

X-Ray / CT

Anthropomorphic X-Ray Phantoms



Body Part X-Ray Phantoms

Phantoms to simulate anatomical reality in Education, Dose Awareness Programmes, X-Ray Equipment Tests and Special Trainings



Body Part X-Ray Phantoms

Our body part x-ray phantoms allow repeated x-ray imaging of specific body regions. The phantoms feature real bones. They are ideal for schools and education, but also for medical technicians since the same phantom can be x-rayed repeatedly in different settings without the danger of harming a patient. The bones are embedded in tissue-equivalent material.

All phantoms are hand-made and unique. They may differ in size and shape. Due to production technology there may be discolouring and cracks inside the phantom. This is related to production and presents no quality issue. These phantoms are only sold against a proof of medical use.

NOTE All part phantoms are available as transparent or opaque versions (just add -o to the article number to obtain the opaque version of the ordered phantom).

Head Phantom

Art. No. 12702

Featuring lower jaw and 5 vertebrae.



Hand Phantom

Art. No. 12711

Featuring wrist.



Foot Phantom

Art. No. 12712

Featuring ankle joint.



Arm Phantom

Art. No. 12713

Featuring lower arm and elbow.



Knee Phantom

Art. No. 12714

Featuring thigh, lower leg and kneecap.

Spine Phantom

Art. No. 12715

Featuring 24 vertebrae and sacral bone.



Hip Phantom

Art. No. 12716

Featuring pelvis, 2 lumbar vertebrae and thigh parts.

Head Phantoms

Specialised Head Phantoms for various applications



Dental Head Phantom

Art. No. 12701

The dental anatomy head phantom is specifically prepared to be used for dental applications such as panoramic, cephalometric, dental Cone-Beam CT, or general 3D imaging.

The phantom features a real human skull with lower jaw and 5 cervical vertebrae, the jaw is slightly opened. Due to the fact that the dentition is completely embedded in tissue-equivalent material, the phantom cannot be used with intra-oral sensors for training or testing.

For artefact assessment in dental x-ray, tooth repairs or inlays are included. Specific repairs, fillings or crowns can be added on customer request.

For easy positioning, a M6 screw hole is available to set up the phantom on a tripod. Case for transport and storage is included. Weight: 5-6 kg.

NOTE The head phantoms are available as transparent or opaque version (just add -o to the article number to obtain the opaque version of the ordered phantom).



Basic Head Phantom

Art. No. 12703

This anthropomorphic phantom features a real human skull with connecting jaws and no extra vertebrae.

Dental X-Ray Training Phantom

Art. No. 12704

The dental intra-oral X-ray training phantom includes a special DENTO-FORM® model with radio-opaque metal teeth, flexible finger for holding film, bite-opening instruments, and latex tongue.

Adult version. Chair mount included. Weight: 3 kg.

Also available: paediatric version, holder for bench/table.



Angiography Head Phantom

Art. No. 12705

This model consists of a real human skull which is embedded in a tissue equivalent head. In the left half of the skull the anterior and middle cerebral arteries are represented and filled with contrast medium. The diameter of the arteries range from 0.5 mm to 4 mm.

Weight: 5 kg.



Anthropomorphic Phantoms

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Torso Phantom CT

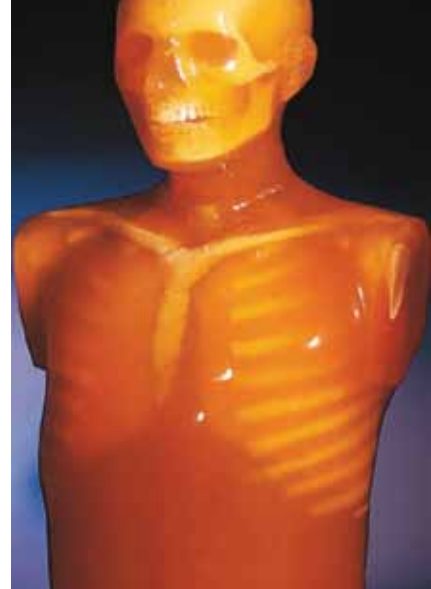
Art. No. 12721

A one-piece anthropomorphic torso phantom with anatomical structures allows various CT approaches including helical scanning.

Along with state-of-the-art synthetic bones, brain with cerebral ventricles, eye balls, lungs with three-dimensional pulmonary vessels, trachea, liver with portal and hepatic veins, kidneys, gallbladder, pancreas, spleen, aorta, cava, ureter, urinary bladder, prostate, rectum, sigmoid colon are embedded.

Each individual organ has a particular Hounsfield unit which corresponds to the human equivalent. The original phantom material featuring radiation absorption approximate to human tissue allows scanning in actual clinical settings.

The phantom covers the body sections from head to the lower pelvis including hip and parts of the upper thigh bones.



Chest Phantom for X-Ray and CT

Art. No. 12722

This multipurpose training model can be used in general X-Ray and Computed Tomography. It can be applied in trainings how radiographs are taken as well as for image evaluation trainings.

Additionally, the phantom can be used for assessment of x-ray and CT systems. All phantom structures are made of materials which have x-ray absorption rates close to human tissue. The model can be opened and artificial tumors can be inserted into the lung. 15 different tumors are supplied with the model.



Abdomen Phantom CT

Art. No. 12723

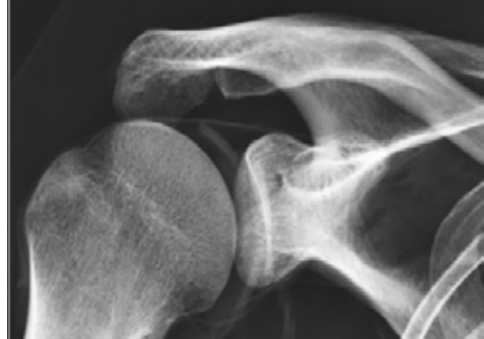
This unique anthropomorphic upper abdomen phantom allows obtaining CT images approximate to clinical data. The elaborate anatomy of organs allows a multi-dimensional approach.

Liver, portal vein, bile duct, hepatic vein, hepatic artery, kidneys, pancreas spleen and IVC are embedded along with synthetic bones. Each individual organ has a particular Hounsfield unit close to the human equivalent. Embedded anatomical structures are lungs (w/o internal structure), heart (w/o internal structure), liver, portal vein, bile duct, hepatic vein, hepatic artery, kidneys, pancreas, spleen, IVC, spinal column, ribs. Vessels and organs with a contrast agent can be included as a special order.



Full-Body X-Ray Phantoms

Unique Body Phantoms for various applications



Anthropomorphic (X-Ray) Training Phantom Art. No. 12731

This model is unique in the world and provides ideal prerequisites for x-ray trainings. It is a must-have for all radiological schools.

The phantom can be utilised for positioning practice as well as for general x-ray training.

The model contains a real human skeleton and allows taking x-ray images comparable to a real patient. In addition to the real skeleton, the phantom incorporates reproductions of heart, lungs, larynx and kidneys which can be identified on the x-ray images.

Each model is hand-made and differs in size and design. It may include some pathologies and may also differ in appearance. This model is only sold against proof of medical use.

Life size.

Weight: 32 kg.



Full-Body Positioning Phantom Art. No. 12732

As the true anatomy version, this model offers the same physical features but contains a full-body plastic skeleton. Its main purpose is therefore aimed at x-ray positioning training.

Weight: 32 kg.



Box for Full-Body Phantoms Art. No. 12731-B

Transport and storage box for full-body phantoms. Features handles for one or more people to move the box or safely transport the phantoms.



Specialised Body Phantoms

Phantoms to simulate anatomical reality in Education, Dose Awareness Programmes, X-Ray Equipment Tests and Special Trainings



Anthropomorphic CT Body Phantom

Art. No. 12724

A unique, life-size whole body phantom for CT provides a variety of educational applications as well as visual evaluation in finding out optimal CT scanning conditions. The phantom can also be used for plain X-ray, showing life-like images. No metal parts or liquid structure are used.

Main joints have close-to-human appearance, allowing various positions for training. The phantom can be disassembled into 10 parts. Improved shoulder joint system enables the phantom to take arm-up positions. Organs are anatomically correct and have appropriate HU numbers.

Patient Positioning: Shoulders (rotate through a full 360 degrees in the sagittal plane, approx. 180 degrees side-ways); Hip joints - rotate forward up to approx. 90 degrees, then abduct up to 45 degrees each; Knees - bend up to approx. 90 degrees; Elbows - bend up to approx. 90 degrees.

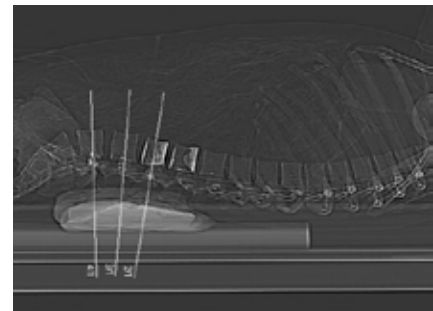
The phantom can be held in the supine frog leg position. Limbs and head are detachable at joints and neck for wider applications. The head support facilitates various head positions.

Internal Organs: head and trunk, synthetic skull, cervical vertebrae, brain, vertebrae, clavicles, ribs, sternum, scapula, coxal bones, femurs, lungs with pulmonary vessels, trachea, liver with portal and hepatic veins, pancreas, kidneys, gallbladder, spleen, aorta, vena cava, ureter, urinary bladder, prostate, rectum, sigmoid colon.

Phantom Materials: radiology absorption and Hounsfield number approximate to human body.

Size and Weight: 170 cm / 50 kg.

Also available as Paediatric Body CT Phantom (105 cm / 20 kg), or as completely modular version.



Lung Cancer Screening Phantom

Art. No. 12741

This phantom is an adapted CT phantom developed to optimise radiation dose and other scanning conditions for Lung Cancer Screening CT examination. Helical CT or MDCT can be tested.

As the screening is usually done on healthy people, the necessity of minimising the exposure while maximising the image quality is considered as imperative. The phantom is designed to simulate conditions for the early detection of small lung cancers such as GGA, which are difficult to diagnose in plain X-ray.

The anthropologic design of the phantom provides life-like images allowing operators a visual evaluation. Quantitative evaluation on radiation dose and density curve of the image can be done stimulatory with a single scan. The model consists of a life-size torso with arms-up position and has the following internal structures: bones; simulated tumors on sections of three lung area (apical portion of the lungs/bifurcation of the trachea/base of lungs); dosimeter inserts (13 mm diameter, on the central axis of the phantom); 8-step linearity phantom; 8 steps of 30mm diameter; embedded density samples.



Miscellaneous Phantoms

Phantoms for special applications



Coronary Simulator

Art. No. 12751

Heart catheter simulator consisting of plastic base with pump and electronics as well as silicone coronary model consisting of ventricle with coronary arteries, aortic valve, aortic arch with branches, descending aorta and femoral artery. Weight: 8 kg. The model features:

- Life-size reproduction of the coronary arteries
- All vessels are elastic and transparent
- Fluid filled, with pulsatile or continuous flow
- Several stenoses included
- Perfect for training of interventional procedures
- Visual as well as radiological supported catheter positioning possible
- Easy to use, power supply required
- Integrated basin for clean working
- Easy and quick vessel part replacement, if required
- Compact construction, perfect for mobile use



Also Available:

- _ Movement Phantoms
- _ Ultrasound QA/QC Phantoms
- _ Anatomical Charts
- _ Anatomical Models (Plastic)
- _ Skeleton Models (Plastic)
- _ Organ Models / Body Part Models (Plastic)
- _ Medical Simulators
- _ Cancer Prevention Models
- _ Veterinary Models



Patient Treatment Tables and Benches





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