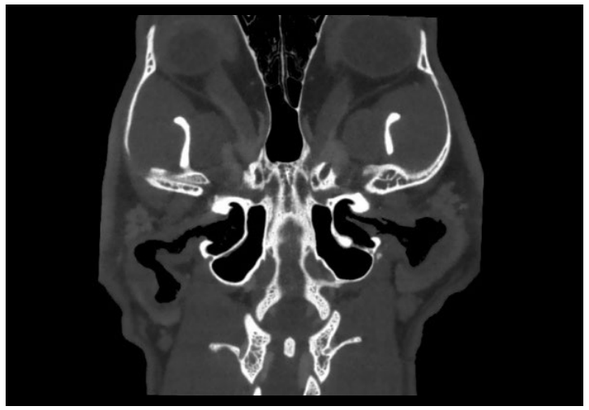


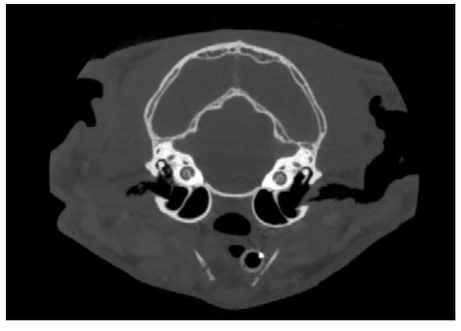
EXAMINATION OF EAR PATHOLOGIES

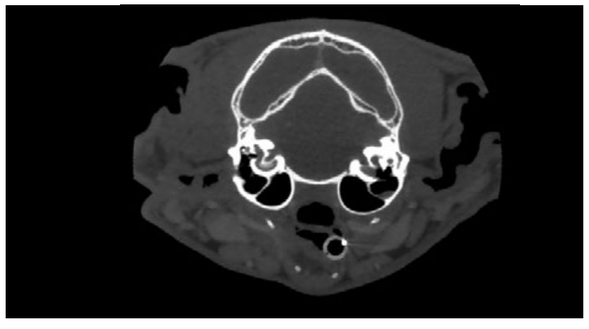










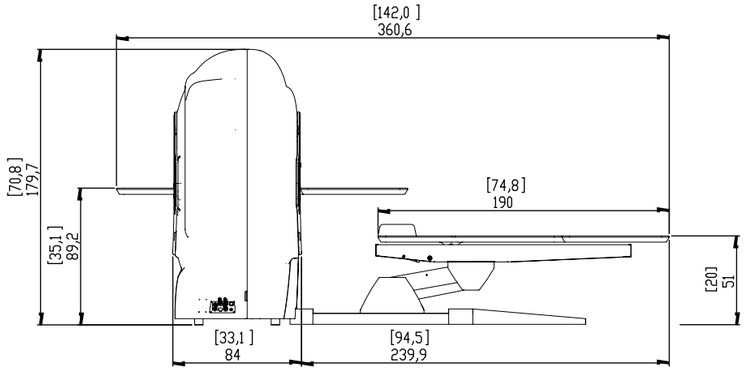


TECHNICAL SPECIFICATIONS.

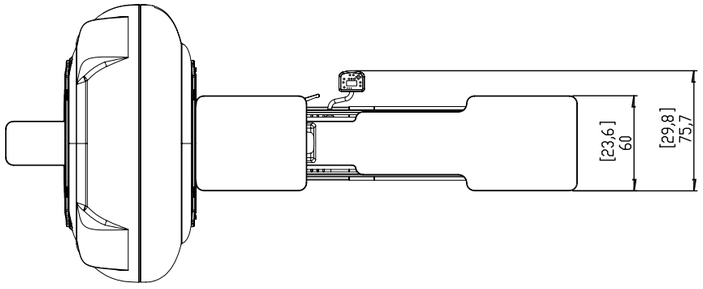
X-ray source	High frequency generator, rotating-anode X-ray tube
Focal spot	0.3 mm
Exposure control	SafeBeam™ to reduce exposure according to patient size
Sensor	Amorphous silicon flat panel
Grey scale	16-bit
3D scan time	18 - 36s
3D emission time	0.9s - 9.0s (single scan)
3D image acquisition	Single scan with Cone Beam technology. Complete rotation (360°)

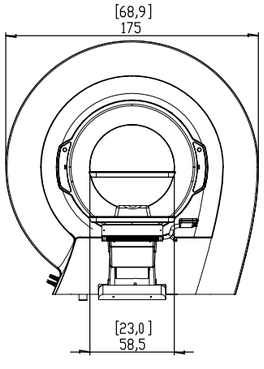
Available FOV Diameter x Height	Resolution		Selectable 3D scan modes			
	Standard	HiRes	Eco	Regular	Boosted	Enhanced
21 x 19 cm	■		■	■	■	■
18 x 16 cm	■		■	■	■	■
15 x 22 cm eFOV	■		■	■	■	■
15 x 12 cm	■		■	■	■	■
15 x 5 cm	■	■	■	■	■	■
12 x 8 cm	■	■	■	■	■	■
10 x 10 cm	■	■	■	■	■	■
10 x 5 cm	■	■	■	■	■	■
8 x 8 cm	■	■	■	■	■	■
8 x 5 cm	■	■	■	■	■	■
6 x 6 cm	■	■	■	■	■	■

Selectable voxel size Standard	200 - 300 µm
Selectable voxel size HiRes	100 - 150 µm
Reconstruction time	Less than 1 minute
Ray2D image acquisition	Digital Radiography (single shot, position selectable by user)
CineX image acquisition	1-36s serial radiography, FOV 18 x 19 cm (W x H)
Patient positioning	Lying down, prone or supine, in cranial-caudal or caudal-cranial position
Weight	660 Kg
Software	NewTom NNT with free Viewer software
DICOM nodes	IHE compliant (Print; Storage-Commitment; WorkList-MPPS; Query/Retrieve)
Power supply	15A @100/115 V~, 12A @200 V~, 10 A @220/230 V~, 8A @240 V~, 50/60 Hz



Dimensions in centimetres
(dimensions in inches)





Specifications subject to change without prior notice.

Available on the App Store

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