Product Catalog V3.2

TRUE PHANTOM
SOLUTIONS

"From Medical Imaging to Training Simulation"

September, 2025

info@truephantom.com

www.truephantom.com

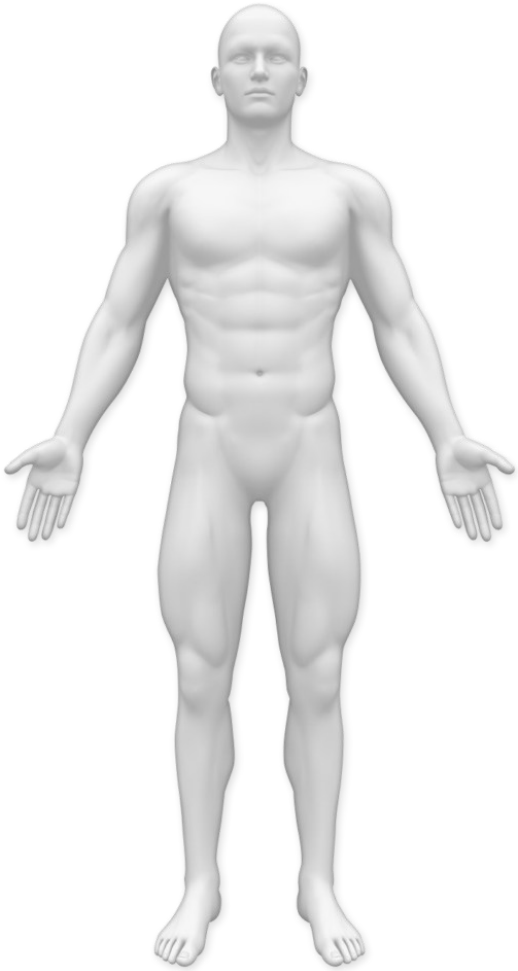
True Phantom Solutions

Expertise in X-Ray CT, US, MRI Phantoms

We are a multinational biomedical company specializing in the design and manufacture of realistic human body models, commonly known as phantoms. Engineered for accuracy and anatomical fidelity, our phantoms serve as advanced medical simulators for scientific research, product development, and clinical training.

Our phantoms are compatible with Ultrasound, MRI, CT, and X-Ray, offering realism and versatility across imaging modalities.

Patented technology| 2 Year product warranty | Lifetime customer service



We can produce phantoms of various shapes and sizes- from those shaped like simple geometric cubes for research purposes, to highly customized human or animal-like copies for radiation positioning training.

Through the use of 3D printing technology, we are also able to fabricate exact patient models based on customer's unique biomedical requirements.

Who do we help?

- Researchers/scientists in need of biomedical imaging phantoms for studying, developing, and testing imaging techniques and devices.
- Medical training institutions teaching X-RAY/CT, MRI and Ultrasound.
- Medical professionals looking to test and perform non-invasive neurosurgical HIFU procedures.
- Medical and nursing students requiring anthropomorphic phantoms to practice hands-on diagnostic imaging skills.
- Veterinary technicians and educators aiming to reduce the use of sedated animals for biomedical imaging training.
- Veterinary teachers/students developing skills in imaging and treatment of dogs, rodents, and other animals.

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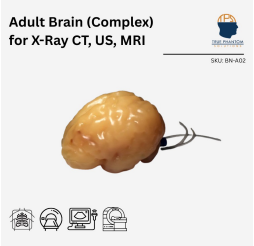

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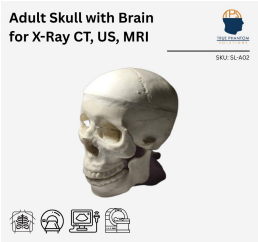

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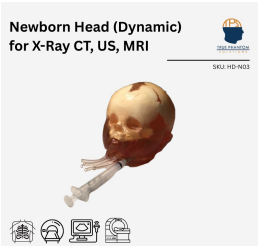

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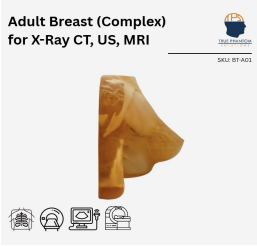

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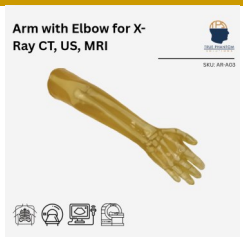

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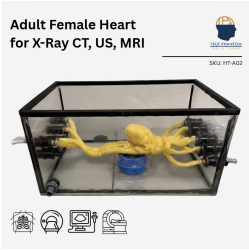

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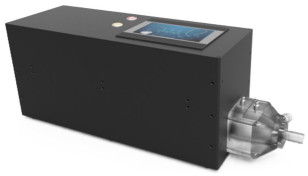

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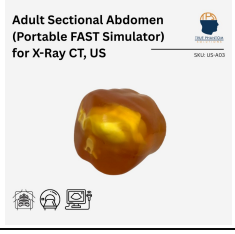

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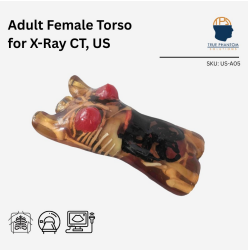

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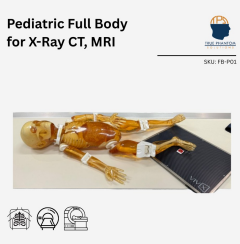

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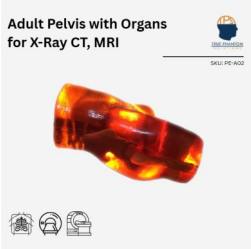

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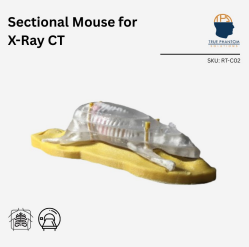

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Product Catalog

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X-Ray CT, US, MRI

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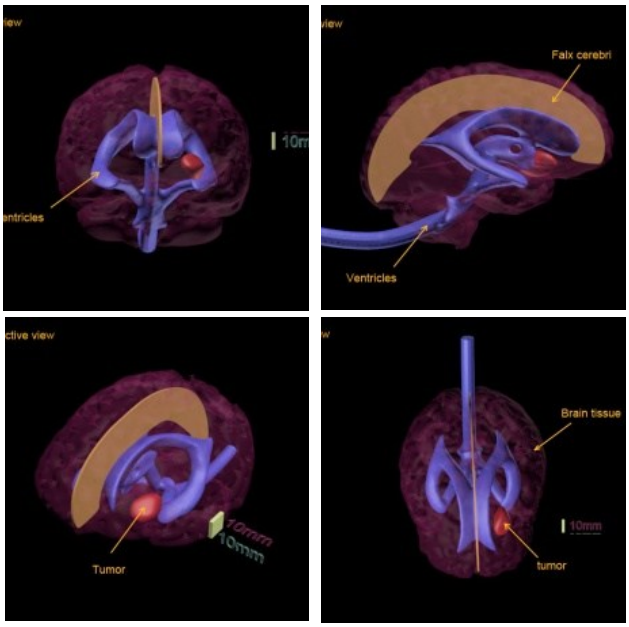
Adult Brain (Standard) for X-Ray CT, US, MRI



BN-A01

Description:

The Adult Brain (Standard) phantom is designed based on an average brain, and it is made out of realistic tissue-mimicking materials suitable for Ultrasound, MRI, and X-Ray/CT applications.

In terms of MRI applications, the phantom tissues have realistic T2 relaxation time values, which makes this product the best fit for any T2-weighted MRI imaging methods. Very good results can also be achieved with Proton Density imaging methods.

Anatomy:

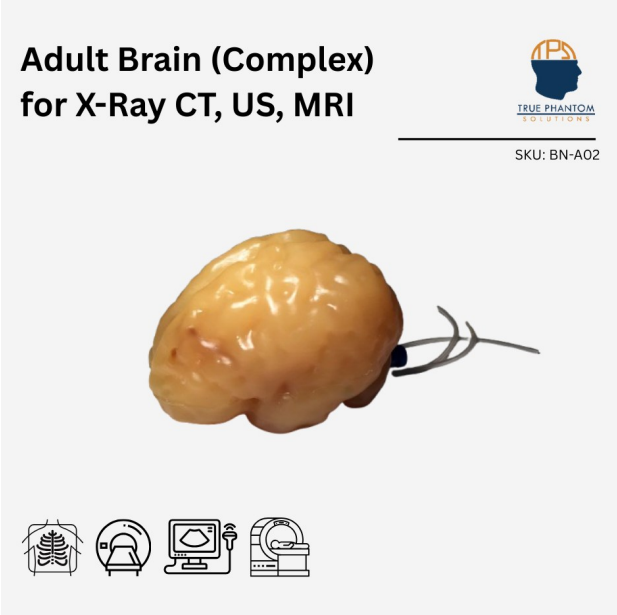
- Accurate Geometry and Dimensions
- Realistic Brain Phantom
- Realistic Brain Tissue
- Brain Ventricles
- Brain Tumor
- Falx Cerebri

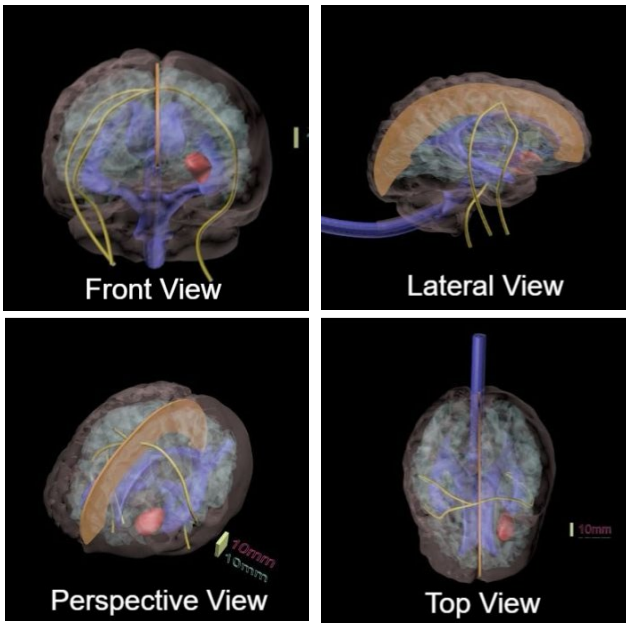
Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 2 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Brain (Complex) for X-Ray CT, US, MRI





BN-A02

Description:

The Adult Brain (Complex) phantom is constructed to resemble an average brain using realistic tissue-mimicking materials suitable for Ultrasound, MRI, and X-Ray/CT scans. It provides realistic T2 relaxation time values, making it ideal for T2-weighted MRI imaging. Proton Density imaging methods also yield good results.

Anatomy:

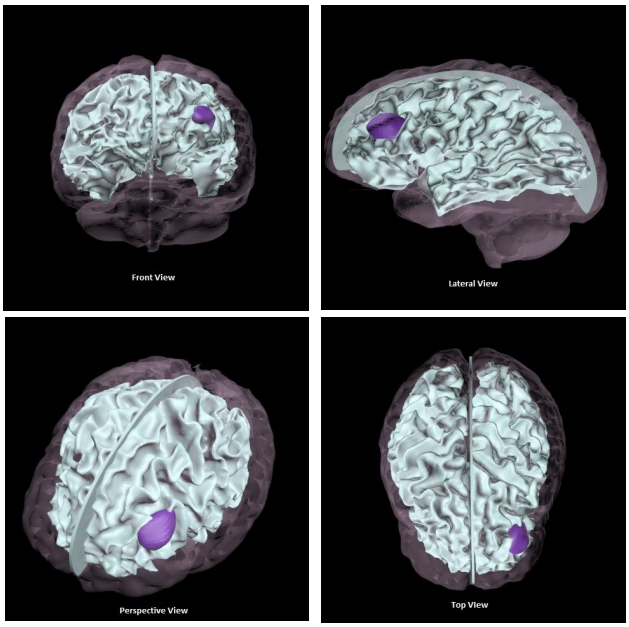
- Gray Matter
- White Matter
- Brain Ventricles
- Brain Tumor
- Blood Vessels with a 2mm Inner Diameter
- One Bifurcation
- Falx Cerebri

Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 2 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Brain (Basic) for X-Ray CT, US, MRI



BN-A03

Description:

The Adult Brain (Basic) phantom is a realistic training tool that resembles an average human brain. It is made with tissue-mimicking materials suitable for Ultrasound, MRI, and X-Ray/CT scans. The phantom features various components, including a tumor, realistic brain tissue, brain white matter, and brain grey matter, creating a comprehensive training experience.

Anatomy:

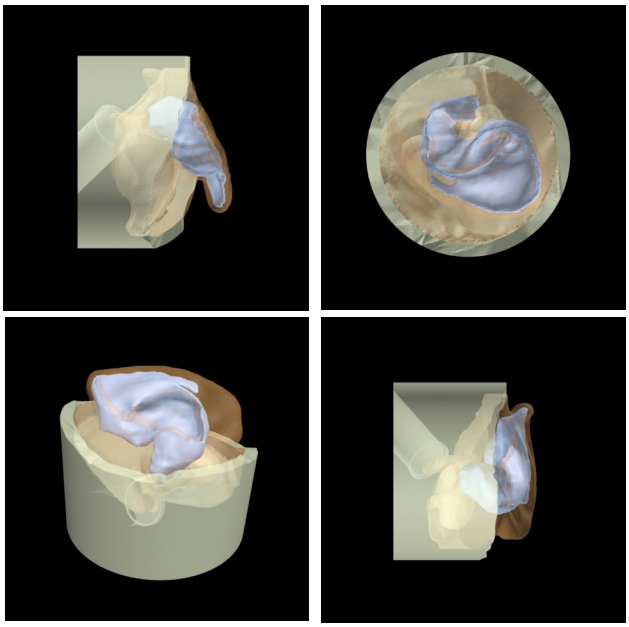
- Tumor
- Realistic Brain Tissue
- Brain White Matter
- Brain Grey Matter

Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 2 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Ear for X-Ray CT, US, MRI



ER-A01

Description:

The Adult Ear Phantom is designed around the complex anatomy of a human ear and is valuable for researching and developing noise reduction equipment. It can be customized for projects involving Ultrasound, X-Ray/CT, and MRI imaging. The phantom is an ideal tool for testing and calibrating hearing aid equipment and can be used as a stand-alone product or incorporated into the complete skull or head phantoms.

Anatomy:

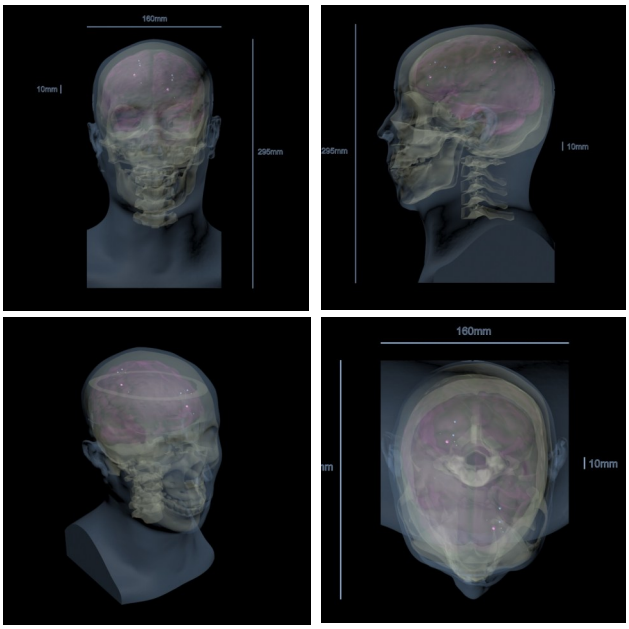
- Ear Cartilage Tissue
- Bone with Ear Canal
- Acoustically Accurate Skin Mimicking-Tissue

Size & Weight:

- Phantom Size: 3 x 3 x 3 Inches, Weight: 1 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Static) for X-Ray CT, US, MRI



HD-A01

Description:

The Adult Head (Static) Phantom is specifically designed for medical imaging of foreign static objects like bone fragments, shrapnel, and bullets. It mimics the average anatomy of a male head using soft and hard tissue-mimicking materials suitable for Ultrasound, MRI, and X-Ray/CT scans. The phantom's stable materials include a realistic three-layered skull structure with an inner diploe layer.

Anatomy:

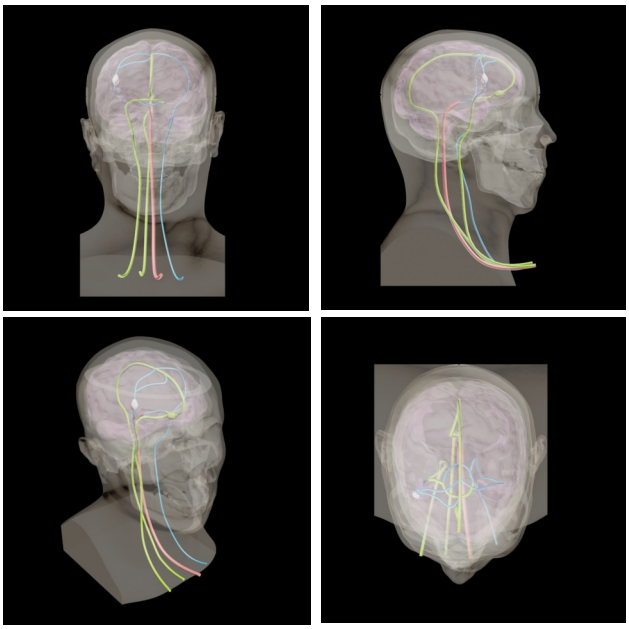
- Realistic Skull Phantom
- Realistic Brain Phantom
- Gray Matter
- Small Static Objects (0.5mm, 1mm, 3mm Diameters)

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Dynamic) for X-Ray CT, US, MRI



HD-A02

Description:

The Adult Head (Dynamic) Phantom is detectable on Ultrasound, MRI, and X-Ray/CT scans. Its brain parenchyma is made of an ultra-soft polyurethane-based material that resembles the soft tissue of a human brain. The skull bone features a realistic three-layered structure with an inner diploe layer. Additionally, the phantom includes realistic blood vessels that can be filled with commonly used blood-mimicking fluid, with or without a contrast agent

Anatomy:

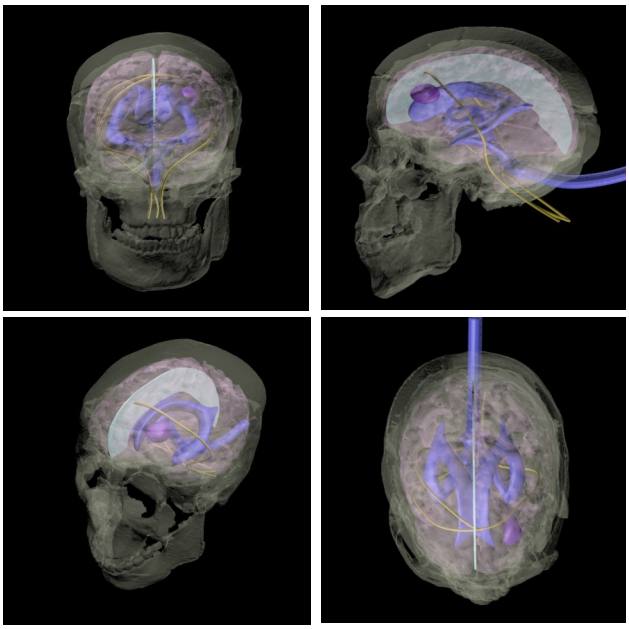
- Skull based on the CT Scan of a Human Head
- Realistic Brain Parenchyma (Grey Matter)
- Complex Brain Vessels Incorporated Circle of Willis
- One Bifurcation
- One Stenosis

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Standard) for X-Ray CT, US, MRI



HD-A03

Description:

The Adult Head (Standard) phantom is designed to resemble an average human male head and is suitable for Ultrasound, MRI, and X-Ray/CT applications. It features realistic tissue-mimicking materials, including an ultra-soft polyurethane-based material for the brain parenchyma. The phantom's skull bone has a three-layered structure. The phantom includes inflatable ventricles that mimic cerebral anatomy and can be filled with liquid

Anatomy:

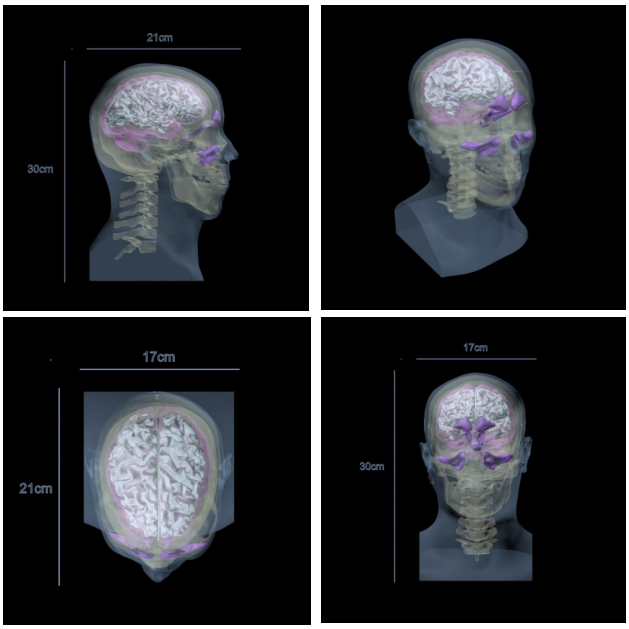
- Realistic Brain Phantom
- Water-Fillable Brain Ventricles
- Brain Tumor
- Blood Vessels with One Bifurcation
- Flax Cerebri

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Training, V1) for X-Ray CT, US, MRI



HD-A04

Description:

The Adult Head (Training, V1) is a radiology training phantom compatible with X-Ray/CT, MRI, and Ultrasound. The phantom's skull bone has a realistic three-layered structure, including an inner diploe layer. The phantom also includes a brain with synthetic tissue and ventricles.

Anatomy:

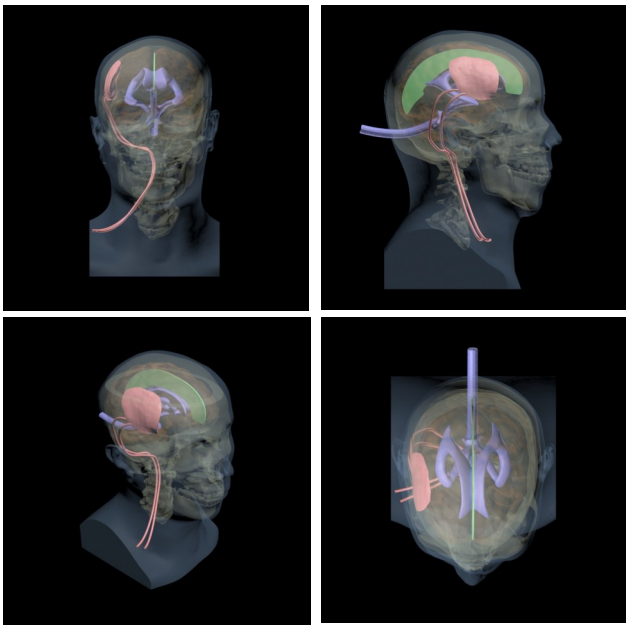
- Skull
- Brain :
  - Gray Matter
  - White Matter
  - Falx Cerebri
- Realistic Air Cavities
- Skin-Mimicking Material
- Cervical Spine
- Alignment Markings
- Frontal Sinus with Air Gaps

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Hematoma) for X-Ray CT, US, MRI



HD-A05

Description:

Our Adult Head (Hematoma) phantom is a cutting-edge medical training solution that seamlessly integrates with X-Ray CT, US, and MRI. This advanced phantom replicates the intricate anatomy of the human head, providing healthcare professionals with a realistic and immersive tool for skill development. This phantom is an excellent tool for applications relating to head trauma and hematomas. Upon special request, we can customize this head to mimic stroke, aneurysm, swelling and other such pathologies.

Anatomy:

- Skull Phantom
- Realistic Brain Phantom:
  - Gray Matter
  - Hematoma
  - Brain Ventricles
  - Falx Cerebri

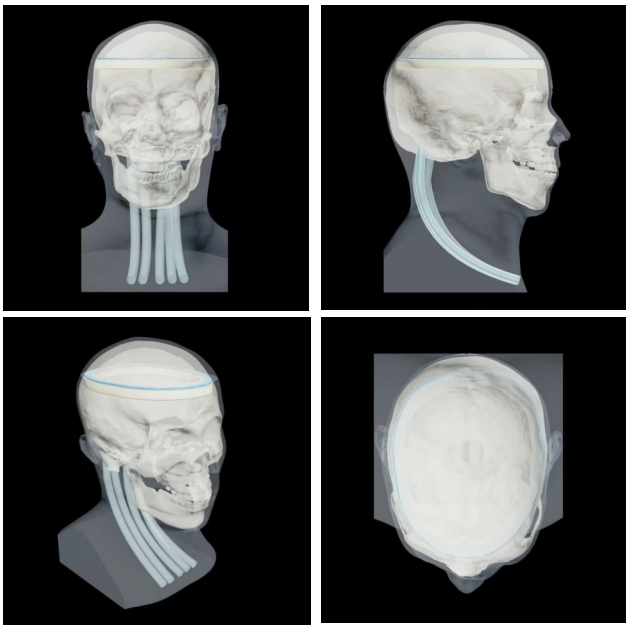
Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Openable) for X-Ray CT, US, MRI

HD-C01



Note: Brain is not included. Can be included upon request.

Description:

The Adult Head (Openable) Phantom is a versatile tool suitable for Ultrasound, MRI, and X-Ray/CT applications. It allows for easy insertion and removal of different brains, catering to various research projects. It can be customized for medical imaging, nuclear medicine, and training purposes. The phantom mimics realistic tissues and has a three-layered skull structure.

Anatomy:

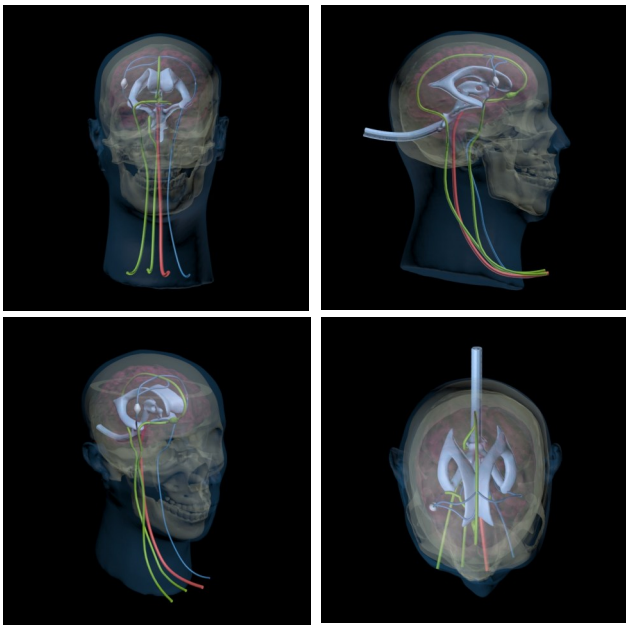
- Skull Phantom
  - Openable and Removable Calvaria
- Alignment Markings
- Acoustically correct Skin-Mimicking Material
- Brain Phantom (Optional)

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Head (Dynamic, Advanced) for X-Ray CT, US, MRI



HD-C02

Description:

The Adult Head (Dynamic, Advanced) phantom is visible on Ultrasound, MRI, and X-Ray/CT scans. It features an anatomically shaped brain made of a soft polyurethane-based material. The skull bone has a realistic three-layered structure. The phantom is suitable for T2-weighted MRI imaging and can also be imaged with Proton Density methods. It includes realistic blood vessels and an inflatable ventricular system that can be filled with liquid.

Anatomy:

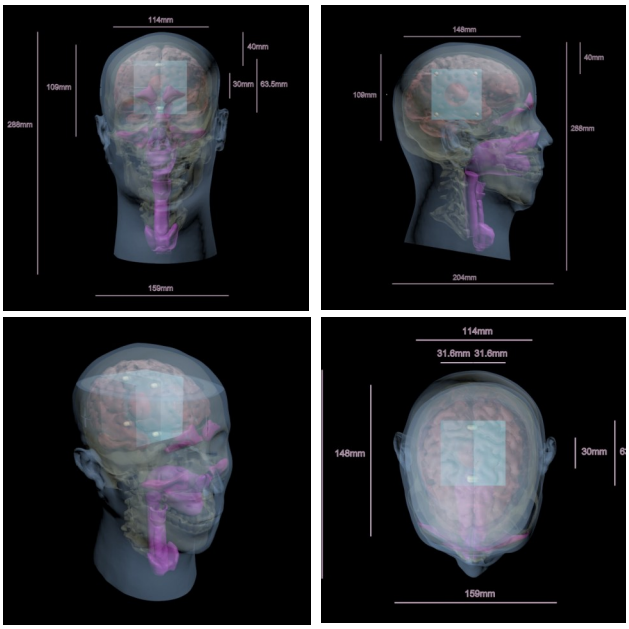
- Skull with Temporal and Suboccipital Windows for Transcranial Doppler Ultrasound
  - Openable and Removable Calvaria
- Brain Phantom
  - Complex Brain Vessels incorporated Circle of Willis
  - One Bifurcation
  - One Stenosis
  - Two Aneurysms
  - Connecting Vessels with Neck
  - Brain Ventricles
  - Plastic Connectors
- Alignment Markings
- Acoustically Correcting Skin-Mimicking Material.

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Head QC1 for X-Ray CT, US, MRI



HD-QC1

Description:

HD-QC1 is an anthropomorphic adult human head phantom that can be used for applications related to Image guided radiotherapy (IGRT), Stereotactic radiosurgery (SRS), and potential quality assurance (QA) applications. It serves as an ideal tool to study target localization and dose delivery under the image guidance of X-Ray/CT, US, MRI and PET.

Anatomy:

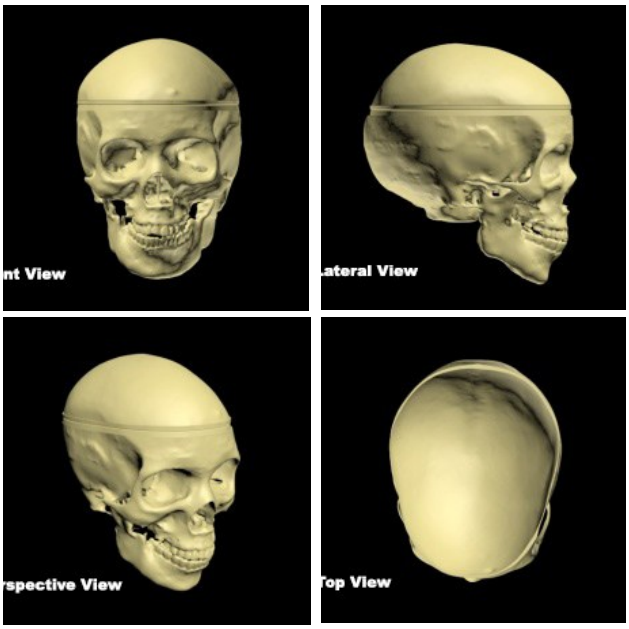
- Skull
- Brain Surrounded by Dura Matter
- Sinus Cavities
- Larynx
- Trachea
- Oral Cavities
- Cervical Spine
- Target Objected Implemented Material
- Alignment Markings
- Skin–Mimicking Material

Size & Weight:

- Phantom Size: 12 x 9 x 7 Inches, Weight: 17 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 90 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Skull for X-Ray CT, US, MRI



SL-A01

Description:

The Adult Skull Phantom is an excellent tool for medical imaging research and treatment planning of non-invasive HIFU brain surgeries. The design is based on a CT scan of a human male head, and the skull is made from a realistic patented epoxy-based bone material suitable for Ultrasound, MRI, and X-Ray/CT applications. The phantom features a realistic three-layered structure with adjustable inner porosity (diploe) to meet specific project requirements. .

Anatomy:

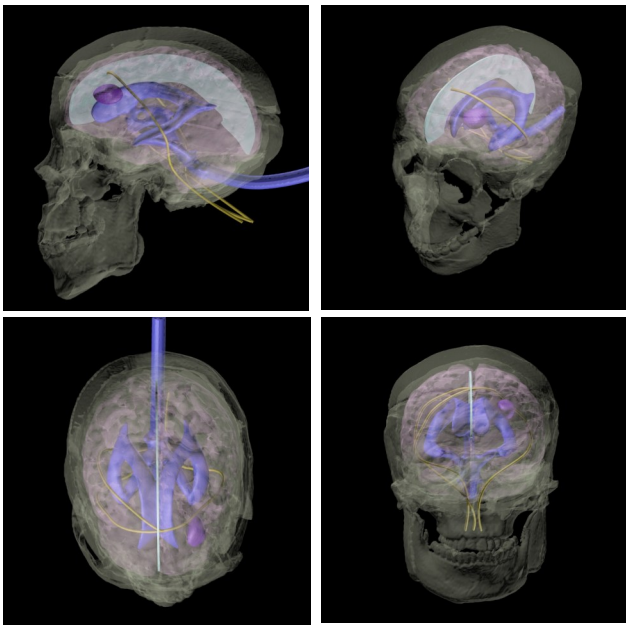
- Complete Human Skull
- Removable Calvaria
- Jaw Bone
- 4 Paranasal Sinuses:
  - Maxillary
  - Ethmoid
  - Sphenoid
  - Frontal

Size & Weight:

- Phantom Size: 6 x 8 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 15 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Skull with Brain for X-Ray CT, US, MRI



SL-A02

Description:

The Adult Skull with Brain Phantom is a versatile tool for medical imaging research, treatment planning of non -invasive brain surgeries, and more. It features a realistic three-layered skull structure and an inner diploe layer made from a patented epoxy-based bone material suitable for Ultrasound, MRI, and X-Ray/CT scans. The brain inside the phantom includes blood vessels and bifurcation features

Anatomy:

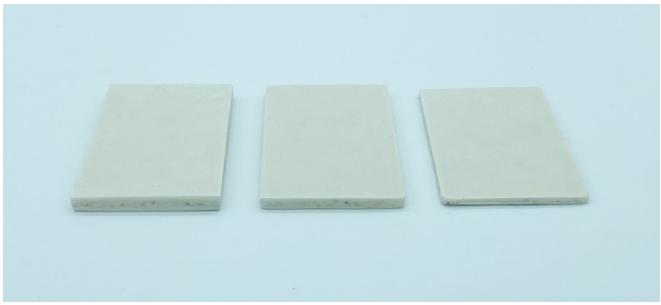
- Human Skull
- Human Brain
- Blood Vessels
- Bifurcation
- Brain Ventricles
- Tumor

Size & Weight:

- Phantom Size: 6 x 8 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 15 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Planar Skull Bone Phantoms for X-Ray CT, US, MRI



SL-G02

Description:

Planar Skull Bone Phantoms are an ideal tool that can be used for medical imaging research. Each bone plate has a realistic three-layered structure with the inner diploe layer. True Phantom Solutions are pioneers in developing these phantoms and hold strength in customizing them.

The Skull Bones are cast out of our realistic patented epoxy-based bone material that is suitable for Ultrasound, MRI, and X-Ray/CT applications.

Anatomy:

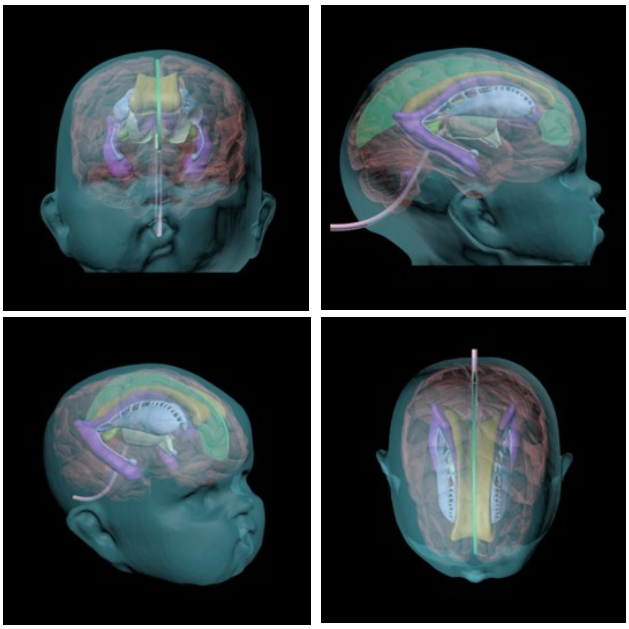
- Planar Skull Bones (3):
  1) 3/8 x 3 x 5 inch (10 x 7.6 x 12.7 cm)
  2) 5/16 x 3 x 5 inch (7.5 x 7.6 x 12.7 cm)
  3) 3/16 x 3 x 5 inch (5 x 7.6 x 12.7 cm)
- Cortical Bone
- Trabecular Bone

Size & Weight:

- Phantom Size: Weight: 0.7 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Head (Complex) for X-Ray CT, US, MRI



HD-N01

Description:

The Newborn Head (Complex) Phantom is a training tool for diagnostic medical imaging and POCUS. Based on an average newborn head, it is made from realistic tissue-mimicking materials suitable for X-Ray CT, US, MRI.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics).

Anatomy:

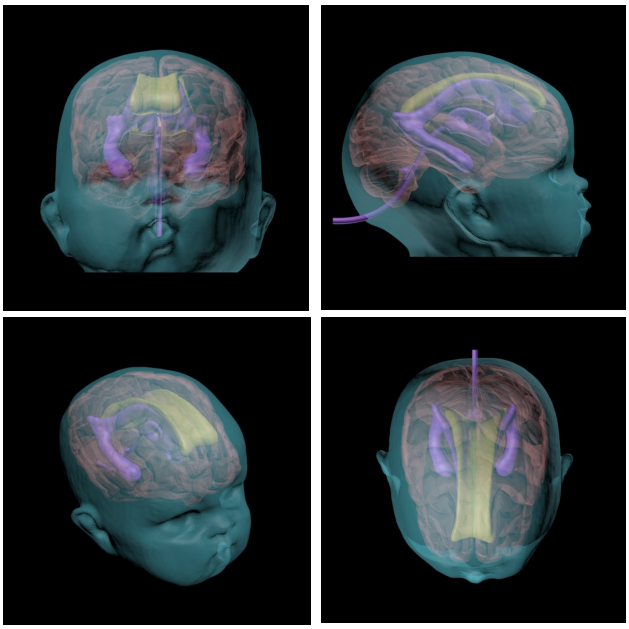
- Newborn Brain
- Corpus Callosum
- Falx
- Brain Ventricles
- Septum Pellucidum
- Caudate
- Putamen
- Thalamus
- Choroid Plexus
- Cerebellum & Pons

Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 4 Lbs (approx.).
- Product Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Head (Simple) for X-Ray CT, US, MRI



HD-N02

Description:

The phantom is designed based on an average newborn head and is made out of realistic tissue-mimicking materials suitable for US imaging. The brain in this model has been specifically simplified to achieve the most cost -efficient training solution.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics

Anatomy:

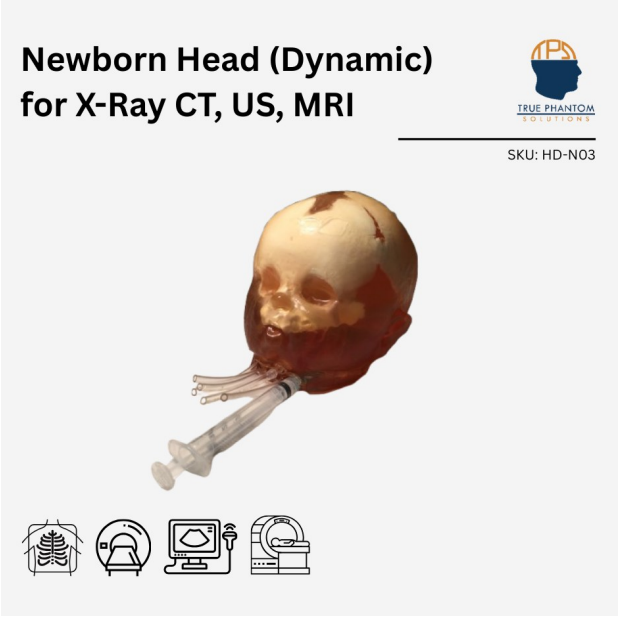
- Newborn Brain
- Corpus Callosum
- Brain Ventricles

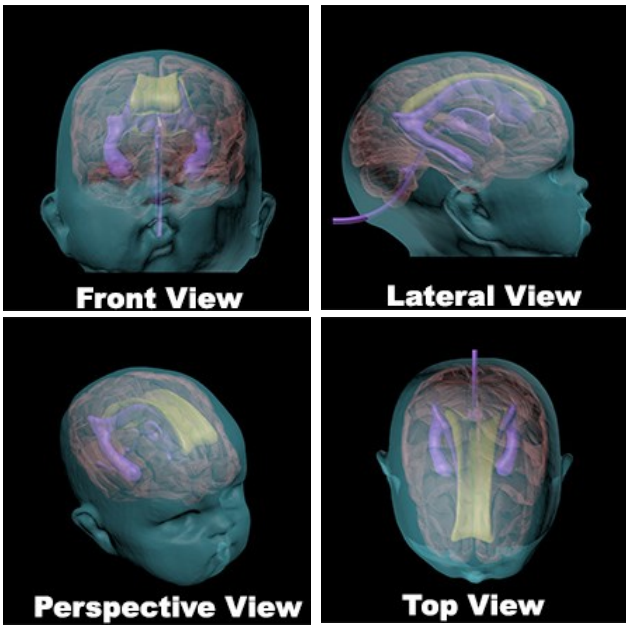
Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 4 Lbs (approx.).
- Product Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Head (Dynamic) for X-Ray CT, US, MRI





HD-N03

Description:

The Newborn Head (Dynamic) phantom is designed for medical imaging of blood flow beneath the skull. It resembles an average newborn head, using realistic tissue-mimicking materials suitable for Ultrasound, MRI, and X-Ray/CT. The skull pieces are individually cast from patented epoxy-based bone material.

Anatomy:

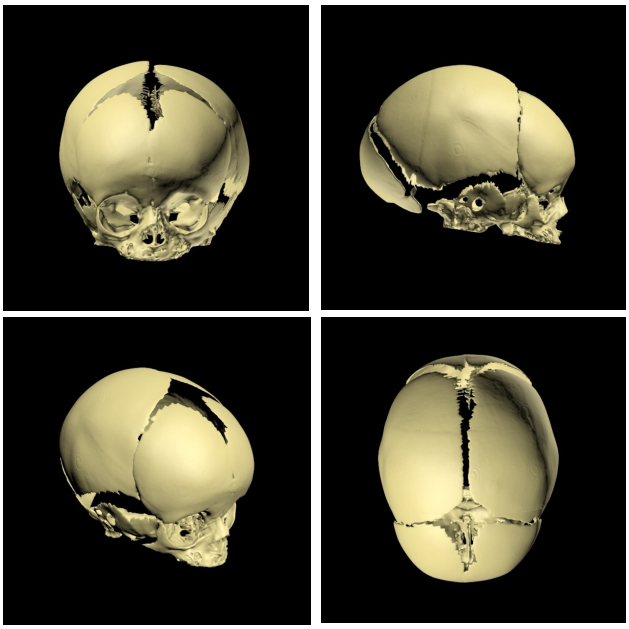
- Based on an average Newborn Skull
- Realistic Newborn Brain Phantom
- Complex Blood Vessel Structures with Circle of Willis

Size & Weight:

- Phantom Size: 5 x 6 x 5 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 8 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Skull for X-Ray CT, US, MRI



SL-N01

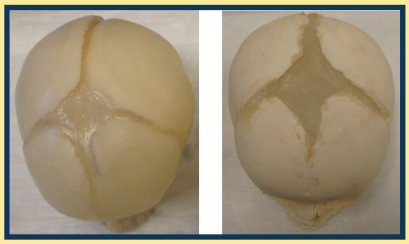
Description:

The Newborn Skull Phantom serves for medical imaging research and treatment planning of non-invasive HIFU brain surgeries. It replicates an average newborn skull using a realistic patented epoxy-based bone material suitable for Ultra-sound, MRI, and X-Ray/CT.

Anatomy:

- Based on an Average Newborn Human Skull
- Realistic Bone-Mimicking Material

Cadaveric Specimen Phantom Specimen



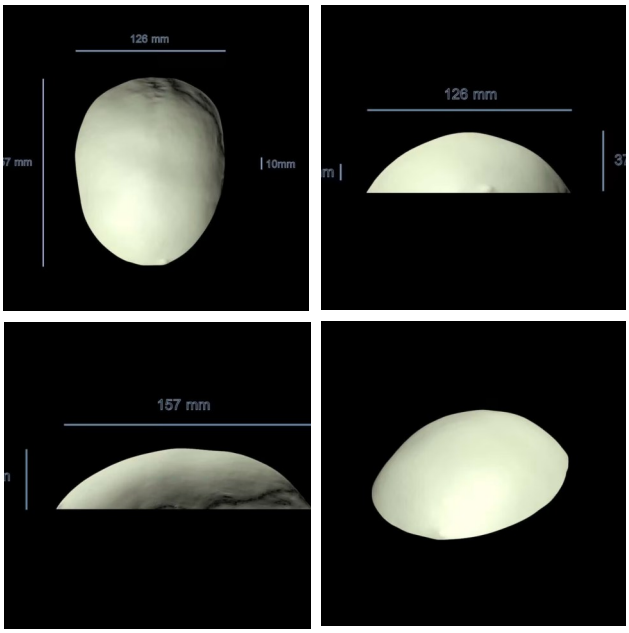
A Wydra, RG Maev, Phys Med Biol, Vol 58(22),

Size & Weight:

- Phantom Size: 4 x 6 x 5 Inches, Weight: 2 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Standard Calvaria for X-Ray CT, US, MRI



CA-C01

Description:

The Standard Calvaria phantom is an excellent tool for medical imaging research. The skull bones are made from a realistic patented epoxy-based bone material suitable for Ultrasound, MRI, and X-Ray/CT applications.

There are several applications of this phantom. It is primarily used for medical imaging & diagnostic research, and treatment planning of non-invasive HIFU brain surgeries

Anatomy:

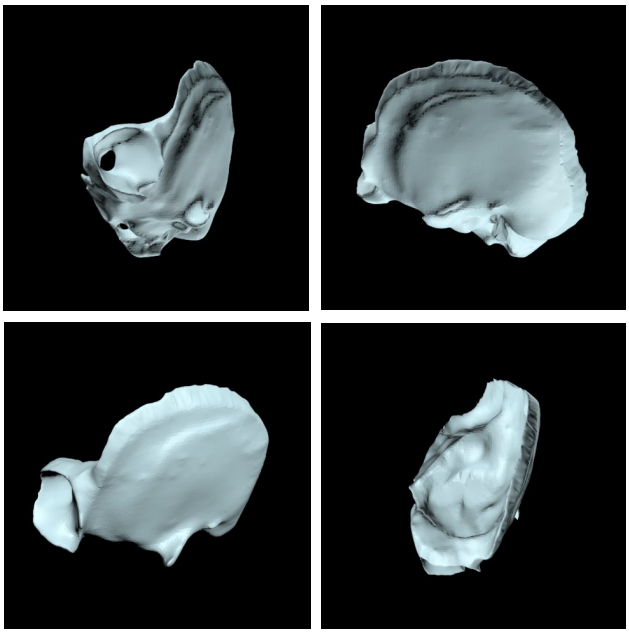
- Calvaria
- Cortical Bone
- Trabecular Bone

Size & Weight:

- Phantom Size: 6.7 x 5.5 x 2.4 Inches, Weight: 2 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Temporal Bone Phantoms for X-Ray CT, US, MRI



TW-C01

Description:

Temporal Bone Phantoms are an ideal tool that can be used for medical imaging research. Each bone has a realistic three-layered structure with the inner diploe layer. True Phantom Solutions are pioneers in developing these phantoms and hold strength in customizing them.

The Skull Bones are cast out of our realistic patented epoxy-based bone material that is suitable for Ultrasound, MRI, and X-Ray/CT applications.

Anatomy:

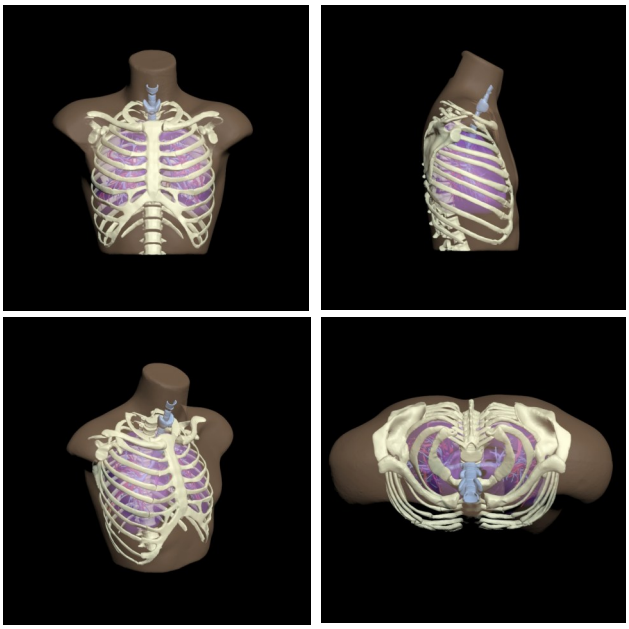
- Temporal Skull Bones (3):
  - A) 2.2 mm thickness
  - B) 4.0 mm thickness
  - C) 7.0 mm thickness
- Cortical Bone
- Trabecular Bone

Size & Weight:

- Size: 2.2 mm, 4.0 mm, 7.0 mm , Weight: 0.7 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Thorax for X-Ray CT, US, MRI



TX-A01

Description:

Adult Thorax phantom features a thoracic skeleton made of realistic patented bone material for X-Ray/CT, US, and MRI applications. It serves medical imaging research and radiology training while also offering customization for equipment testing. The vertebrae have adjustable porosity, and lungs are customizable that can help mimic different pathologies.

Anatomy:

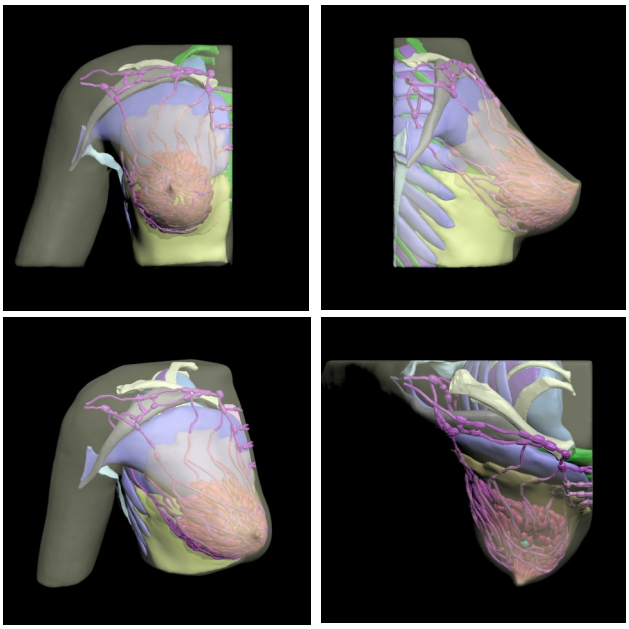
- Spine with Porous Inner Structure
- Complete Ribcage
- Shoulders and Clavicles
- Trachea
- Heart

Size & Weight:

- Phantom Size: 18 x 10 x 18 Inches, Weight: 58 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 90 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Breast (Complex) for X-Ray CT, US, MRI



BT-A01

Description:

The Adult Breast (Complex) for X-Ray CT, US, MRI is a life-sized representation of a female breast, meticulously crafted to reflect typical anatomical features. This phantom is particularly useful for medical professionals and students who are seeking to develop their skills in breast examinations, especially in the detection and diagnosis of tumors. By using the phantom, they can practice various imaging techniques, learn to identify different types of breast abnormalities, and gain experience in interpreting mammograms and MRI scans.

Anatomy:

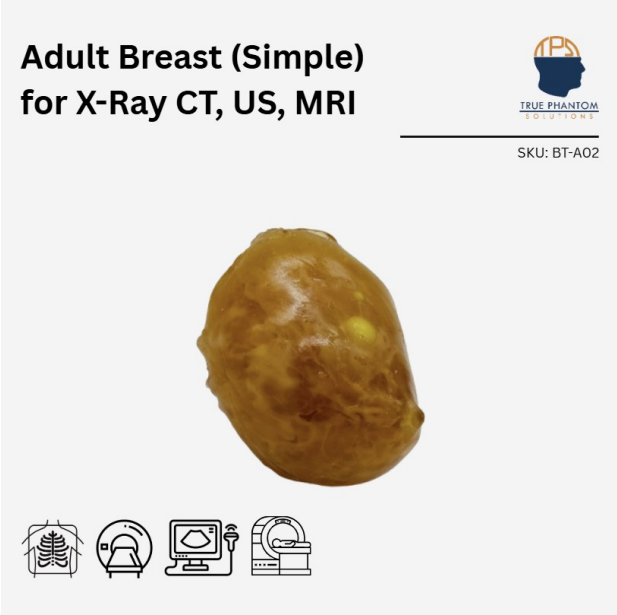
- Partial Ribs and Cartilage
- One Lung
- Major Fat Tissues
- Major Muscles
- Axillary Lymph Nodes
- Subcutaneous Adipose
- Retromammary Adipose
- Mammary Glands
- Two Spherical Tumors

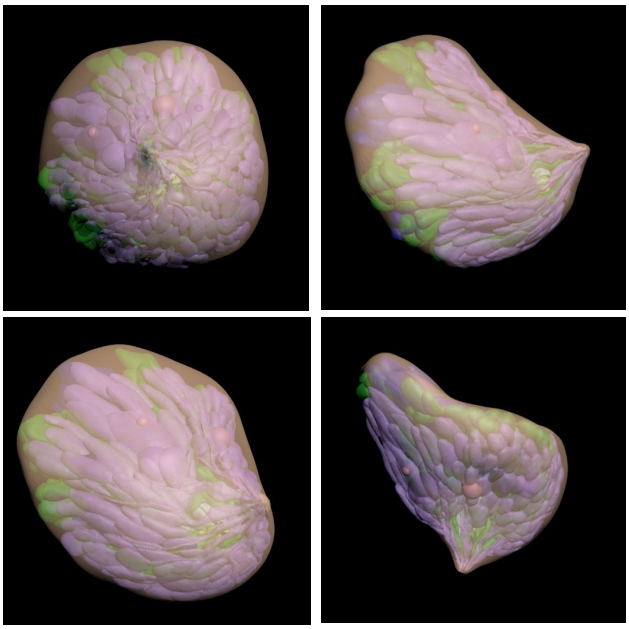
Size & Weight:

- Phantom Size: 10 x 9 x 10 Inches, Weight: 11 Lbs (approx.).
- Shipment Size: 36 x 24 x 12 Inches, Weight: 45 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Breast (Simple) for X-Ray CT, US, MRI





BT-A02

Description:

The Adult Breast (Simple) is a realistic phantom. Its design is based on the average anatomy of a female human breast. This phantom is compatible with X-Ray CT, US, and MRI. This makes it an ideal tool to study, research, test, and calibrate medical imaging devices

Anatomy:

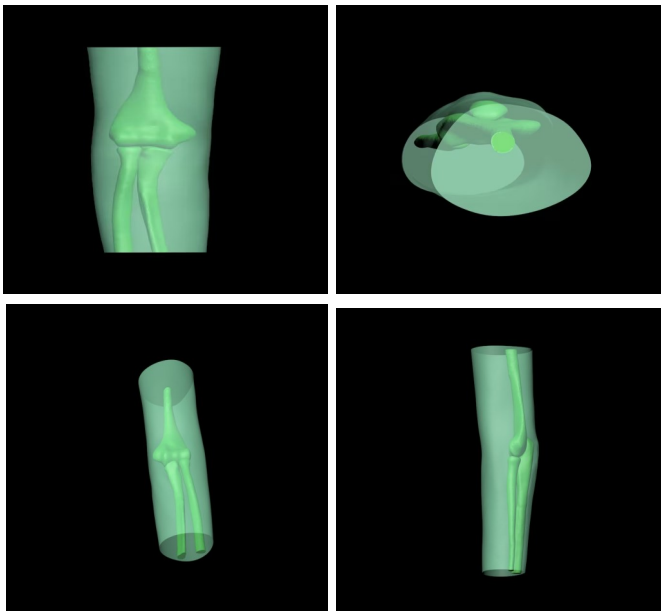
- Body Tissue Mimicking Material
- Mammary Fat Tissues
- Mammary Gland Tissues
- Radiolucent Lesion

Size & Weight:

- Phantom Size: 4.7 x 4.7 x 4.7 Inches, Weight: 1.8 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Elbow for X-Ray CT, US, MRI



AR-E01

Description:

The Elbow phantom is designed around the structure of an average adult human elbow in X-Ray AP View. It comprises of synthetic bones made from patented bone material and urethane-based tissue mimicking materials for soft tissues. Suitable for X-Ray/CT, US and MRI imaging, it serves medical imaging research, and Orthopedic related studies

Anatomy:

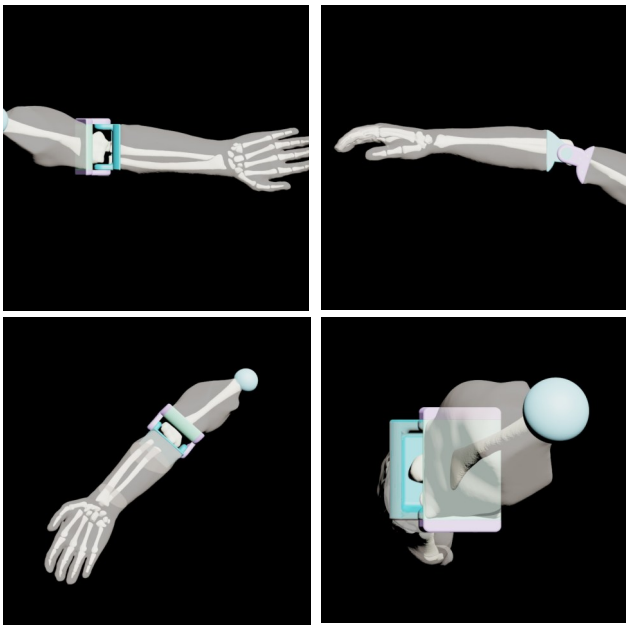
- Partial Ulna
- Partial Radius
- Partial Humerus
- Realistic Soft Body Tissue

Size & Weight:

- Product Size: 36 x 12 x 8 Inches, Weight: 48 Lbs (approx.).
- Shipment Size: 49 x 17 x 13 Inches, Weight: 62.5 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Adult Arm for X-Ray CT, US, MRI



AR-A01

Description:

The Adult Arm for X-Ray/CT, US, and MRI has a joint at the elbow for flexibility and motion. It connects the lower arm with the upper arm. These two parts can be disarticulated as per needs.

This X-Ray/CT, US and MRI Arm Phantom can be used to take x-ray images of the full arm. The model includes synthetic bones cast individually from our realistic patented bone-mimicking material. The X-Ray Arm Model is perfect for radiology schools for training and learning different settings of X-RAY without the danger of exposing an actual patient to harmful radiation.

Anatomy:

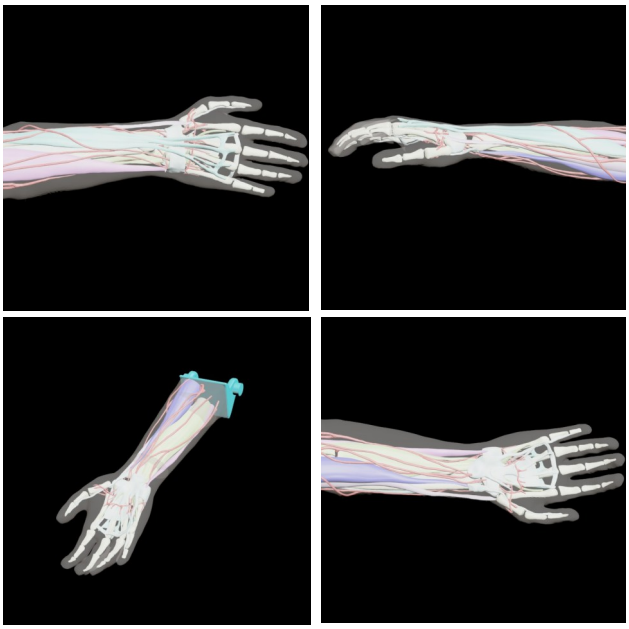
- Arm (Humerus)
- Elbow Joints
- Forearm (Radius, Ulna)
- Hand (Wrist with Fingers)

Size & Weight:

- Phantom Size: 7 x 7 x 24 Inches, Weight: 7.7 Lbs (approx.).
- Shipment Size: 28 x 12 x 12 Inches, Weight: 13.2 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Arm (Complex) for X-Ray CT, US, MRI



AR-A02

Description:

The Adult Arm Phantom for X-Ray/CT, US and MRI is a realistic, life-size phantom that is designed based on an average anatomy of a human arm with all the essential bones and tissue features. All major ligaments/ tendons structures are present inside. This phantom is compatible with X-Ray/CT, US and MRI which makes it an ideal tool to study, research, and test medical imaging devices.

AR-A02 can be used to study several diagnostic X-Ray/CT, US and MRI procedures in different orientation and positioning techniques.

Anatomy:

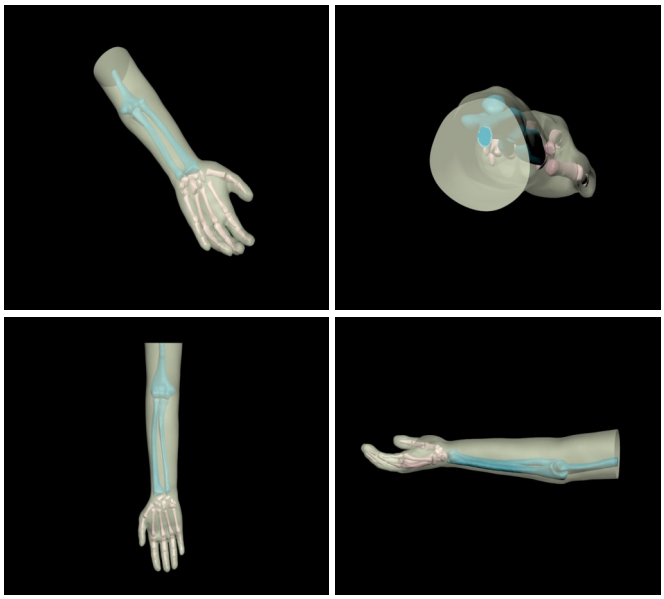
- Radius
- Ulna
- Carpals
- Static Blood Vessels
- Scaphoid
- Major Muscles
- Major Tendons

Size & Weight:

- Phantom Size: 7 x 7 x 24 Inches, Weight: 7.7 Lbs (approx.).
- Shipment Size: 28 x 12 x 12 Inches, Weight: 13.2 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Arm with Elbow for X-Ray, CT, US, MRI



AR-A03

Description:

The Arm with Elbow phantom is designed around the structure of an average human adult's arm, in X-Ray AP View. It comprises of synthetic bones made from patented bone material and urethane-based tissue mimicking materials for soft tissues. Suitable for X-Ray/CT, US as well as MRI imaging, it is an ideal tool for radiology training, medical imaging research, and Orthopedic related studies.

Anatomy:

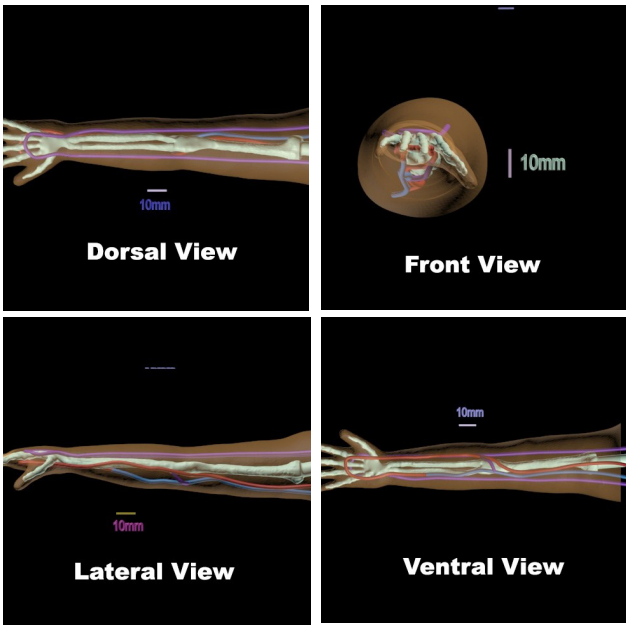
- Partial Humerus
- Ulna
- Radius
- Hand
  - Wrist Bones
  - Finger Bones
- Realistic Soft Body Tissue

Size & Weight:

- Product Size: 5.9 x 3.6 x 19.3 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 16 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Newborn Arm for X-Ray CT, US, MRI



AM-S01

Description:

The Newborn Arm Phantom is designed to resemble the anatomy of a healthy newborn baby's arm. Made from realistic materials, it is suitable for ultrasound-guided IV training for healthcare professionals. This durable and long-lasting phantom allows for practice in intravenous injections under ultrasound guidance, with permanently prefilled blood vessels, eliminating the need for additional fluid.

Anatomy:

- Blood Vessels
- IV Training Feature
- Arm Bones (Ulna & Radius)
- Skin-Mimicking Material

Size & Weight:

- Phantom Size: 8 x 2 x 2 Inches, Weight: 1 Lbs (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Pediatric Hand for X-Ray CT, US, MRI

HN-P01

Description:

The Pediatric Hand Phantom is designed specifically for X-Ray, CT, US and MRI applications. This innovative medical training tool is essential for radiologists, technicians, and educators dedicated to advancing pediatric imaging techniques and improving diagnostic accuracy.

The Pediatric Hand Phantom accurately replicates the intricate anatomy of a 4-year-old child's hand, including bones, joints, and soft tissues. This precision ensures a lifelike representation that aids in detailed anatomical studies and practice.

Anatomy:

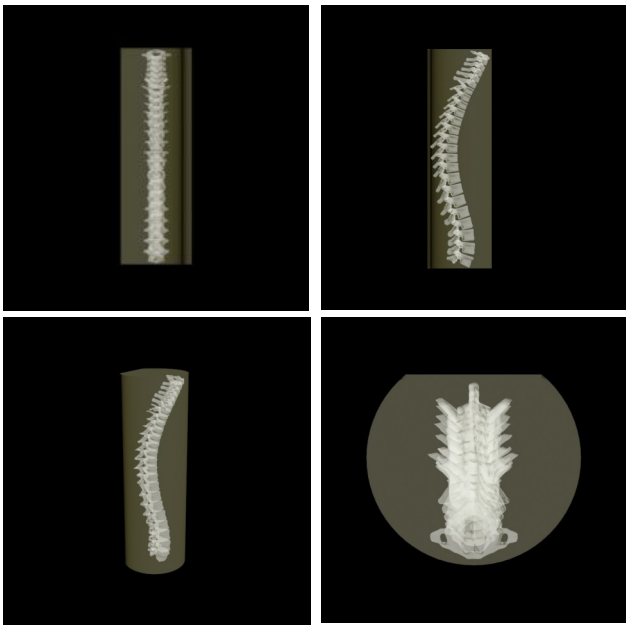
- Wrist Bones
- Finger Bones
- Partial Ulna
- Partial Radius
- Soft tissue mimicking material

Size & Weight:

- Phantom Size: 6 x 3 x 1 Inches, Weight: 1 Lbs (approx.).
- Shipment Size: 10 x 7 x 5 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Spine for X-Ray CT, US, MRI



SE-A01

Description:

Adult Spine Phantom consists of 25 individual vertebrae assembled on top of each other and encased in a semi-cylindrical-shaped body-mimicking tissue. The vertebrae have a realistic three-layered structure, and their inner porosity can be adjusted according to the requirement of the particular project.

The Phantom is designed based on average human anatomy, and the bones are made out of realistic patented bone material that is suitable for X-Ray/CT, US and MRI. It can be used for medical imaging research and treatment planning of various medical procedures (Upon request, it can be modified for a lumbar or spine lumbar practice phantom with soft tissue-mimicking material surrounding it).

Anatomy:

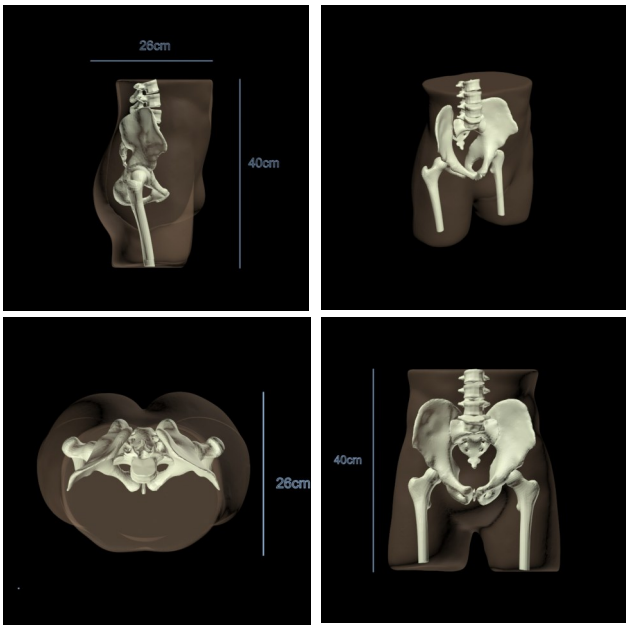
- Cervical Vertebrae (C1 – C7)
- Thoracic Vertebrae (T1 – T12)
- Lumbar Vertebrae (L1 – L5)

Size & Weight:

- Phantom Size: 22 x 7 x 7 Inches, Weight: 30 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 34 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Pelvis for X-Ray CT, US, MRI



PE-A01

Description:

The Adult Pelvis Phantom – Its structure & geometry is based on an average adult human male. It is made out of realistic soft tissue-mimicking material and patented synthetic bones suitable for X-Ray/CT, US and MRI imaging applications. It can be used as a tool to conduct medical imaging research, radiology training, testing, and calibration purposes. This product can be further customized to match our client's specific requirements. The spine bones will consist of a realistic three-layered structure with inner porosity, which can be adjusted according to the requirement of the particular project. The phantom can also be customized in size and shape (i.e., based on any individual's CT scan).

Anatomy:

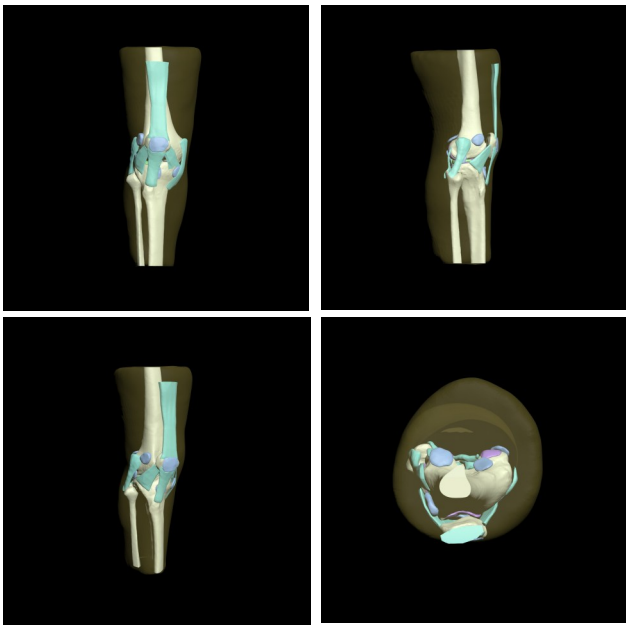
- Spine from L5 to L2
- Pelvis Bone
- Partial Left and Right Femoral Bones

Size & Weight:

- Phantom Size: 14 x 10 x 16 Inches, Weight: 48.5 Lbs (approx.)
- Shipment Size: 36 x 24 x 12 Inches, Weight: 88.2 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Knee for X-Ray CT, US, MRI



KE-A01

Description:

The Adult Knee phantom has a complex internal structure and anatomy, which are based on an average knee of an adult human male. The synthetic bones used in this phantom are made out of our patented material, which is best suited for X-Ray/CT, US, MRI imaging applications. The soft tissues, tendons, ligaments, and cartilage are made from realistic urethane-based tissue-mimicking materials.

Anatomy:

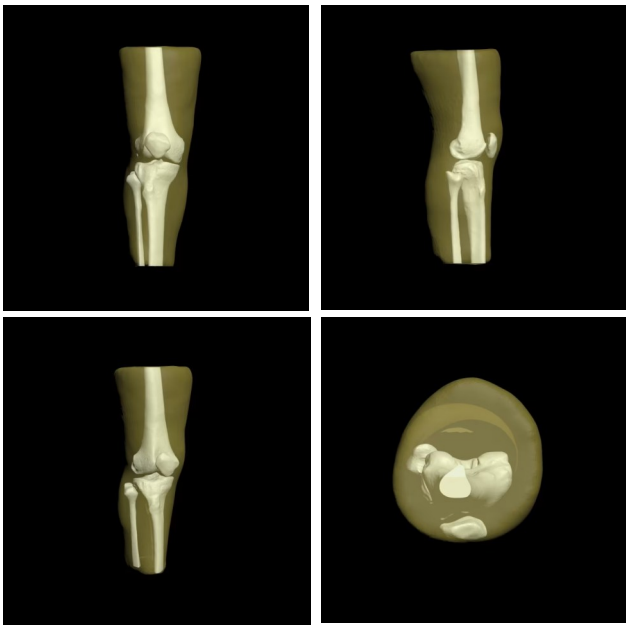
- Partial Upper and Lower Leg
- Patella
- Meniscus:
  - Lateral Meniscus
  - Medial Meniscus
- Condyle:
  - Lateral Condyle Femoral
  - Medial Condyle Femoral
- Ligaments and Tendons:
  - Quadriceps Femoris Tendon
  - Patellar Ligament
  - Lateral Patellar Retinaculum
  - Medial Patellar Retinaculum
  - Anterior Cruciate Ligament
  - Posterior Cruciate Ligament
  - Arcuate Popliteal Ligament
  - Oblique popliteal Ligament
- Bursa:
  - Subtendinous Bursa (3)
  - Semimembranosus Bursa
  - Pes anserine Bursa
  - Infrapatellar Bursa

Size & Weight:

- Size: 6 x 7 x 15 Inches, Weight: 18 Lbs (approx.).
- Size: 23 x 14 x 10 Inches, Weight: 26 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Knee (Bones Only) for X-Ray CT, US, MRI



KE-A03

Description:

The Adult Knee phantom has an internal structure and anatomy based on the average knee of an adult human male. The synthetic bones used in this phantom are made out of our patented material, which is best suited for X-Ray, CT and US imaging applications. The soft tissue is made from realistic urethane-based tissue-mimicking materials.

The phantom can be used as a tool to conduct medical imaging research, radiology training, and testing.

Anatomy:

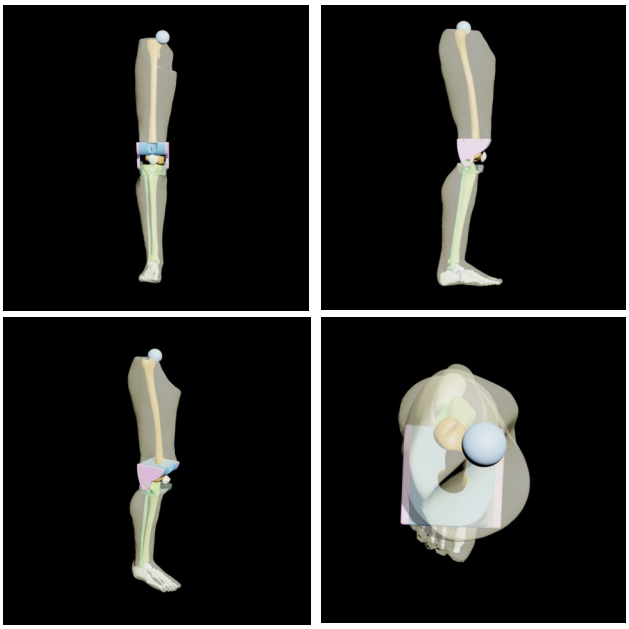
- Partial Upper Leg
- Partial Lower Leg
- Condyle:
  -Lateral Condyle Femoral

Size & Weight:

- Product Size: 6 x 7 x 15 Inches, Weight: 18 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 26 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Adult Leg for X-Ray CT, US, MRI



LG-A01

Description:

This X-Ray/CT, US and MRI Adult Leg Phantom can be used to take X-Ray images of the full leg. The model includes synthetic bones made out of realistic patented bone-mimicking material. The X-Ray Leg Model is perfect for radiology schools for training and learning different settings of X-Ray without the danger of exposing an actual patient to harmful radiation.

The leg phantom has a joint at the knee for flexibility and motion. It connects the lower leg with the upper leg (thigh).

Anatomy:

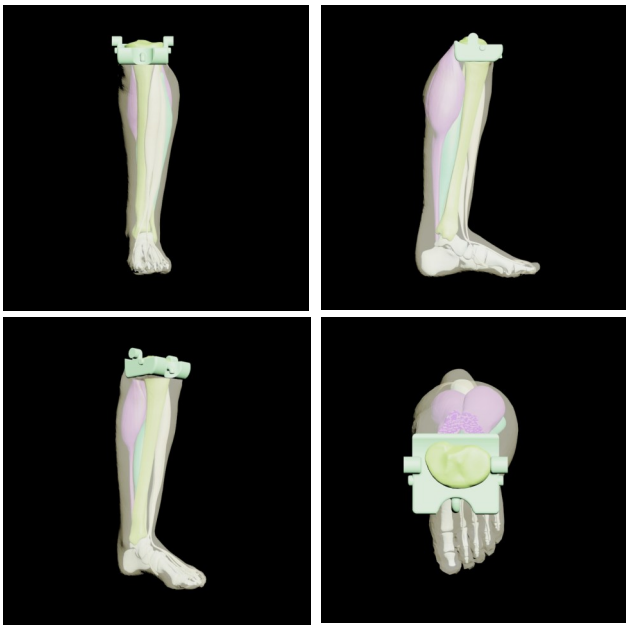
- Thigh (Femur)
- Knee Joint
- Leg (Tibia, Fibula)
- Foot (Toe Bones)

Size & Weight:

- Phantom Size: 38 x 10 x 7 Inches, Weight: 27 Lbs (approx.).
- Shipment Size: 36 x 24 x 12 Inches, Weight: 35 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Leg (Muscles) for X-Ray CT, US, MRI



LG-A02

Description:

Adult Leg Phantom for X-Ray/CT, US and MRI is a realistic phantom designed based on the average anatomy of a human male leg. It has all the essential bony and soft tissue features that make it an ideal tool to study, research, and test medical imaging devices.

The LG-A02 can be used to study several diagnostic X-Ray/CT, US and MRI procedures in different orientation and positioning techniques. Upon request, this product can be customized with different pathologies as well as for specific training applications.

Anatomy:

- Fibula Bone
- Tibia Bone
- Foot Bones
- Major Muscle Tissues

Size & Weight:

- Phantom Size: 38 x 10 x 7 Inches, Weight: 26.5 Lbs (approx.).
- Shipment Size: 36 x 24 x 12 Inches, Weight: 35 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Foot for X-Ray CT, US, MRI

FT-A01

Description:

The Adult Foot phantom has an internal structure and anatomy based on the average foot of an adult human male. The synthetic bones used in this phantom are made out of our patented material, which is best suited for X-Ray, CT ,US and MRI imaging applications. The soft tissue is made from realistic urethane-based tissue-mimicking materials.

The phantom can be used as a tool to conduct radiology training in schools and other teaching institutions, medical imaging research, or testing. The phantom can be scanned over and over again without any risk of radiation. The bones are individually casted by hand and assembled by expert technicians before being casted in the soft tissue mimicking material.

Anatomy:

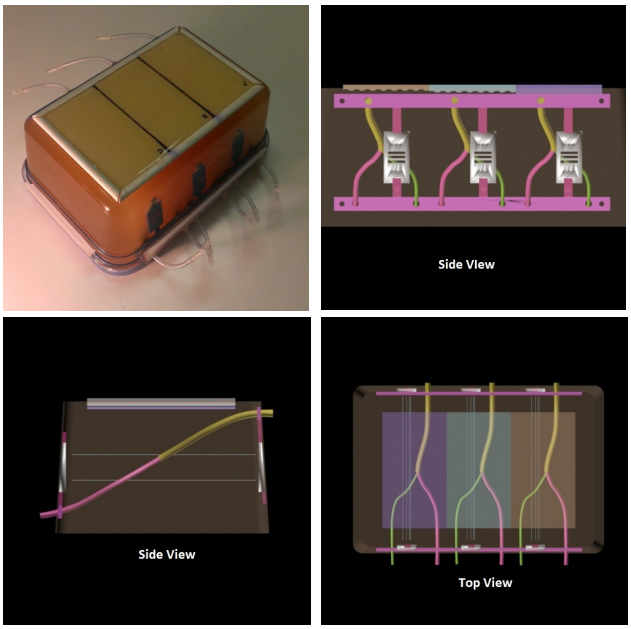
- Partial Tibia
- Partial Fibula
- 26 Foot Bones
- Realistic Soft Body Tissue

Size & Weight:

- Product Size: 3.6 x 9.5 x 5.9 Inches, Weight: 2.7 Lbs (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 11 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Doppler Phantom for X-Ray CT, US, MRI



DP-C01

Description:

Doppler Phantom serves purposes in medical imaging research, development, training, and testing. The phantom includes a bone plate simulating the 2D projection of the skull with realistic internal porosity. Internal blood vessels can be filled with water or commonly used blood-mimicking fluids.

Anatomy:

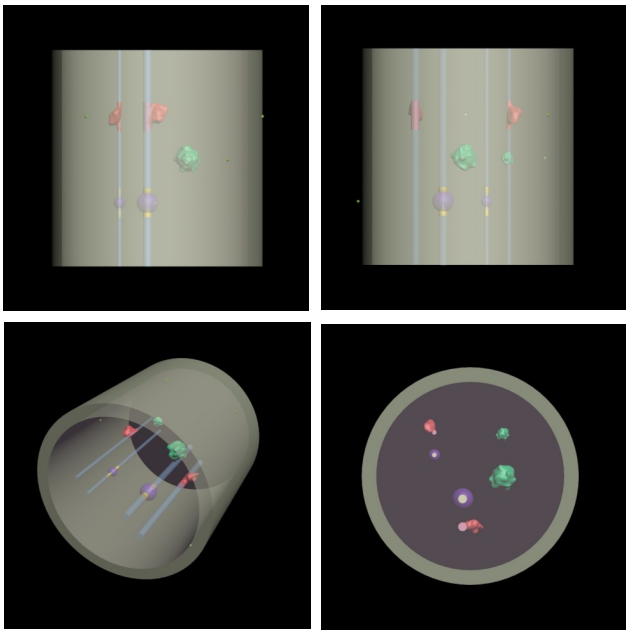
- Partial Skull Phantom with a Customized Thickness;
- Filling the Phantom with the Acoustically Correct Brain-Mimicking Material
- Custom Blood Vessels
- Standard Tubes and Connectors Connected to the Custom Vessels
- Incorporating the Phantom within a Standard Compact Box

Size & Weight:

- Product Size: 8 x 6 x 4 Inches, Weight: 1 Lbs (approx.).
- Shipment Size: 12 x 10 x 10 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Cylindrical Head for X-Ray CT, US, MRI



HD-G01

Description:

This Cylindrical Head Phantom is an ideal tool for medical imaging research. Main applications of this phantom is computed tomography and ultrasound tomography. Our patented bone-mimicking tissue allows it to accurately replicate the properties of real human bone and our realistic brain tissue replicates real human brain. It is compatible with X-Ray CT, US, and MRI applications

Anatomy:

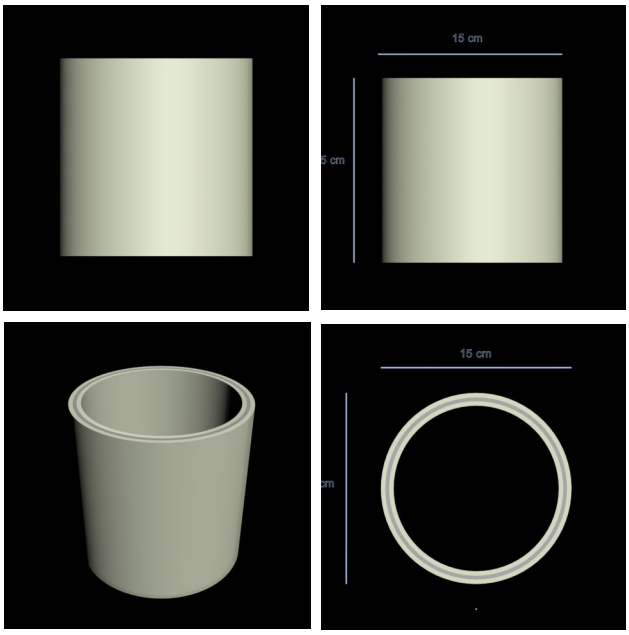
- Cylindrical 3-layered Skull Phantom
- Realistic Brain Tissue
- 15 cm Diameter
- Blood Vessels with Contrast Agent
- Blood Vessels without Contrast Agent
- Tumors
- Alignment Markings

Size & Weight:

- Phantom 5 29/32 x 5 29/32 x 5 29/32 Inches, 8 Lbs (approx.)
- Shipment: 23 x 14 x 10 Inches, Weight: 16 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Cylindrical Skull for X-Ray CT, US, MRI



SL-G01

Description:

This Cylindrical Skull Phantom is an ideal tool for medical imaging research. True Phantom Solutions is a pioneer in developing these phantoms and holds the strength to customize them.

The Skull is cast out of our realistic patented epoxy-based bone material that is suitable for Ultrasound, MRI, and X-Ray/CT applications. The phantom has a realistic three-layered structure with an inner porosity (diploe) that can be adjusted according to the project's requirements.

Anatomy:

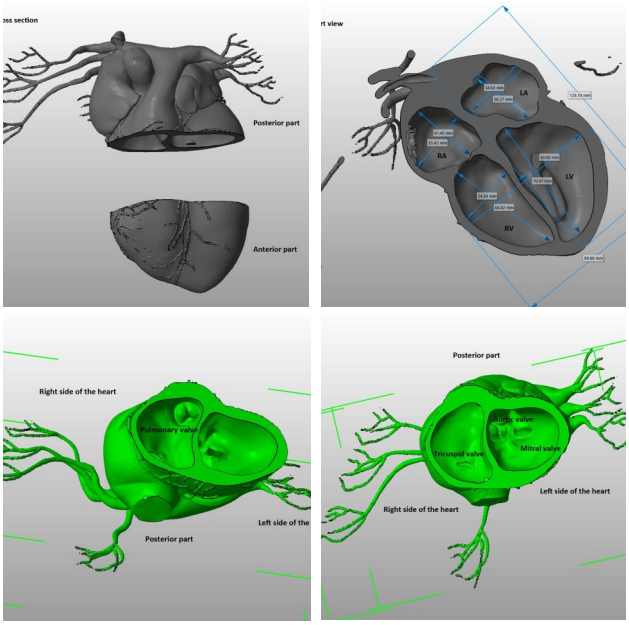
- Cylindrical Skull Phantom
  - 15 cm x 15 cm, 10mm thickness
- Cortical Bone
- Trabecular Bone

Size & Weight:

- Phantom: 6 x 6 Inches, Weight: 3.5 Lbs (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 6 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Male Heart for X-Ray CT, US, MRI



HT-A01

Description:

The Lung Pump's adaptability makes it an ideal tool for simulating diverse patient conditions and respiratory challenges. The adjustable cyclic respiratory motion, ranging from 0 to 45 breaths per minute, ensures an accurate representation of various respiratory scenarios. Users can also fine-tune the breath volume with options from 250ml, 300ml all the way to 1200ml in 100ml increments, accommodating a wide range of training requirements

Anatomy:

- 2 Atria, 2 Ventricles:

–Right Ventricle: 60ml

–Moderator Band that runs from the anterior wall to the septum bridge

–Left Ventricle: 63ml

–Papillary muscles to the anterior and posterior walls

–Right Atrium: 45ml

–Right atrial appendage with distinct muscle structure

–Left Atrium: 29ml

–Unique muscle structure to the appendage of the left atrium

- 4 Valves
- SVC
- IVC
- Aorta
- Arteries:

–Right and Left Subclavian Arteries

–Right and Left Pulmonary Arteries

–Right and Left Femoral Arteries

- Veins:

–Right and Left Subclavian Veins

– Right and Left Jugular Veins

–Right and Left Femoral Veins

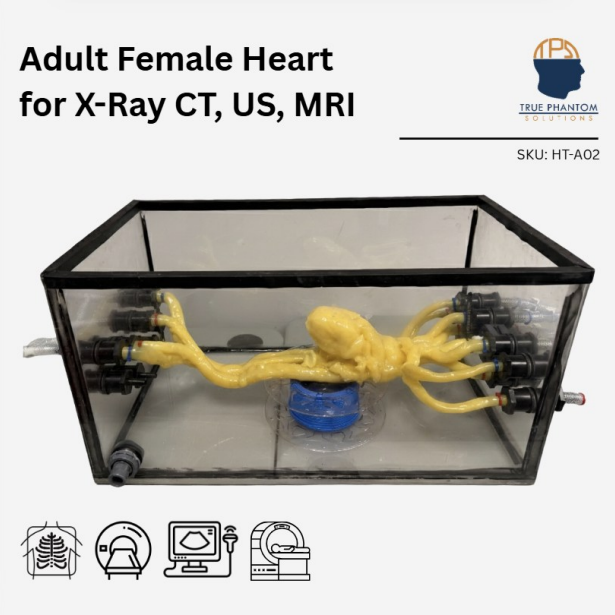
- Appendage Feature
- Flexible Valvular Structures
- Esophagus
- Placed inside a transparent water tank with access points

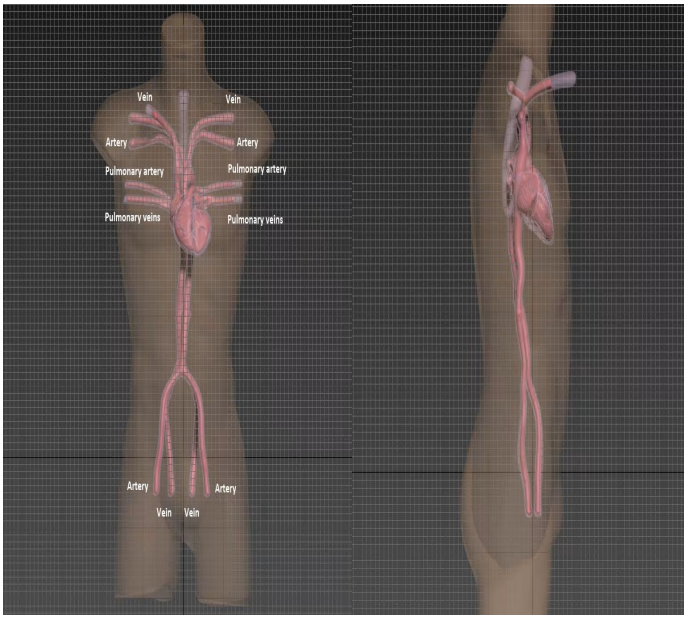
Size & Weight:

- Phantom Size: 23 x 7 x 12 Inches, Weight: 3 Lbs (approx.).
- Shipment Size: 36 x 24 x 12 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Female Heart for X-Ray CT, US, MRI





HT-A02

Description:

The Adult Female Heart Phantom is a realistic simulator of a healthy female heart, compatible with X-Ray/CT, Ultrasound, and MRI. It supports beating functionality and lifelike motions, making it useful for echocardiograms, endoscopies, catheter insertion, and cardiovascular research. Made from synthetic material with accurate anatomical structures, the phantom is fully customizable for various biomedical projects. A water tank is included to ensure proper mounting and performance for viewing internal structures and heart motion.

Anatomy:

- 2 Atria, 2 Ventricles:

–Right Ventricle: 48 ml
–Moderator Band that runs from the anterior wall to the septum bridge
–Left Ventricle: 74 ml
–Papillary muscles to the anterior and posterior walls
–Right Atrium: 52 ml
–Right atrial appendage with distinct muscle structure
–Left Atrium: 64 ml
–Unique muscle structure to the appendage of the left atrium

- 4 Valves
- SVC
- IVC
- Aorta
- Arteries:

–Right and Left Subclavian Arteries
–Right and Left Carotid Arteries
–Right and Left Femoral Arteries

- Veins:

–Right and Left Subclavian Veins
– Right and Left Jugular Veins
–Right and Left Femoral Veins

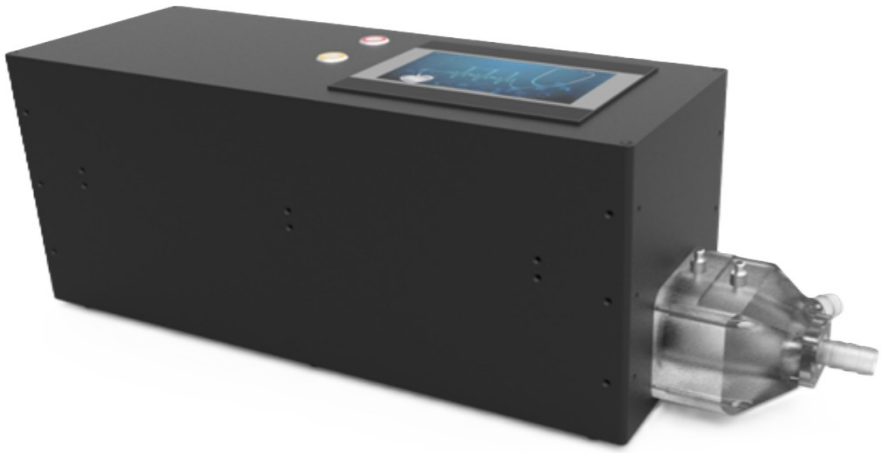
- Appendage Feature
- Flexible Valvular Structures
- Esophagus

Size & Weight:

- Phantom Size: 23 x 7 x 12 Inches, Weight: 3 Lbs (approx.).
- Shipment Size: 36 x 24 x 12 Inches, Weight: 22 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Heart Pump (V4)



HP-A04

Description:

The Valvengine by Vascular-Labs is a powerful and affordable synthetic heart valve actuator designed with precision and performance in mind for R&D and engineering laboratory professionals but also portable and versatile enough for traveling sales & marketing teams. The pump can be attached to various TPS phantoms which include a dynamic heart (e.g.: heart phantoms, dynamic torso phantoms, dynamic full bodies, etc.) to give a realistic heart cyclic motion of heart walls.

Features:

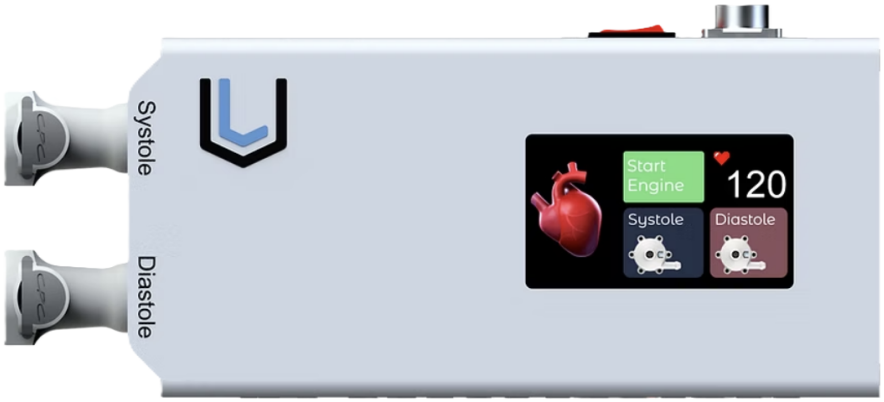
- Controlled pulsating flow
- Adjustable stroke volume (5 ml - 130 ml per stroke)
- Adjustable heart rate (20 BPM – 150 BPM)
- Output waveform stored for the simulated physiological response
- High-precision piston movement
- Available in 120 V or 220 V

Size & Weight:

- Product Size: 27.5 x 8 x 10 Inches, Weight: 39 Lbs (approx.).
- Shipment Size: 27.5 x 8 x 10 Inches, Weight: 39 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Heart Pump (V5)



HP-A05

Description:

Heart Pump (V5) is our new pump which is more user-friendly, has better durability, is smaller than its previous version, and allows for continuous work/heartbeat for a long period of time. The pump can be attached to our TPS heart phantom to give a realistic heart cyclic motion of heart walls.

Features:

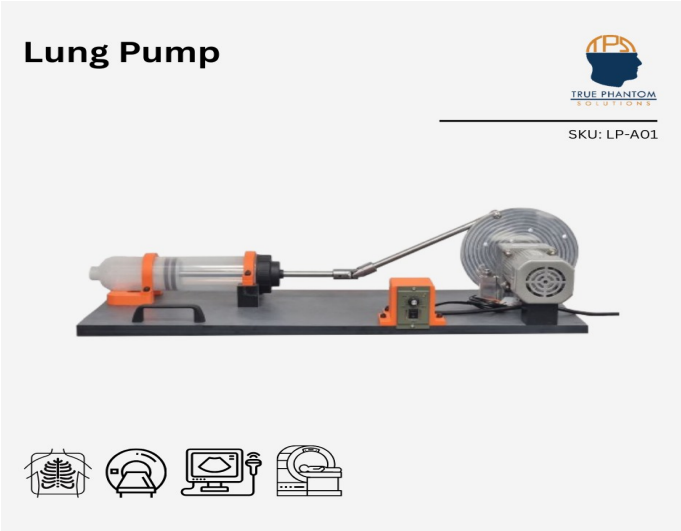
- 0-200 BPM (Adjustable Pulsatility)
- Windkessel Capable (Centrifugal)
- Adjustable Pulse Length (0-750ms)
- Adjustable Pulse Flow Power (0-100%)
- Two 0-6L/min Outputs (Systole/Diastole)
- Arterial Pressure (Output up to 430 mmHg

Size & Weight:

- Product Size: 27.5 x 8 x10 Inches, Weight: 39 Lbs (approx.).
- Shipment Size: 27.5 x 8 x 10 Inches, Weight: 39 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Lung Pump



LP-A01

Description:

The adjustable cyclic respiratory motion, ranging from 0 to 45 breaths per minute, ensures an accurate representation of various respiratory scenarios. Users can also fine-tune the breath volume with options from 250ml, 300ml all the way to 1200ml in 100ml increments, accommodating a wide range of training requirements. The Lung Pump's adaptability makes it an ideal tool for simulating diverse patient conditions and respiratory challenges.

Features:

- Enabling breathing capability by modifying static lungs to dynamic inflatable lungs
- Realistic cyclic respiratory motion
- Custom duration of the breathing cycle
- Adjustable cyclic respiratory motion (0 – 45 breaths per minute)
- Adjustable breath volume (250ml, 300ml-1200ml in 100ml increments)
- Complete system installed on a Garolite (G10) base

Size & Weight:

- Product Size: 36 x 12 x 8 Inches, Weight: 48 Lbs (approx.).
- Shipment Size: 49 x 17 x 13 Inches, Weight: 62.5 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Product Catalog

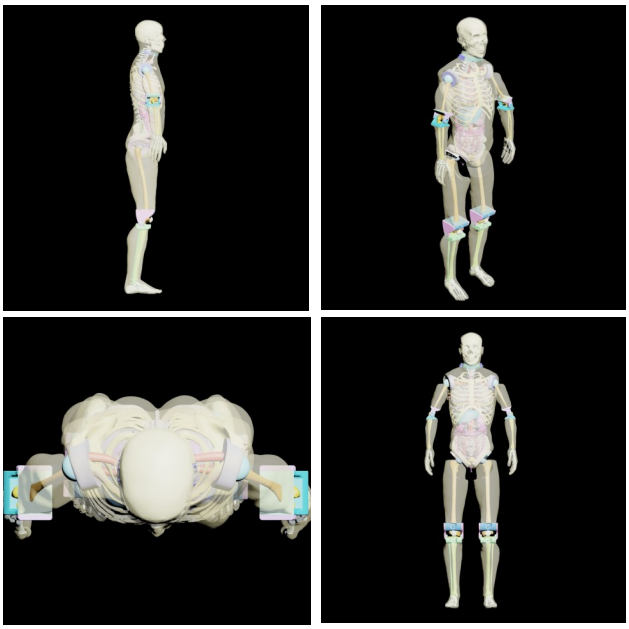
TRUE PHANTOM
SOLUTIONS

X-Ray CT, US

info@truephantom.com

www.truephantom.com

Adult Full Body for X-Ray CT, US



FB-A03

Description:

This Adult Full Body Phantom is an X-Ray/CT and US-compatible training product. The primary application of this phantom is to train and demonstrate various patient positioning techniques in radiology. Other uses include hands-on experience with diagnostic imaging techniques and visual evaluation to find optimal scanning conditions. This phantom can be ordered in a translucent or skin-colored version.

Anatomy:

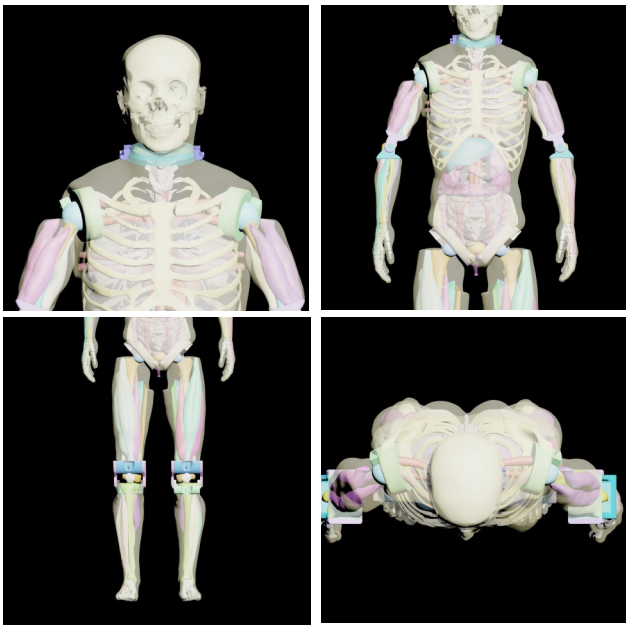
- Rotatable Shoulders
- Movable Hip, Knee, and Elbow Joints
- Adult Full Body (10 Parts)
  - Skull
  - Brain (with tissue)
  - Grey and White Matter
  - Air Cavities
  - Frontal Sinus with Air Gaps
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Femur
  - Knee Joints
  - Tibia
  - Fibula

Size & Weight:

- Size: 69 Inches, Weight: 154 Lbs (approx.).
- Size: 46 x 36 x 17 Inches, Weight: 199 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Full Body (with Muscles) for X-Ray CT, US



FB-A04

Description:

The Adult Full Body Phantom with Muscles is an X-Ray CT and US-compatible training product. Above other functionality listed below, this phantom was specifically enhanced to mimic the major muscle structure of arms and legs. The primary application of this phantom is to train and demonstrate various patient positioning techniques in radiology. This phantom can be ordered in a translucent or skin-colored version.

Anatomy:

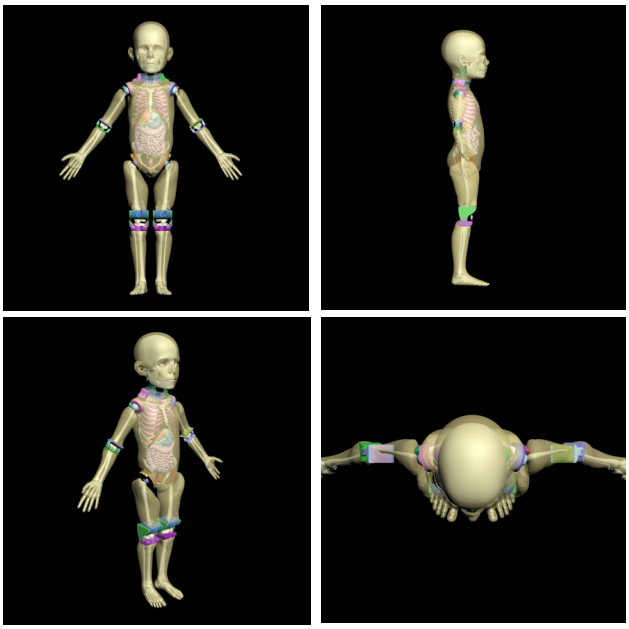
- Rotatable Shoulders
- Movable Hip, Knee, and Elbow Joints
- Adult Full Body (10 Parts)
  - Skull
  - Brain (with tissue)
  - Grey and White Matter
  - Air Cavities
  - Frontal Sinus with Air Gaps
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Major Arm Muscles
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Major Leg Muscles
  - Femur
  - Knee Joints
  - Tibia

Size & Weight:

- Size: 69 Inches, Weight: 154 Lbs (approx.).
- Size: 46 x 36 x 17 Inches, Weight: 199 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Pediatric Full Body for X-Ray CT, US



FB-P02

Description:

4-Year-old Pediatric Full Body Phantom is an X-Ray/CT, US-compatible training product. It is primarily used to train various patient positioning techniques. Often purchased by medical schools and teaching hospitals to train their radiology students and other medical professionals.

Anatomy:

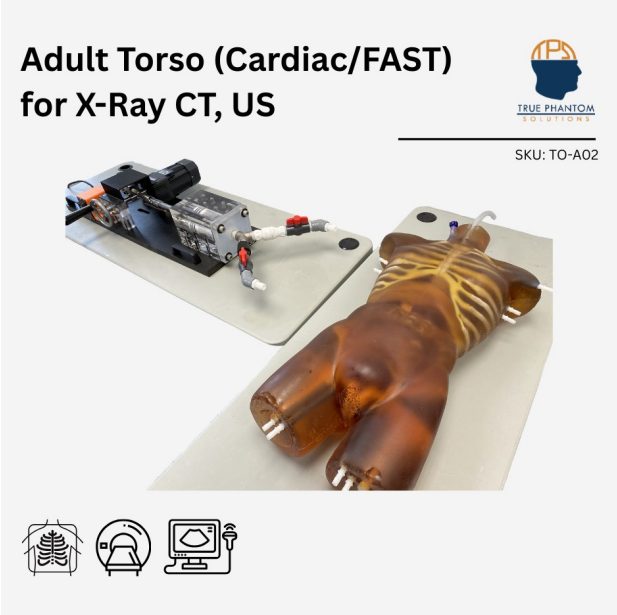
- Pediatric Full Body
- Realistic Body Tissue
- Rotatable Shoulders
- Moveable Hip Joints, Knees, and Elbows
- Detachable Head, Torso, and Limbs
- Customizable with Different Pathologies
  - Skull
  - Brain (with Gray Matter)
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Femur
  - Knee Joints
  - Tibia
  - Fibula
  - Foot with Toes

Size & Weight:

- Phantom Size: 40 x 8 x 27 Inches, Weight: 40 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 99 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso (Cardiac/FAST) for X-Ray CT, US



TO-A02

Description:

Adult Human Torso (Cardiac/FAST) with a beating heart is a lifelike, anatomically realistic, from neck to pelvic area phantom/simulator with all the essential organs present inside. This product includes a heart pump.

Anatomy:

- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Realistic Heart with:
  - 2 Atria, 2 Ventricles:
  - Right Ventricle
  - Left Ventricle
  - Right Atrium
  - Left Atrium
- Appendage Feature
- Aorta
- Jugular vessels
- Pulmonic and Pulmonary Veins
- Flexible Valvular Structures
- SVC
- IVC
- Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate
- Beating Heart
- Adjustable Heart Rate
- Pathologies (tumors, Hemorrhages, polyps, etc.)

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88 Lbs (approx.)
- Heart Pump Size: 36 x 12 x 8 Inches, Weight: 88 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso (Dynamic) for X-Ray CT, US

TO-A04

Description:

The Adult Human Torso (Dynamic) phantom is a lifelike simulator compatible with US and X-Ray/CT. The phantom includes a realistic heart with a TPS heart pump and breathable lungs with a TPS lung pump.

Anatomy:

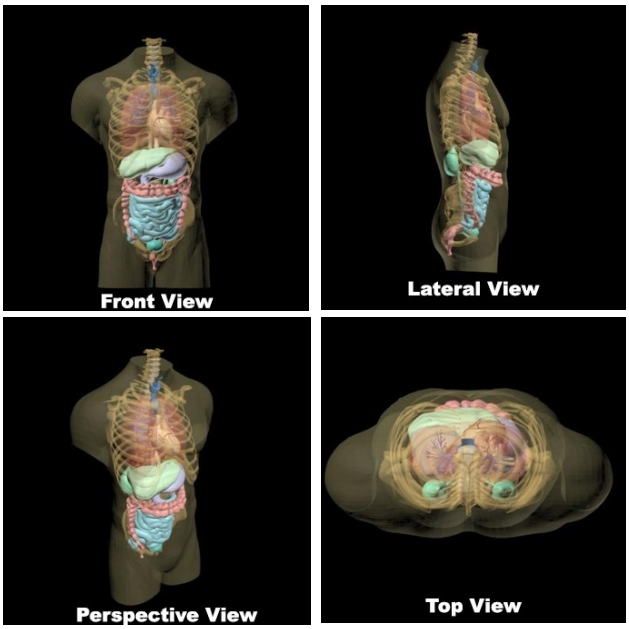
- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Realistic Heart with:
  - 2 Atria, 2 Ventricles:
  - Right Ventricle
  - Left Ventricle
  - Right Atrium
  - Left Atrium
- Appendage Feature
- Aorta
- Jugular vessels
- Pulmonic and Pulmonary Veins
- Flexible Valvular Structures
- SVC
- IVC
- Breathable Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate
- Beating Heart
- Adjustable Heart Rate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88 Lbs (approx.)
- Torso Shipment: 47 x 26 x 18 Inches, Weight: 144 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso for X-Ray CT, US



US-A02

Description:

Adult Torso for X-Ray CT, US is designed based on an average anatomy of an adult healthy human male. It is compatible with X-Ray/CT and Ultrasound. The skeleton is made from individually cast bones from a realistic patented epoxy-based composite material with vertebrae that have a realistic three-layered structure with inner porosity.

The phantom can be customized with any pathologies for learning the techniques of FAST (focused assessment with sonography for trauma), FAMUS (Focused Acute Medicine Ultrasound), and any other procedural training (Pericardial effusion, etc.)

Anatomy:

- Complete Spine
- Complete Ribcage
- Shoulders & Clavicles
- Pelvis
- Partial Femur Bones
- Trachea
- Heart
- Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88.2 Lbs (approx.).
- Shipment Size: 47 x 26 x 18 Inches, Weight: 144 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Sectional Abdomen (Portable FAST Simulator) for X-Ray CT, US

US-A03

Description:

Adult Sectional Abdomen for X-Ray CT, US is designed based on an average anatomy of an adult healthy human male. It is compatible with X-Ray/CT and Ultrasound. The bones are made from a realistic patented epoxy-based composite material with vertebrae that have a realistic three-layered structure with inner porosity.

This product is a translucent amber version (opaque, skin-colored version available upon request). An ideal phantom for training ultrasound technicians and other medical students.

Anatomy:

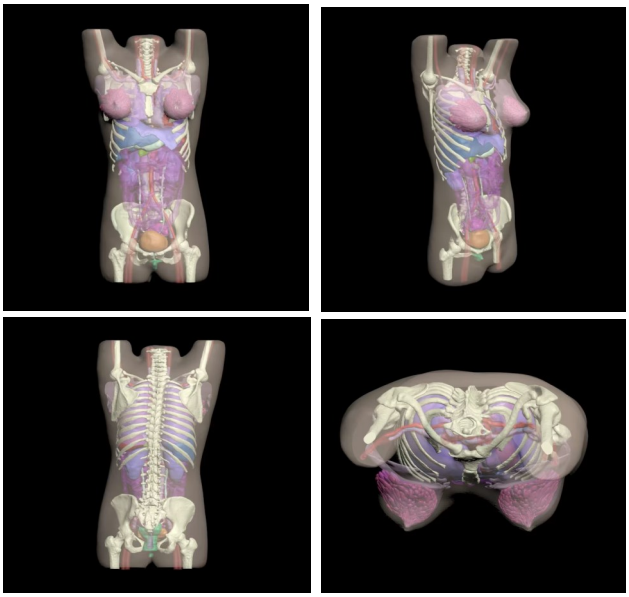
- Partial Spine
- Diaphragm
- Liver (with vessels and bile duct)
- Stomach
- Kidneys (with vessels)
- Pancreas
- 9 Lesions
  - 1-2 cm in diameter
  - Spherical and non-spherical
  - Located in kidney and liver
- Soft Body Tissue

Size & Weight:

- Phantom Size: 11 x 9 x 8 Inches, Weight: 22 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 30 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Female Torso for X-Ray CT, US



US-A05

Description:

This phantom was designed using a CT dataset from a healthy 35-year-old female patient, standing 168 cm (5’5″) tall with a BMI adjusted to 22. The model was developed using advanced artificial intelligence (AI) software, incorporating a leading-edge algorithm to extract anatomical structures, ensuring exceptional precision and anatomical accuracy within the phantom.

Anatomy:

- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Heart
- Lungs
- Diaphragm
- Breasts:

- Body Tissue Making
- Mammary Fat Tissues
- Mammary Gland Tissues

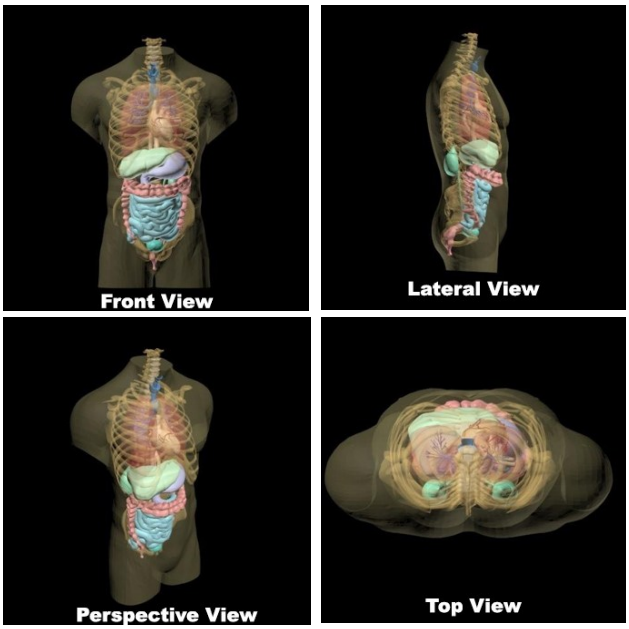
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder

Size & Weight:

- Phantom Size: 18 x 10 x 18 Inches, Weight: 58 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 90 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso (Skin) for X-Ray CT, US



US-S01

Description:

Adult Torso (Skin) for X-Ray CT, US is designed based on an average anatomy of an adult healthy human male. It is compatible with X-Ray/CT and Ultrasound. The skeleton is made from individually cast bones from a realistic patented epoxy-based composite material with vertebrae that have a realistic three-layered structure with inner porosity.

Anatomy:

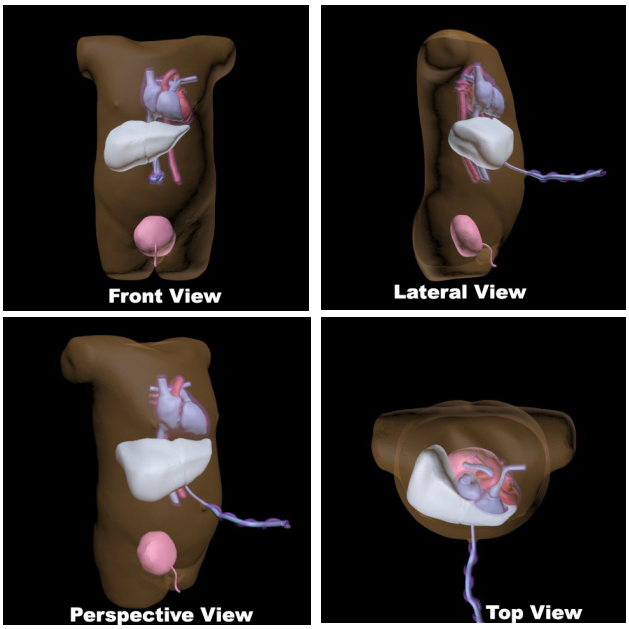
- Complete Spine
- Complete Ribcage
- Shoulders & Clavicles
- Pelvis
- Partial Femur Bones
- Trachea
- Heart
- Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large & Small Intestines
- Bladder
- Prostate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88.2 Lbs (approx.).
- Shipment Size: 47 x 26 x 18 Inches, Weight: 144 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Torso for X-Ray CT, US



US-S02

Description:

The design of our standard newborn torso phantom is based on an average newborn torso. It is made from realistic tissue-mimicking materials with ultrasound speckles suitable for Ultrasound and X-Ray/CT imaging methods. The phantom has a water-fillable umbilical cord and bladder, which can both be used for catheterization training under ultrasound guidance.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics).

Anatomy:

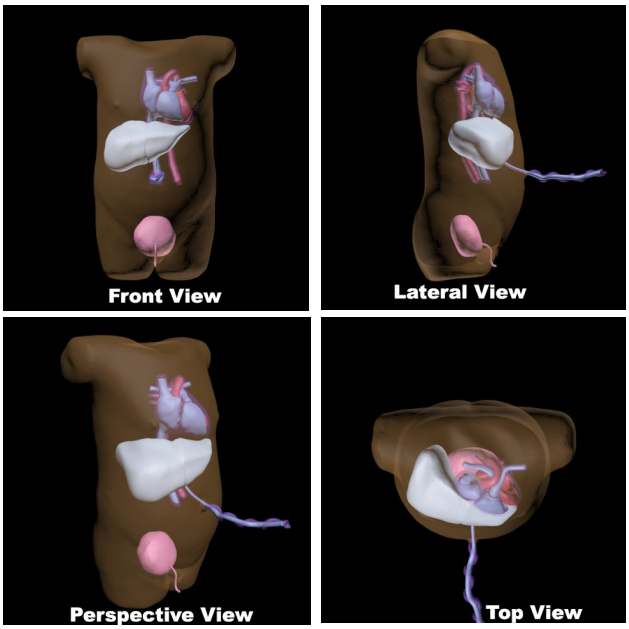
- Heart
- Aorta
- Inferior Vena Cava
- Water Fillable Umbilical Cord
- Liver
- Water Fillable Bladder

Size & Weight:

- Phantom Size: 6 x 5 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 8 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Torso (Transparent) for X-Ray CT, US



US-N02

Description:

The design of this Newborn Torso phantom is based on an average newborn torso. It is made from realistic tissue-mimicking materials suitable for Ultrasound and X-Ray/CT imaging. The phantom has a water-fillable umbilical cord and bladder, which can be both used for catheterization training under ultrasound guidance.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics).

Anatomy:

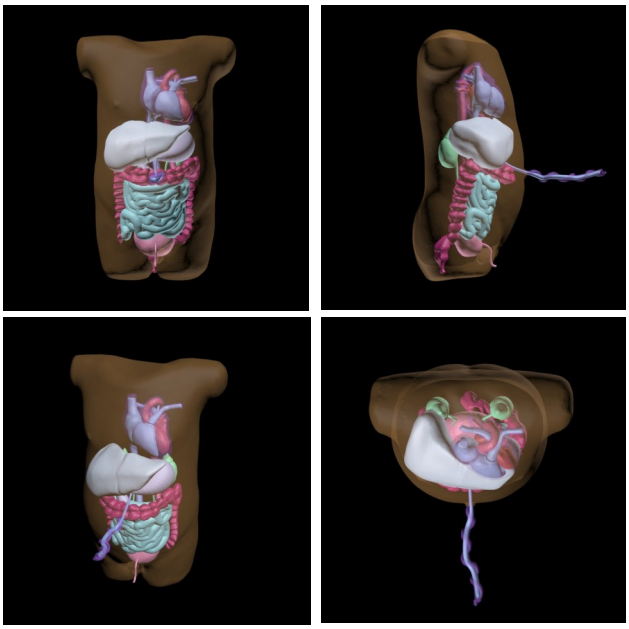
- Hear
- Aorta
- Inferior Vena Cava
- Water Fillable Umbilical Cord
- Liver
- Water Fillable Bladder

Size & Weight:

- Phantom Size: 6 x 5 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 8 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Torso (Advanced) for X-Ray CT, US



AN-N01

Description:

The design of this Advanced Newborn Torso phantom is based on an average newborn torso. It is made from realistic tissue-mimicking materials suitable for Ultrasound and X-Ray imaging. The phantom has a water-fillable umbilical cord and bladder, which can be both used for catheterization training under ultrasound guidance.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics).

Anatomy:

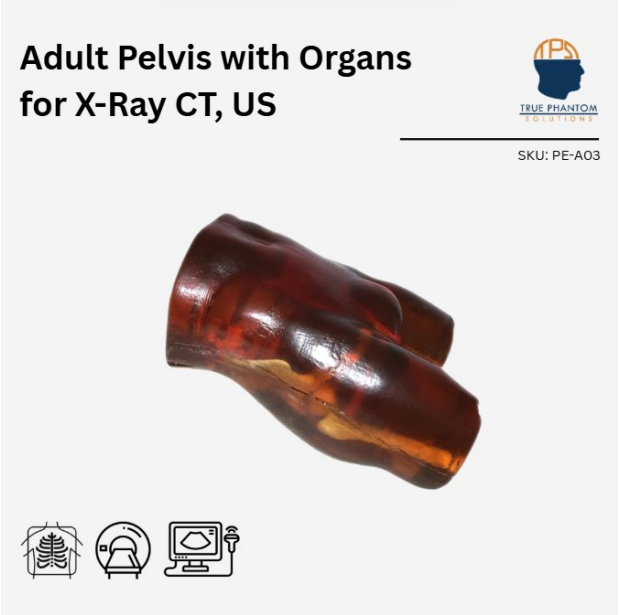
- Heart
- Aorta
- Inferior Vena Cava
- Liver
- Kidneys
- Stomach
- Large and Small Intestines
- Water Fillable Bladder
- Water fillable Umbilical Cord
- Realistic Body Tissue

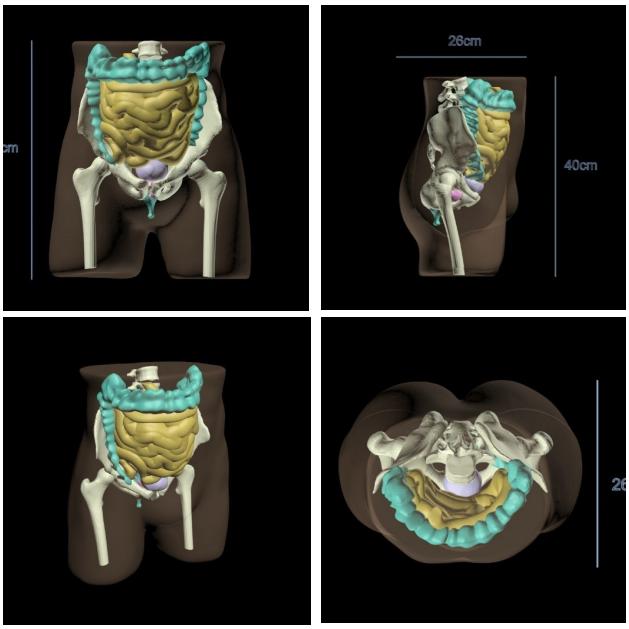
Size & Weight:

- Phantom Size: 6 x 5 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 8 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Pelvis with Organs for X-Ray CT, US





PE-A03

Description:

The Adult Pelvis with Organs phantom is designed around the average adult male anatomy. It features soft tissue-mimicking materials and synthetic bones suitable for X-Ray/CT and US. It serves as a tool for medical imaging research, radiology training, testing, and calibration. The spine bones will consist of a realistic three-layered structure with inner porosity, which can be adjusted according to the requirement of the particular project. The phantom can also be customized in size and shape (i.e., based on any individual's CT scan).

Anatomy:

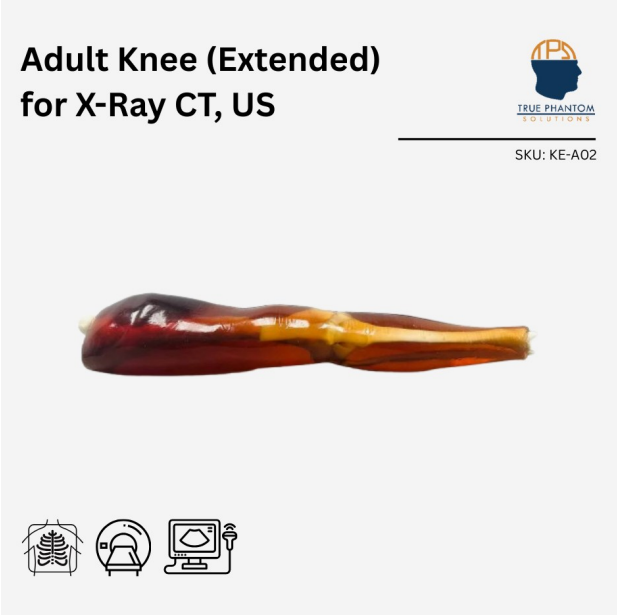
- Spine from L5 to L2
- Pelvis Bone
- Partial Left and Right Femoral Bones
- Large Intestine
- Rectum

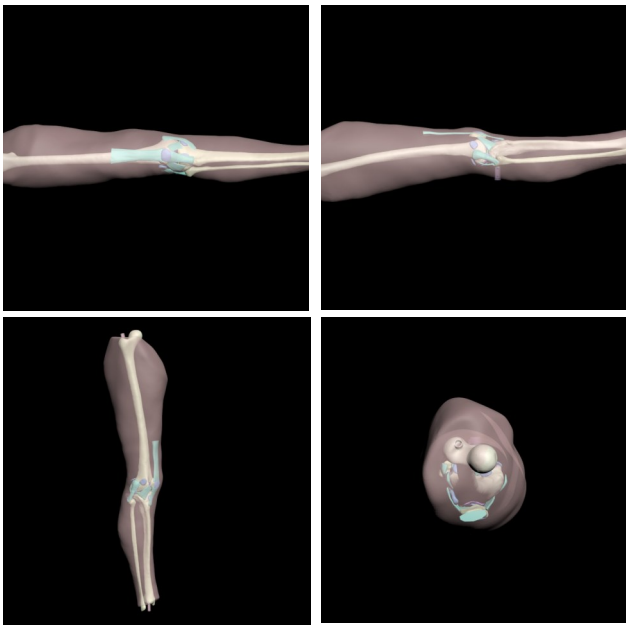
Size & Weight:

- Phantom Size: 14 x 10 x 16 Inches, Weight: 48.5 Lbs (approx.)
- Shipment Size: 36 x 24 x 12 Inches, Weight: 88.2 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Knee (Extended) for X-Ray CT, US





KE-A02

Description:

The design of this phantom is based on an average human right knee with thigh and calf regions. It is made out of several realistic tissue mimicking materials that are suitable for X-Ray CT and Ultrasound applications.

Anatomy:

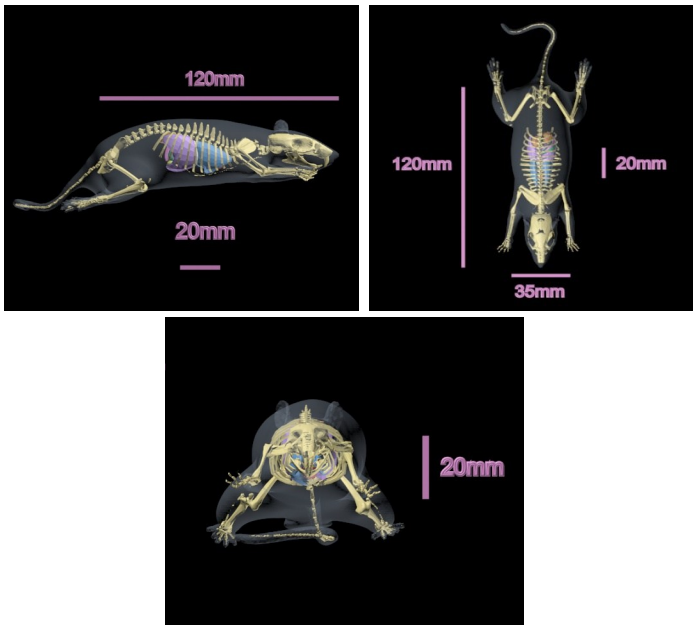
- Upper and Lower Leg
- Patella
- Meniscus:
  - Lateral Meniscus
  - Medial Meniscus
- Condyle:
  - Lateral Condyle Femoral
  - Medial Condyle Femoral
- Ligaments and Tendons:
  - Quadriceps Femoris Tendon
  - Patellar Ligament
  - Lateral Patellar Retinaculum
  - Medial Patellar Retinaculum
  - Anterior Cruciate Ligament
  - Posterior Cruciate Ligament
  - Arcuate Popliteal Ligament
  - Oblique popliteal Ligament
- Bursa:
  - Subtendinous Bursa (3)
  - Semimembranosus Bursa
  - Pes anserine Bursa
  - Infrapatellar Bursa
  - Prepatellar Bursa
  - Iliotibial Band Bursa

Size & Weight:

- Size: 7 x 8 x 35 Inches, Weight: 26 Lbs (approx.).
- Size: 43 x 26 x 17 Inches, Weight: 50 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Rat Phantom (Anatomical) for X-Ray CT, US



RT-A02

Description:

Rat Phantom (anatomical) is built based on an average anatomy of a rat (mouse) and it is suitable for either X-Ray/CT and Ultrasound OR X-Ray/CT and MRI imaging methods. Furthermore, the phantom can be additionally customized with extra chambers and/or other features to excel in a selected application. The size, shape, and internal features can also be modified in terms of shape and properties to fit the needs of any particular biomedical research project.

Anatomy:

- Complete Rat Skeleton
- Heart
- Lungs
- Diaphragm
- Liver
- Kidneys
- Pancreas

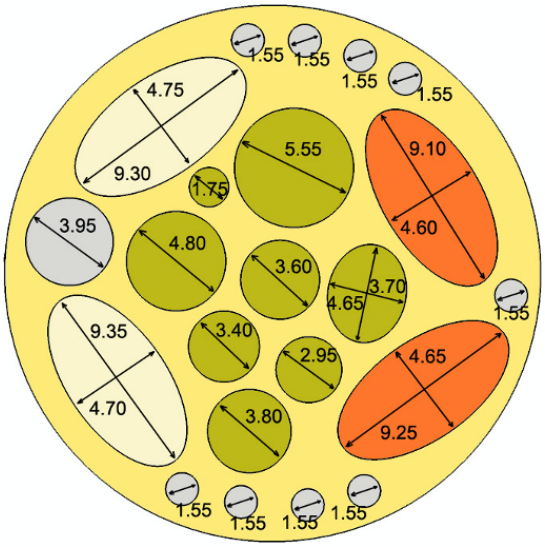
Size & Weight:

- Phantom Size: 7 x 3 x 2 Inches, Weight: 1 Lb (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Rat Phantom (Cylindrical) for X-Ray CT, US

RT-C03



*All units are in milimeters

Description:

Rat Phantom (Cylindrical) is designed to mimic complex rat anatomy in a form of a simple cylinder. It is a powerful tool that can be used for testing and calibration-related work of various medical imaging devices. The cylindrical phantom has a 27mm diameter and 70mm height, which correspond to the dimensions of small animals (i.e. a laboratory rat/mouse.).

Anatomy:

- Soft Body Tissue – Soft Body Tissue – for better imaging results and optical transparency, the phantom tissue is translucent and has no ultrasonic speckles
- Organs without Speckles – those are organs with low ultrasound echogenicity. They appear dark on ultrasonic images.
- Organs with Speckles – those are the organs with higher stiffness and echogenicity than the surrounding body tissue (i.e. muscles).
- Cartilage Tissue – very stiff and much more attenuative tissue than the organs and body tissue.
- Soft Organs with Speckles – those are soft organs with a high level of ultrasonic speckles and low ultra-

Size & Weight:

- Phantom Size: 1 x 1 x 3 Inches, Weight: 1 Lb (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Product Catalog

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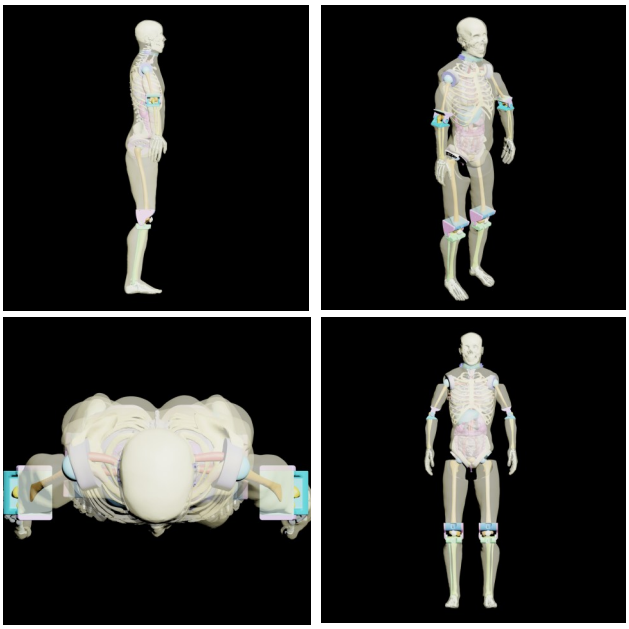
Adult Full Body for X-Ray CT, MRI



FB-A01

Description:

This Adult Full Body Phantom is an X-Ray/CT, MRI-compatible training product. The primary application of this phantom is to train and demonstrate various patient positioning techniques in radiology. This phantom can be ordered in a translucent or skin-colored version.

Anatomy:

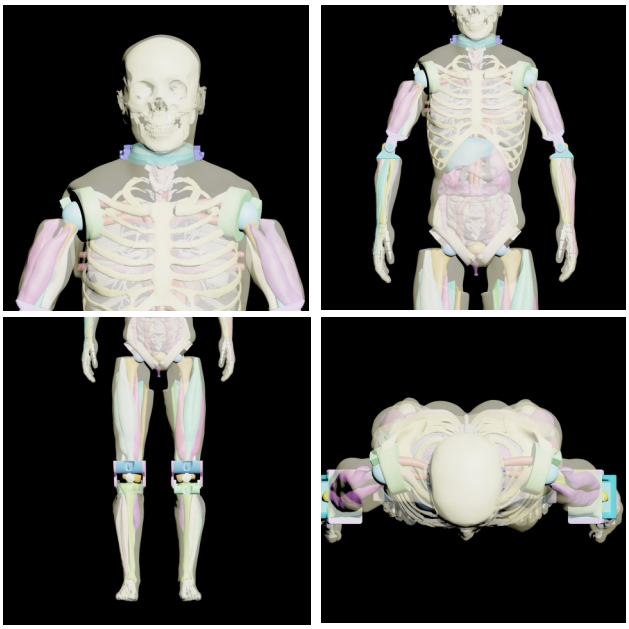
- Rotatable Shoulders
- Movable Hip, Knee, and Elbow Joints
- Adult Full Body (10 Parts)
  - Skull
  - Brain (with tissue)
  - Grey and White Matter
  - Air Cavities
  - Frontal Sinus with Air Gaps
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Femur
  - Knee Joints
  - Tibia
  - Fibula
  - Foot with Toes

Size & Weight:

- Size: 69 Inches, Weight: 154 Lbs (approx.).
- Size: 46 x 36 x 17 Inches, Weight: 199 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Full Body (with Muscles) for X-Ray CT, MRI



FB-A02

Description:

Adult Full Body Phantom with Muscles is an X-Ray/CT and MRI-compatible training product. The primary application of this phantom is to train and demonstrate various patient positioning techniques in radiology. . This phantom can be ordered in a translucent or skin-colored version.

Anatomy:

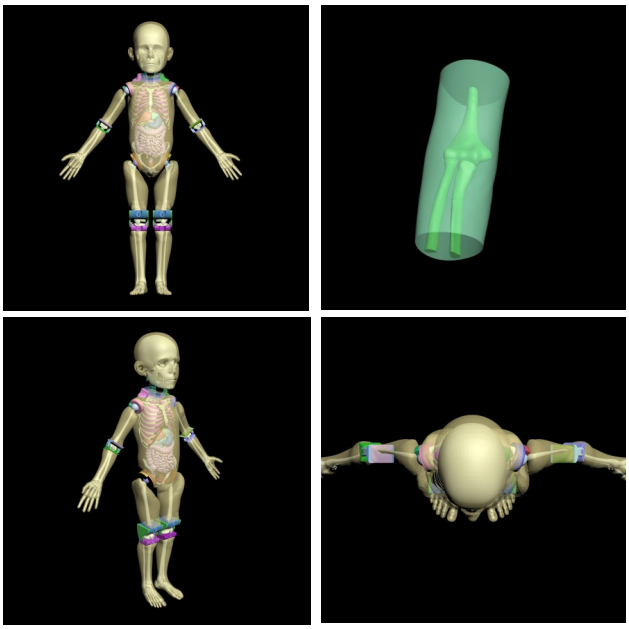
- Rotatable Shoulders
- Movable Hip, Knee, and Elbow Joints
- Adult Full Body (10 Parts)
  - Skull
  - Brain (with tissue)
  - Grey and White Matter
  - Air Cavities
  - Frontal Sinus with Air Gaps
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Major Arm Muscles
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Major Leg Muscles
  - Femur
  - Knee Joints
  - Tibia
  - Fibula
  - Foot with Toes

Size & Weight:

- Phantom Size: 69 Inches, Weight: 154 Lbs (approx.).
- Shipment Size: 46 x 36 x 17 Inches, Weight: 199 Lbs (approx.).

For more information about this product, please refer to our website.
Learn More

Pediatric Full Body for X-Ray CT, MRI



FB-P01

Description:

4-Year-old Pediatric Full Body Phantom is an X-Ray/CT, US-compatible training product. It is primarily used to train various patient positioning techniques. Often purchased by medical schools and teaching hospitals to train their radiology students and other medical professionals.

Anatomy:

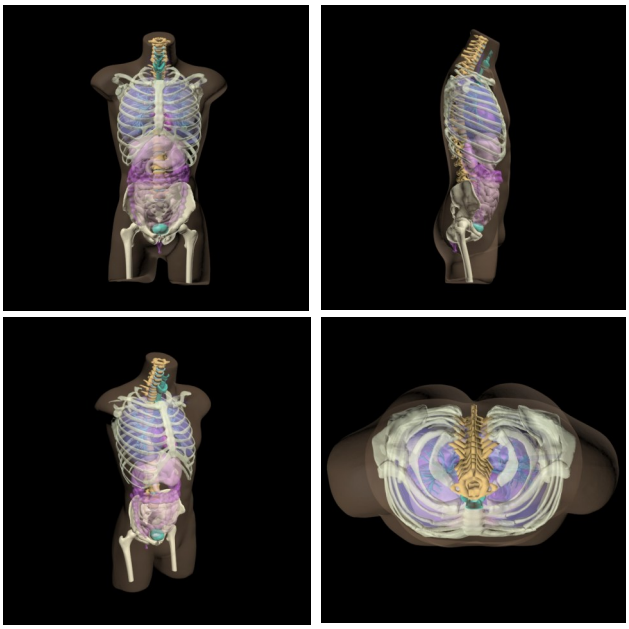
- Pediatric Full Body
- Realistic Body Tissue
- Rotatable Shoulders
- Moveable Hip Joints, Knees, and Elbows
- Detachable Head, Torso, and Limbs
- Customizable with Different Pathologies
  - Skull
  - Brain (with Gray Matter)
  - Spine
  - Ribcage
  - Shoulders and Clavicles
  - Pelvis
  - Trachea
  - Heart
  - Lungs
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate
  - Humerus
  - Elbow Joints
  - Radius and Ulna
  - Wrist with Fingers
  - Femur
  - Knee Joints
  - Tibia
  - Fibula
  - Foot with Toes

Size & Weight:

- Phantom Size: 40 x 8 x 27 Inches, Weight: 40 Lbs (approx.).
- Shipment Size: 32 x 23 x 13 Inches, Weight: 99 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso for X-Ray CT, MRI



CT-A01

Description:

This phantom is designed based on average human anatomy and is made out of realistic bone and soft tissue-mimicking materials that are suitable for X-Ray/CT and MRI applications. It can be used for medical imaging research and radiology training and can also be served as a customized tool for equipment testing and calibration.

The Lungs installed inside this Torso can be customized in several ways to simulate any pathology, such as mucus, lesions, and typical infections. This phantom can also be customized as a training simulator to train medical students on COVID-19-related diagnostic procedures.

Anatomy:

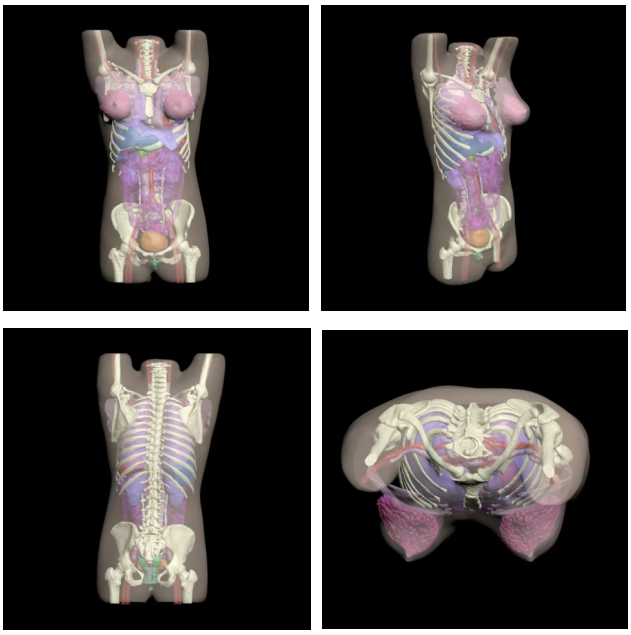
- Complete Spine
- Complete Ribcage
- Shoulders & Clavicles
- Pelvis
- Partial Femur Bones
- Trachea
- Heart
- Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88.2 Lbs (approx.).
- Shipment Size: 47 x 26 x 18 Inches, Weight: 144 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Female Torso for X-Ray CT, MRI



CT-A02

Description:

This phantom was designed using a CT dataset from a healthy 35-year-old female patient, standing 168 cm (5’5″) tall with a BMI adjusted to 22. The model was developed using advanced artificial intelligence (AI) software, incorporating a leading-edge algorithm to extract anatomical structures, ensuring exceptional precision and anatomical accuracy within the phantom.

Anatomy:

- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Heart
- Lungs
- Diaphragm
- Breasts:

- Body Tissue Making
- Mammary Fat Tissues
- Mammary Gland Tissues

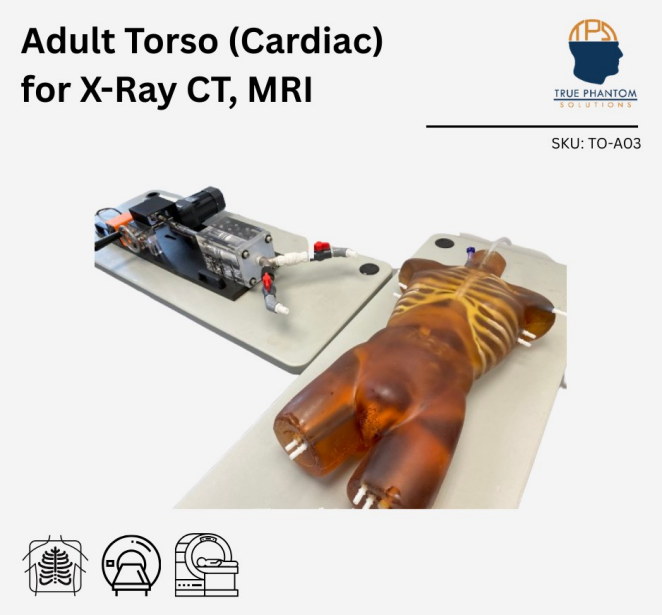
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Cervix
- Vaginal Canal

Size & Weight:

- Phantom Size: 29 x 14 x 11 Inches, Weight: 80 Lbs (approx.).
- Shipment Size: 46 x 36 x 17 Inches, Weight: 136 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso (Cardiac) for X-Ray CT, MRI



TO-A03

Description:

Adult Human Torso (Advanced) with a beating heart is a lifelike, anatomically realistic, from neck to pelvic area phantom/simulator with all the essential organs present inside. This product includes a heart pump.

Anatomy:

- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Realistic Heart with:
  - 2 Atria, 2 Ventricles:
  - Right Ventricle
  - Left Ventricle
  - Right Atrium
  - Left Atrium
- Appendage Feature
- Aorta
- Jugular vessels
- Pulmonic and Pulmonary Veins
- Flexible Valvular Structures
- SVC
- IVC
- Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate
- Beating Heart
- Adjustable Heart Rate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88 Lbs (approx.)
- Heart Pump Size: 36 x 12 x 8 Inches, Weight: 88 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Torso (Dynamic) for X-Ray CT, MRI

TO-A05

Description:

The Adult Human Torso (Dynamic) phantom is a lifelike simulator compatible with MRI and X-Ray/CT. The phantom includes a realistic heart with a TPS heart pump and breathable lungs with a TPS lung pump.

Anatomy:

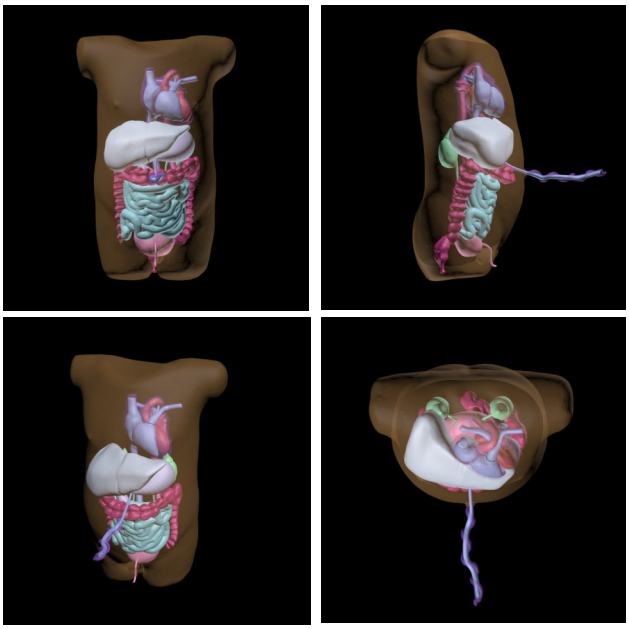
- Complete Spine
- Complete Ribcage
- Shoulders and Clavicles
- Pelvis
- Partial Femoral Bones
- Trachea
- Realistic Heart with:
  - 2 Atria, 2 Ventricles:
  - Right Ventricle
  - Left Ventricle
  - Right Atrium
  - Left Atrium
- Appendage Feature
- Aorta
- Jugular vessels
- Pulmonic and Pulmonary Veins
- Flexible Valvular Structures
- SVC
- IVC
- Breathable Lungs
- Diaphragm
- Liver
- Gallbladder
- Stomach
- Kidneys
- Spleen
- Pancreas
- Large and Small Intestines
- Bladder
- Prostate
- Beating Heart
- Adjustable Heart Rate

Size & Weight:

- Phantom Size: 34 x 18 x 10 Inches, Weight: 88 Lbs (approx.)
- Torso Shipment: 47 x 26 x 18 Inches, Weight: 144 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Newborn Torso (Advanced) for X-Ray CT, MRI



AN-N02

Description:

The design of this Advanced Newborn Torso phantom is based on an average newborn torso. It is made from realistic tissue-mimicking materials suitable for MRI and X-Ray/CT imaging. The phantom has a water-fillable umbilical cord and bladder, which can be both used for catheterization training under ultrasound guidance.

The phantom was developed in collaboration with a group of physician experts from the Sonographic Clinical Assessment of the Newborn (SCAN) Training Program at the University of Calgary (Department of Pediatrics).

Anatomy:

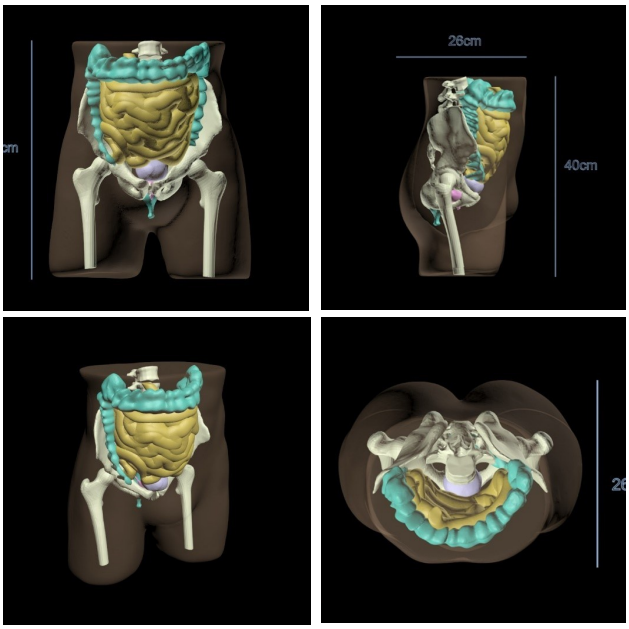
- Heart
- Aorta
- Inferior Vena Cava
- Liver
- Kidneys
- Stomach
- Large and Small Intestines
- Water Fillable Bladder
- Water fillable Umbilical Cord
- Realistic Body Tissue

Size & Weight:

- Phantom Size: 6 x 5 x 9 Inches, Weight: 4 Lbs (approx.).
- Shipment Size: 16 x 12 x 10 Inches, Weight: 8 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Pelvis with Organs for X-Ray CT, MRI



PE-A02

Description:

The Adult Pelvis with Prostate Phantom is built based on an average adult human male anatomy. It is made out of realistic soft tissue-mimicking materials and patented synthetic bones suitable for X-Ray/CT, MRI imaging applications. It can be used as a tool to conduct medical imaging research, radiology training, testing, and calibration purposes. This product can be further customized to match our client's specific requirements.
The spine bones will consist of a realistic three-layered structure with inner porosity, which can be adjusted according to the requirement of the particular project. The phantom can also be customized in size and shape (i.e., based on any individual's CT scan).

Anatomy:

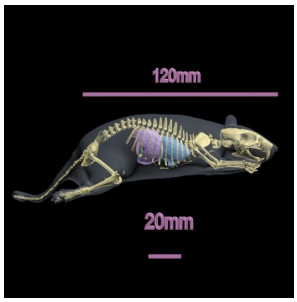
- Spine from L5 to L2
- Pelvis Bone
- Partial Left and Right Femoral Bones
- Large Intestine
- Rectum
- Prostate

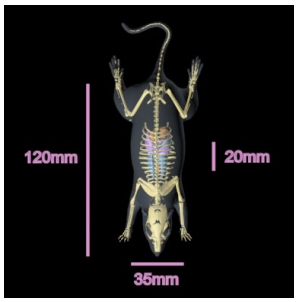
Size & Weight:

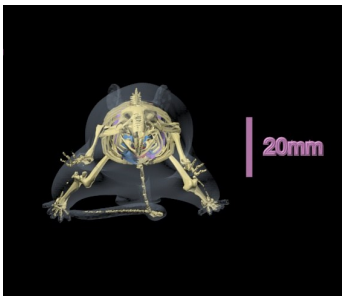
- Phantom Size: 14 x 10 x 16 Inches, Weight: 48.5 Lbs (approx.)
- Shipment Size: 36 x 24 x 12 Inches, Weight: 88.2 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Rat Phantom (Anatomical) for X-Ray CT, MRI







RT-A01

Description:

Rat Phantom (Anatomical) is designed based on an average anatomy of a rat/mouse and it is suitable for X-Ray/ CT and MR imaging methods. It can be customized to excel in a selected imaging modality which makes it is a powerful tool that can be used for testing and calibration-related work of various medical imaging devices. The phantom can be customized in size and shape. The internal features can also be modified in terms of shape and properties to fit the needs of any particular bio-medical research project.

Anatomy:

- Complete Rat Skeleton
- Heart
- Lungs
- Diaphragm
- Liver
- Kidneys

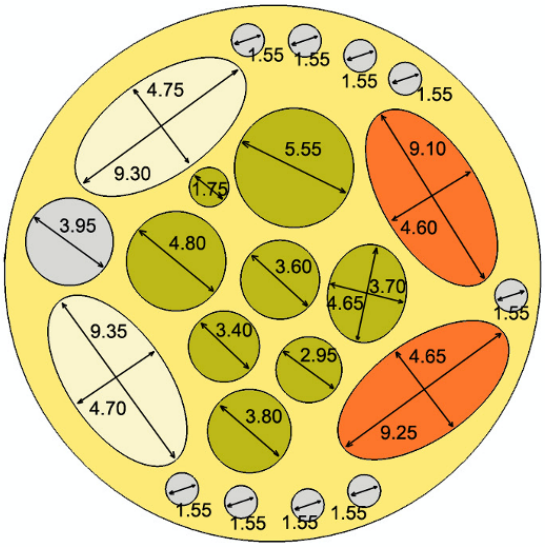
Size & Weight:

- Phantom Size: 7 x 3 x 2 Inches, Weight: 1 Lb (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Rat Phantom (Cylindrical) for X-Ray CT, MRI

RT-C01



*All units are in milimeters

Description:

Rat Phantom (Cylindrical) is designed to mimic complex rat anatomy in a form of a simple cylinder. It is a powerful tool that can be used for testing and calibration-related work of various medical imaging devices. The cylindrical phantom has a 27mm diameter and 70mm height, which correspond to the dimensions of small animals (i.e. a laboratory rat/mouse.).

Anatomy:

- Soft Body Tissue – for better imaging results and optical transparency, we set this tissue to be transparent and to have no speckles.
- Organs without Speckles – those are organs which are softer than the surrounding body tissue. They appear brighter on T2-weigthed MRI images.
- Organs with Speckles – those are the organs with higher stiffness and density (i.e. muscles). They appear brighter on T2-weigthed MRI images.
- Cartilage Tissue – very stiff and much more attenuative tissue than the organs and body tissue. It appears darker on T2-weigthed MRI images.
- Soft Organs with Speckles – those are the softest organs in the phantom. They appear the brightest in the phantom on T2-weigthed MRI images (i.e. kidneys, liver, etc.).

Size & Weight:

- Phantom Size: 1 x 1 x 3 Inches, Weight: 1 Lb (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Product Catalog

TRUE PHANTOM
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X-Ray CT

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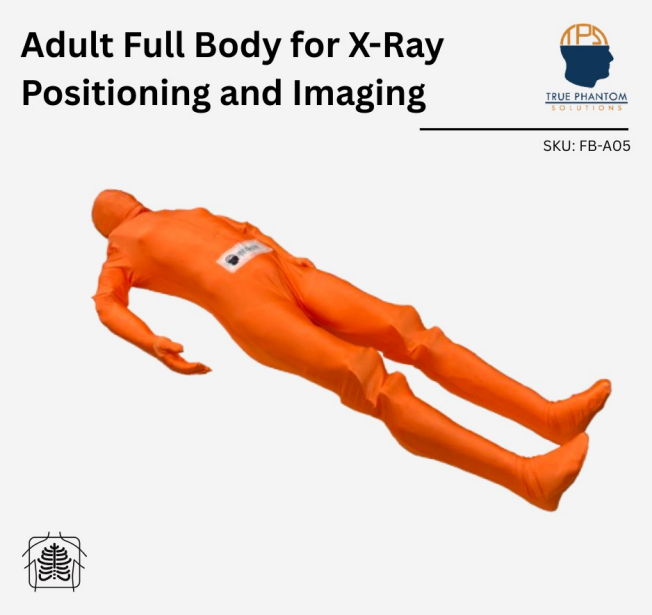
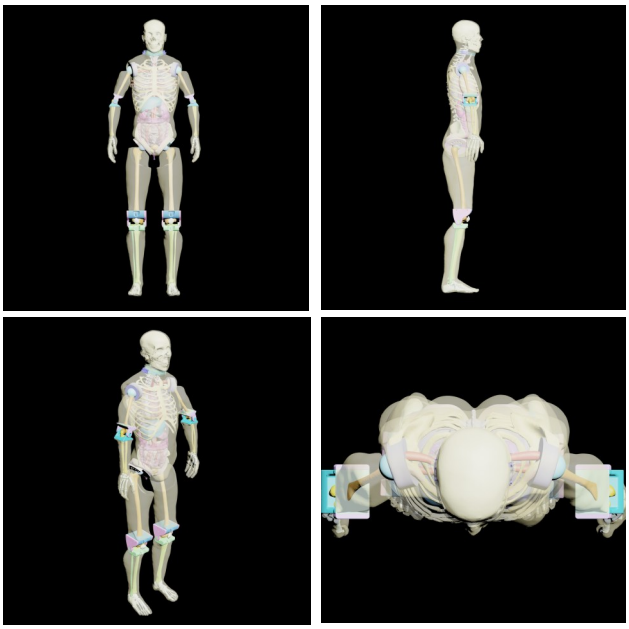
www.truephantom.com

Adult Full Body X-Ray Positioning and Imaging





FB-A05

Description:

The Adult Full Body Phantom is a lightweight, 20 kg X-ray positioning and imaging training tool, with no assembly required, designed for radiology students and professionals. Made from durable synthetic materials, it allows for repeated practice without radiation risks.

Anatomy:

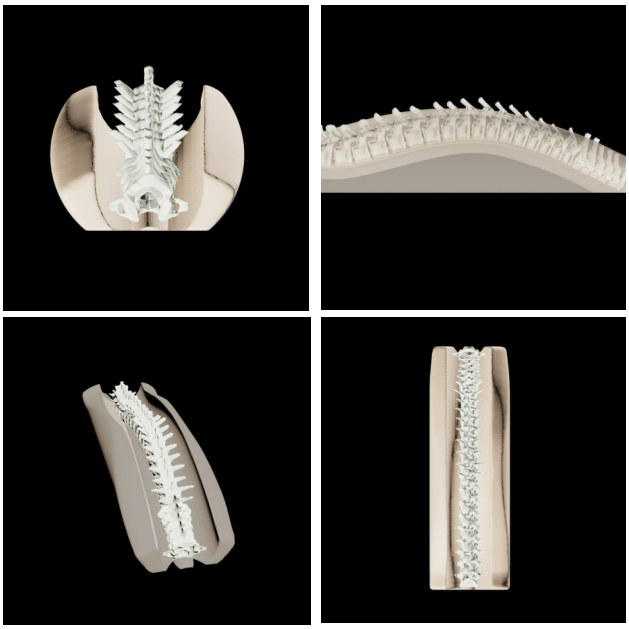
- ✓ Foam Body Tissue
- ✓ Movable Hip, Knee, and Elbow Joints
- ✓ Adult Head
  - – Skull
  - – Air Cavities
  - – Frontal Sinus with Air Gaps
- ✓ Adult Torso
  - – Spine
  - – Ribcage
  - – Shoulders& Clavicles
  - – Pelvis
  - – Trachea
  - – Heart
  - – Lungs
  - – Diaphragm
  - – Liver
  - – Gallbladder
  - – Stomach
  - – Kidneys
  - – Spleen
  - – Pancreas
  - – Large and Small Intestines
  - – Bladder
  - – Prostate
- ✓ Adult Arms
  - – Humerus
  - – Elbow Joints
  - – Radius
  - – Ulna
  - – Wrist
  - – Fingers
- ✓ Adult Legs
  - – Femur & Knee joints
  - – Foot with toes
  - – Tibia and Fibula

Size & Weight:

- ✓ Size: 69 Inches, Weight: 44 Lbs (approx.).
- ✓ Size: 63 x 34 x 42 Inches, Weight: 90 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Adult Spine for X-Ray CT



SE-A02

Description:

Adult Spine Phantom consists of 25 individual vertebrae assembled on top of each other and encased in a semi-cylindrical-shaped body-mimicking tissue. The vertebrae have a realistic three-layered structure, and their inner porosity can be adjusted according to the requirement of the particular project.

The Phantom is designed based on average human anatomy, and the bones are made out of realistic patented bone material that is suitable for X-Ray/CT applications. It can be used for medical imaging research & treatment planning of various medical procedures (Upon request, it can be modified for a lumbar or spine lumbar practice phantom with soft tissue-mimicking material surrounding it).

Anatomy:

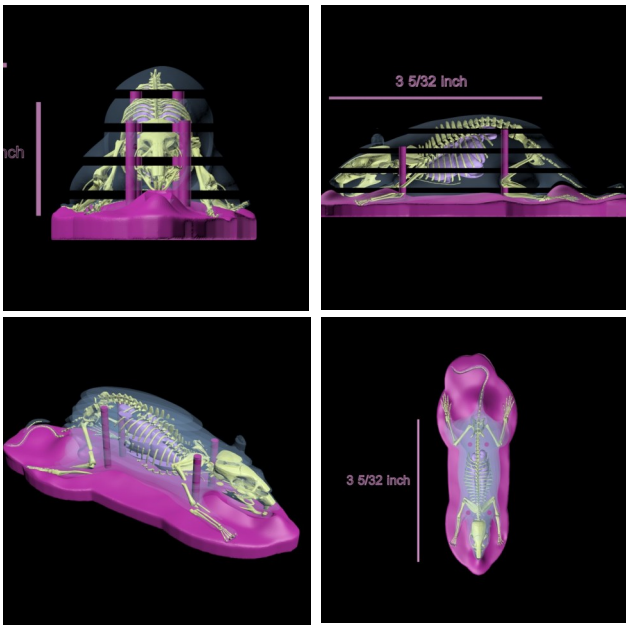
- Cervical Vertebrae (C1 – C7)
- Thoracic Vertebrae (T1 – T12)
- Lumbar Vertebrae (L1 – L5)

Size & Weight:

- Phantom Size: 22 x 7 x 7 Inches, Weight: 30 Lbs. (approx.).
- Shipment Size: 23 x 14 x 10 Inches, Weight: 34 Lbs. (approx.)

For more information about this product, please refer to our website.
Learn More

Sectional Mouse for X-Ray CT



RT-C02

Description:

Sectional Mouse Phantom for X-Ray/CT is designed based on the average anatomy of a mouse, and it is sliced into four 5 mm thick segments. The phantom can be used for medical imaging research & development, testing, and calibration-related work. It can be customized in terms of size, shape, internal features, and properties to fit the needs of a wide variety of biomedical research projects.

Anatomy:

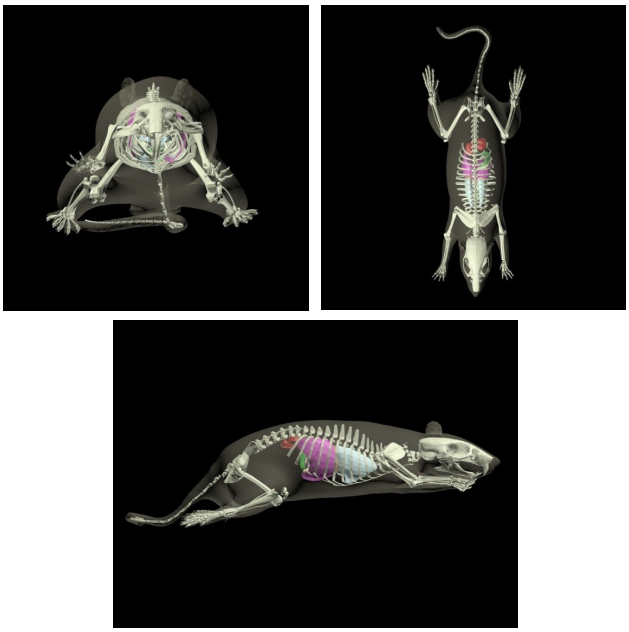
- Complete Mouse Skeleton
- Heart
- Lungs
- Diaphragm
- Liver
- Kidneys
- Pancreas

Size & Weight:

- Phantom Size: 2 x 4 x 1 Inches, Weight: 0.5 Lbs. (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs. (approx.)

For more information about this product, please refer to our website.
Learn More

Sectional Rat for X-Ray CT



RT-C04

Description:

Sectional Rat Phantom for X-Ray/CT is designed based on the average anatomy of a rat, and it is sliced into four 5 mm thick segments. The phantom can be used for medical imaging research & development, testing, and calibration-related work. It can be customized in terms of size, shape, internal features, and properties to fit the needs of a wide variety of biomedical research projects.

Anatomy:

- Complete Rat Skeleton
- Heart
- Lungs
- Diaphragm
- Liver
- Kidneys
- Pancreas

Size & Weight:

- Phantom Size: 2 x 4 x 1 Inches, Weight: 0.5 Lbs. (approx.).
- Shipment Size: 10 x 8 x 6 Inches, Weight: 3 Lbs. (approx.)

For more information about this product, please refer to our website.
Learn More

Product Catalog

TRUE PHANTOM
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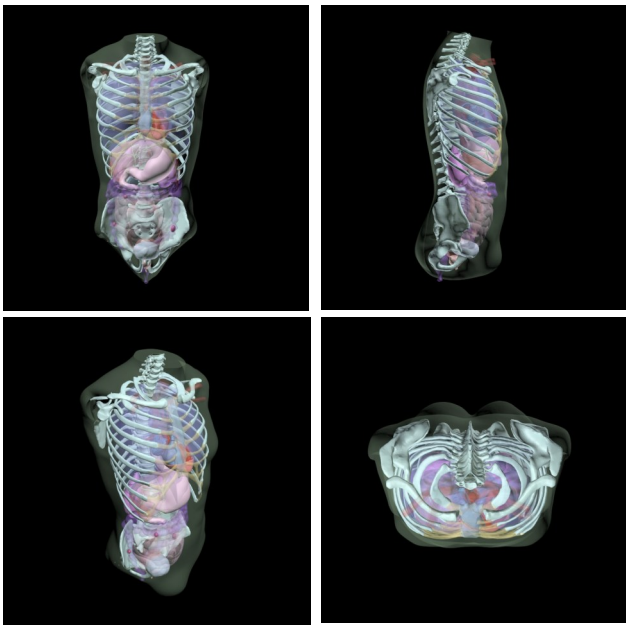
info@truephantom.com

www.truephantom.com

Adult Torso for FAST Training



US-A04

Description:

The Adult FAST Torso phantom, is for ultrasound imaging, with a primary focus on the FAST (Focused Assessment with Sonography in Trauma) protocol.

Anatomy:

- 3D Printed Bones:
  - Complete Spine
  - Complete Ribcage
  - Shoulders and Clavicles
  - Pelvis Structure
- Thoracic Organs:
  - Trachea
  - Heart with Four Chambers
  - Lungs
- Abdominal Organs:
  - Diaphragm
  - Liver
  - Gallbladder
  - Stomach
  - Kidneys
  - Spleen
  - Pancreas
  - Large and Small Intestines
  - Bladder
  - Prostate

Pathologies:

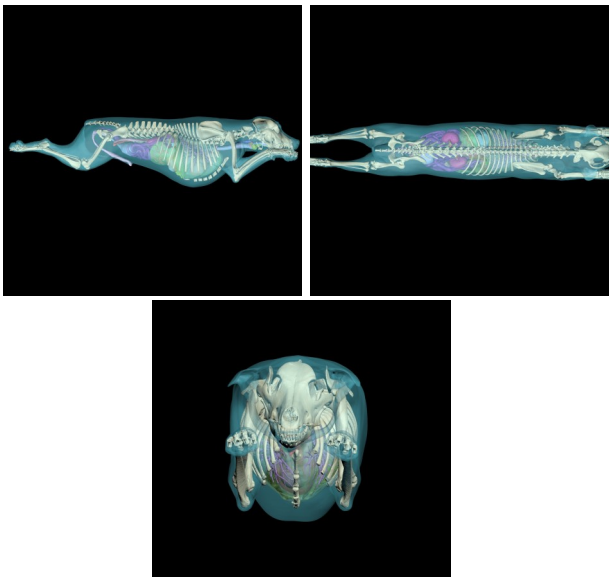
- Internal Hemorrhages:
  - Perihepatic: 88ml
  - Perisplenic: 76ml
  - Pericardial: 21ml
  - Around the bladder: 61 ml
- Cholecystitis
- Aortic Aneurysm
- Lesion in the colon

Size & Weight:

- Phantom Size: 27 x 10 x 14 Inches, Weight: 65 Lbs (approx.)
- Shipment Size: 32 x 23 x 13 Inches, Weight: 110 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Canine Phantom



CN-A02

Description:

The newly launched Canine Phantom was thoughtfully designed to meet the real-world needs of veterinary education and hands-on clinical training. Its anatomical design is based on a CT dataset of a male Bull Mastiff–Rhodesian Ridgeback cross, ensuring anatomical authenticity .

Anatomy:

- Adult Canine Head
- 3D-Printed Skull
- 3D-Printed Jaw Bone
- 3D-Printed Tailbone
- Skin Mimicking Material
- 3D-Printed Complete Spine
- 3D-Printed Complete Ribcage
- 3D-Printed Shoulder (Scapula bones)

Realistic Heart with Internal structures

- Valves
- Chambers
- Major Heart Vessels- IVC,SVC, Aorta
- Lungs
- Diaphragm
- Stomach
- Liver with vessels
- Gallbladder
- Kidney with Vessels and Arteries
- Spleen with Vessels
- Large Intestine
- Small Intestine
- Caecum
- Rectum
- Pancreas with Vessels
- Bladder
- Ureter
- Penis
- Urethra
- Adult Canine Front Arms and Rear legs

Size & Weight:

- Phantom Size: 110cm x 20cm x 20cm , Weight: 35 Lbs (approx.)
- Shipment Size: 120cm x 42cm x 24cm , Weight: 65 Lbs (approx.)

For more information about this product, please refer to our website.
Learn More

Technical Properties - Body Tissues

Type of Tissue	Sound Velocity [m/s]	Density [g/cm^3]	Attenuation Measured at 2.25 MHz [dB/cm]	Hardness [Shore OO]	T2 [ms]	Speckles
Organs with Speckles (liver, kidneys, etc.)	1400 ± 10	0.99	1.0 ± 0.2	20	70	VARIABLE
Organs without Speckles (stomach, intestines, etc.)	1400 ± 10	0.99	1.0 ± 0.2	20	70	NO
Heart Tissue	1400 ± 10	1.02	1.7 ± 0.2	60	30	YES
Body Tissue	1400 ± 10	1.00	1.2 ± 0.2	30	65	NO/LOW
Soft Tissue	1400 ± 10	1.01	1.3 ± 0.2	35	N/A	NO
Cartilage	1800 ± 10	1.03	25 ± 2	65 Shore A	N/A	NO
Tumor Feature	1400 ± 10	1.01	1.2 ± 0.2	30	65	YES
Cortical Bone	3000 ± 30	2.31	6.4 ± 0.3	N/A	N/A	N/A
Trabecular Bone	2800 ± 50	2.03	21 ± 2	N/A	N/A	N/A
Temporal Bone	3000 ± 30	2.31	6.4 ± 0.3	N/A	N/A	N/A
Brain Grey Matter	1400 ± 10	0.99	1.0 ± 0.2	20	70	YES
Brain White Matter	1400 ± 10	1.01	1.3 ± 0.2	35	60	YES
Falx Cerebri	1400 ± 10	1.01	1.7 ± 0.2	60	50	YES
Muscle Tissue	1400 ± 10	1.01	1.3 ± 0.2	35	60	YES
Skin Tissue	1400 ± 10	1.02	1.7 ± 0.2	60	50	NO

HU Values of the Tissue Mimicking-Materials

S.No.	Tissue Type	HU Value (Average)
1	Body Tissue	-25
2	Skin Tissue	-25
3	Brain Tissue	-25
4	Trabecular Bone	800
5	Cortical Bone	1300
6	Aorta	40
7	Vena Cava	40
8	Trachea	80 (Tissue Part), -1000 (Air Filled Part)
89	Pancreas	110
10	Spleen	110
11	Kidneys	110
12	Bladder	35
13	Rectum Wall	100
14	Sigmoid Colon Wall	100
15	Heart	40
16	Liver	110
17	Gallbladder	35

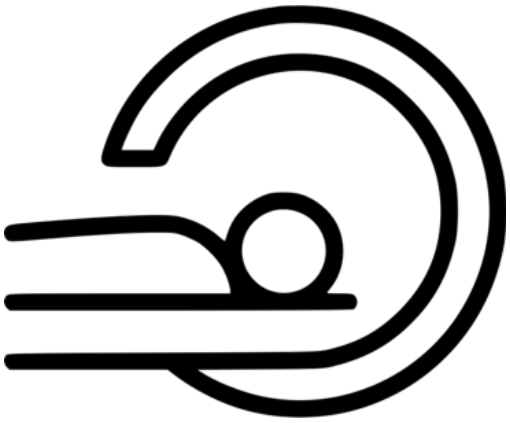
Thermal Properties of our Bone-Mimicking Material

Thermal Conductivity	Volumetric Specific Heat Capacity	Thermal Diffusivity	Thermal Resistivity	Specific Heat	Speed of Sound
0.776 W/ m K	1.040 MJ/ m^3 K	0.746 mm^2/ s	1.289 m K/ W	0.978 J/ g °C	3070 m/s

Technical Properties - Rat (Cylindrical)

Type of Tissue	Sound Velocity [m/s]	Density [g/cm³]	Hardness [Shore 00]	T2 [ms]	Speckles	Attenuation Measured at 2.25 MHz [dB/cm]
(#1) – Transparent	1400 ± 10	1.01	30	N/A	NO	1.3 ± 0.2
(#2) – Transparent	1400 ± 10	1.03	60	N/A	NO	1.8 ± 0.2
(#3) – Red	1400 ± 10	1.04	60	N/A	YES	1.8 ± 0.2
(#4) – Cartilage	1850 ± 10	1.06	85	N/A	NO	30 ± 2
(#5) – Non-Transparent	1400 ± 10	1.00	20	N/A	YES	1.0 ± 0.2

Scanning Applications



- Our phantoms are fabricated based on the anatomy of the real human body. It can be scanned as per the standard protocols used while positioning a real person.
- The phantoms can be put on horizontal as well as vertical positions for scanning purposes.
- Anterior, Lateral and Posterior techniques can also be performed.

Storage and Handling

- Our phantoms are made from urethane-based material and should be protected from direct exposure to any intense UV light.
- The experiments conducted on the phantoms can be performed in a sunny lab, but it is not recommended to leave the phantom under direct sunlight for weeks or months. If the phantom is not in use, we strongly recommend storing it in a dry and dark place or covering it with a plastic sheet/foil.

Cleaning

- The phantom is water-resistant, and it can be cleaned after its use. It is ideal for cleaning it either with water or with soapy water.
- It is also quite resistant to chemicals, but if stronger solvents are meant to be used with the phantom, we recommend doing a small test on the bottom part of the neck or legs. The phantom should be placed on its belly, and the chosen solvent can be applied on a small, selected surface of the phantom for a few hours. If there is no visible effect on the phantom's surface, it is safe to assume that the phantom is resistant to the tested chemical, and it is safe to use it for the rest of the phantom. In other cases, avoid the solvent or contact us for alternatives.

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SOLUTIONS

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