Phantom features vary depending on the specific anatomy. Realistic imaging phantoms are developed by experts in the fields of diagnostic imaging and learning experiences. A variety of models are available in equipment offering realistic experiences. Training phantoms are designed to be used with clinical imaging and are low cost yet durable. Diagnostic imaging phantoms are made from materials that image like human tissue and offer a safe, stress-free learning environment. CIRS training phantoms offer a cost-effective alternative to live subjects. They are made from materials that image like human tissue and offer a safe, stress-free learning environment. The phantom contains realistic anatomy to facilitate teaching and demonstration of techniques in a non-stressful setting. Students gain competency with ultrasound techniques in a non-stressful situation.

For additional information, visit www.cirsinc.com.
COMPREHENSIVE HANDS-ON INSTRUCTION

CIRS training phantoms are designed for demonstration, instruction and practice using standard clinical imaging equipment. Phantoms are made from materials that image like human tissue and offer a safe, cost-effective alternative to live subjects.

ADVANTAGES AND OBJECTIVES INCLUDE:
- Understanding goals and techniques for specific anatomies
- Eye-hand coordination skill development
- Adjusting equipment controls and transducer manipulation
- Learning how different scan set-ups impact image quality

VISIT WWW.CIRSINC.COM FOR ADDITIONAL INFORMATION
REALISTIC IMAGES
FROM STANDARD CLINICAL EQUIPMENT

<table>
<thead>
<tr>
<th>Fetal Phantom</th>
<th>Pediatric Phantom</th>
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<th>Female Training Pelvis</th>
<th>Lumbar Phantom</th>
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<th>Abdominal Phantom</th>
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<th>Thyroid Phantom</th>
<th>Female Pelvis Phantom</th>
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A variety of models are available for use with clinical imaging, simulating the characteristics of various human models. These phantoms and simulators are designed for quantitative densitometry, calibration, and quality control in the field of medical imaging and radiotherapy. They provide a realistic puncture practice phantom for ultrasound techniques, a realistic training medium for ultrasound imaging procedures, and a non-echoic, amniotic fluid-like environment for fetal ultrasound techniques. Models are made from materials that image like human tissue and offer a safe, cost-effective alternative to live subjects. The phantom kit also includes needles, simulated blood, and a needle insertion practice device. It is suitable for demonstrating 3D systems and protocol management, as well as MRI cardiac applications development. The phantom can be used for developing ultrasound examination skills and ultrasound examination parameter development. The phantom can also be used to provide trainees with experience in identifying vascular access and providing a realistic training medium for vascular access. The phantom is self-sealing for easy use and provides a realistic puncture practice phantom for ultrasound techniques. The phantom is made from a healing material with realistic acoustic properties. It is ideal for teaching and demonstrating ultrasound techniques, as well as developing ultrasound examination skills and ultrasound examination parameter development. The phantom is portable and easy to use, and it provides a realistic training medium for ultrasound imaging procedures.
FETAL ULTRASOUND  BIOMETRICS PHANTOM

The CIRS Model 068 Fetal Ultrasound Biometrics Phantom facilitates teaching and demonstration of fetal ultrasound techniques.

A tissue equivalent full fetal model is suspended in a non-echoic, amniotic fluid-like environment. The model is housed in a rotatable cylinder with 2 fields of view. A variety of fetal/transducer orientations can be achieved.

The Model 068 contains an asymmetric head with upper portion of the skull, right and left brain lobes and lateral and third ventricles. These anatomical references are used to measure the biparietal diameter (BPD) and anterior/posterior diameter (APD). Right and left femoral shafts with distal epiphysis are provided for femur length (FL) measurements. An umbilical marker indicates proper position for taking abdominal circumference (AC). Crown-Rump length (CRL) can also be taken. In addition, the model has full facial details making it suitable for demonstrating 3D systems and assessment of fetal anomalies.

THYROID ULTRASOUND  TRAINING PHANTOM

The CIRS Thyroid Training Phantom is a disposable training tool and practice medium for ultrasound guided thyroid biopsy procedures. The phantom also serves as an excellent teaching tool for identification of various types of thyroid nodules and training on proper thyroid scanning techniques.

This phantom contains a slightly enlarged thyroid gland positioned within an anthropomorphic neck. The chin and clavicle are provided as external anatomical landmarks. The phantom provides the trachea, internal jugular vein and common carotid artery as internal anatomical landmarks. All materials are formulated to be ultrasonically realistic.

LUMBAR  TRAINING PHANTOM

The CIRS Model 034 Lumbar Training Phantom provides a realistic puncture practice phantom for use with fluoroscopic image guidance.

Phantom contains realistic anatomy to facilitate eye/hand coordination in a training environment.

Practice:
- Lumbar epidural
- Caudal epidural
- Facet and nerve blocks
- Sacroiliac joint injection
- Lumbar diskography

Phantom images under CT, MR, and ultrasound.
VASCULAR ACCESS TRAINING PHANTOM

The CIRS Model 072 Vascular Access Training Phantom Kit provides a realistic training medium for needle insertion. The phantom is made from a durable elastometric compound mimicking the tactile feel and puncture resistance of soft tissue. This self healing material has realistic acoustic properties allowing imaging of the simulated palpable vessels under ultrasound. The phantom is self sealing for repeated use.

The phantom contains one bifurcated vessel and 2 straight walled vessels at a variety of depths and diameters to simulate a range of challenges often encountered in the clinical environment. The phantom kit also includes needles, simulated blood and a syringe.

FEMALE ULTRASOUND TRAINING PELVIS

The Model 404 Female Ultrasound Training Pelvis facilitates teaching and demonstration of ultrasound techniques in a non-stressful situation. The gynecological ultrasound exam is an important diagnostic tool. Students gain competency with hands-on practice. Access to patients can be limited. The Model 404 consists of an external female pelvic model containing a uterus, fallopian tubes, ovaries and iliac vessels. The phantom has both abdominal and vaginal scanning access allowing a variety of transducer orientations.

The Female Ultrasound Training Pelvis creates a focused learning environment for teaching and developing ultrasound examination skills and techniques as well as demonstrating 3D ultrasound capabilities.

TRIPLE MODALITY 3D ABDOMINAL PHANTOM

Abdominal imaging is valuable for diagnosing disease and monitoring treatments. The Model 057 Triple Modality 3D Abdominal Phantom provides a representation of a small adult abdomen and can be imaged under CT, MR and ultrasound. The multiple imaging feature makes the phantom a useful tool for a variety of applications including image fusion studies, developing imaging protocols, scan training, system testing and demonstration. The phantom can also be used for image-guided interventional procedures.
**PEDIATRIC TRAINING PHANTOM**

SPOeRT™ is the world’s first sectional pediatric Radiography Trainer ideal addition to any imaging department. The CIRS Model 715 assists in the monitoring, training and improvement of parameters and protocols common to most pediatric imaging procedures.

The phantom represents a typical 5-year old in both size and structure, making it portable and easy to position.

SPOeRT™ is designed to aid teaching and improvement of patient positioning, collimation and anatomical comprehension and its wide range of features facilitate effective instruction of safe, high quality, pediatric imaging.

**SCROTAL ULTRASOUND TRAINING PHANTOM**

The CIRS Model 504 Scrotal Ultrasound Training phantom provides an anatomically accurate phantom for training on testicular ultrasound exams without the need for live volunteers. The phantom allows students to gain valuable practice time in a non-stressful setting.

Using the Scrotal Ultrasound Training phantom, the testicles and epididymis can be examined by moving the ultrasound transducer over the scrotum. The phantom also includes a 10 mm intratesticular mass to provide trainees with experience in identifying masses.

**ULTRASOUND HEART PHANTOM**

The Heart Phantom has completely anthropomorphic external and internal anatomy and is designed for cardiac image training.

The Heart Phantom is ideal for teaching and developing ultrasound examination skills and techniques as well as demonstrating 3D ultrasound capabilities. Additionally, the model 067 phantom is helpful for MRI cardiac applications development, MRI protocol management, and MRI 3D reconstruction.

The phantom is housed in a flexible PVC membrane, and embedded in a clear anechoic medium. All standard cardiac imaging planes are easily achieved.
CIRS training and demonstration phantoms are designed to be used with clinical imaging equipment offering realistic learning experiences. A variety of models are available covering specific anatomy. Each phantom’s characteristics were developed by experts in the fields of diagnostic imaging and interventional techniques. Phantom features vary depending on the specific anatomy.

Disposable interventional models are low cost yet durable. Diagnostic models are highly detailed and realistic offering years of use as a demonstration, teaching or practice device. CIRS training phantoms offer a stress-free learning environment allowing rich, practical hands-on experiences without the inconvenience or exposure of using human models.

CIRS, Inc. is recognized world wide for tissue simulation technology and is the leading manufacture of phantoms and simulators for quantitative densitometry, calibration, quality control and research in the field of medical imaging and radiotherapy.
REALISTIC IMAGES FROM STANDARD CLINICAL EQUIPMENT

Phantom features vary depending on the specific anatomy. Interventional techniques are developed by experts in the field, covering specific anatomy. Each phantom is designed to be used with clinical imaging equipment offering realistic phantom images under CT, MR, and ultrasound. A variety of models are available, making it suitable for demonstrating 3D systems and studies, developing imaging protocols, scan training, and monitoring treatments. The Model 057 Triple Training Phantom provides a realistic puncture practice phantom for use with clinical imaging equipment, allowing rich, practical hands-on training. The phantom contains realistic anatomy to facilitate practice, providing a realistic puncture practice phantom for use with clinical imaging equipment.

CIRS training phantoms are designed for demonstration, instruction, and practice. They are made from materials that image like human tissue and offer a safe, cost-effective alternative to live subjects. The phantom is housed in a flexible PVC membrane, making it portable and easy to use. It is designed to provide a realistic puncture practice phantom for use with clinical imaging equipment. The phantom contains realistic anatomy to facilitate practice, providing a realistic puncture practice phantom for use with clinical imaging equipment.

ADVANTAGES AND OBJECTIVES INCLUDE:

- Understanding goals and techniques for specific anatomies
- Developing ultrasound examination skills and focused learning environment for teaching and demonstration of ultrasound imaging techniques as well as demonstrating 3D ultrasound capabilities. Additionally, the model 067 phantom is developed for demonstrating 3D ultrasound capabilities.
- Practicing ultrasound techniques in a non-stressful setting.
- The gynecological ultrasound exam is an important technique in a non-stressful situation. This phantom contains a slightly enlarged thyroid and serves as an excellent teaching tool for identification of various types of thyroid nodules and training on guided thyroid biopsy procedures. The phantom also provides a realistic puncture practice phantom for use with clinical imaging equipment.
- The phantom is designed to provide a realistic puncture practice phantom for use with clinical imaging equipment.
- The phantom is housed in a flexible PVC membrane, making it portable and easy to use.
- The phantom contains realistic anatomy to facilitate practice, providing a realistic puncture practice phantom for use with clinical imaging equipment.
- The phantom is designed for demonstration, instruction, and practice. It is made from materials that image like human tissue and offers a safe, cost-effective alternative to live subjects.

TEACH LEARN PRACTICE DEMONSTRATE

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