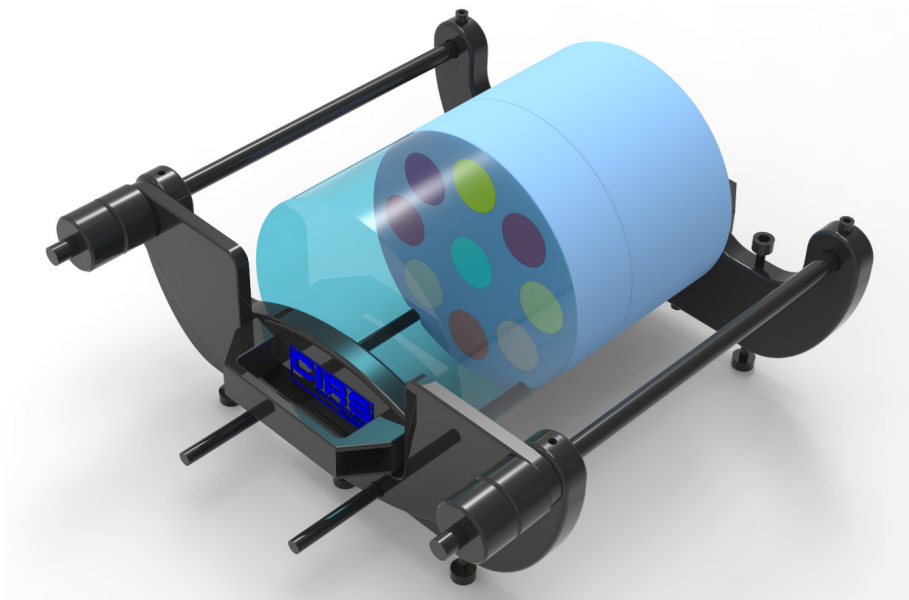


Multi-Energy CT QA Phantom (MECT)

Model 662



COMPREHENSIVE QA FOR MULTI-ENERGY CT

Multi-Energy CT offers a great improvement in advanced recognition, differentiation, quantification of human tissues and different contrast agents based on their linear attenuation at the different X-Ray energies. A Quality Assurance program using appropriate phantoms, is important to ensure accuracy and reproducibility for ME CT scanner performance.

The CIRS Multi-Energy CT QA (MECT) phantom is designed to assure accurate performance and consistency of Multi-Energy CT scans. The phantom facilitates evaluation of scanner performance allowing users to verify the quantitative accuracy of multi-energy scans, check for artifacts in an extended field-of-view and compare the consistency and stability across different scanners.

Our phantom features a series of 13 iodine in water & blood equivalent inserts, six calcium in water equivalent inserts and a matching kit displaying the same CT numbers at 120 kVp on a conventional CT scanner. See matching kit graph on page 2. All inserts contain a core target of Ø 10 mm inside Plastic Water® -LR for minimizing effects of “beam hardening” and can be positioned in 17 different locations within the scan field. In addition, a water vial plug that can be filled with any fluid. Adipose, Muscle and Water equivalent inserts are also provided. Inserts from the CIRS standard Electron density Phantom (model 062M/MA) can be used for extended testing due to their tissue equivalency of +/- 1% within a wide energy range.

Our phantom consists of nested disks made from CIRS Plastic Water® -LR, representing both head and abdomen configurations. Two 10 cm thick sections surround a 5 cm target section for proper scattering conditions.

A holder/support stand (062MA-30) that allows for adding additional sections from CIRS model 062 phantom and a soft carry case are also included with our phantom.

Benefits

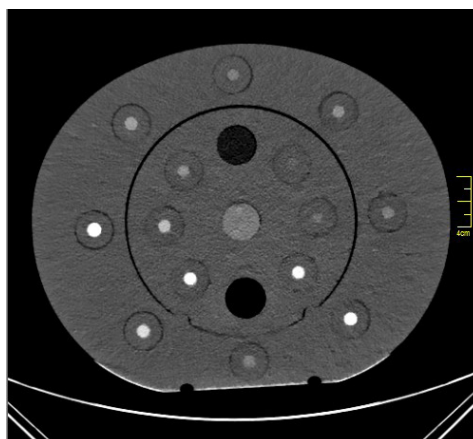
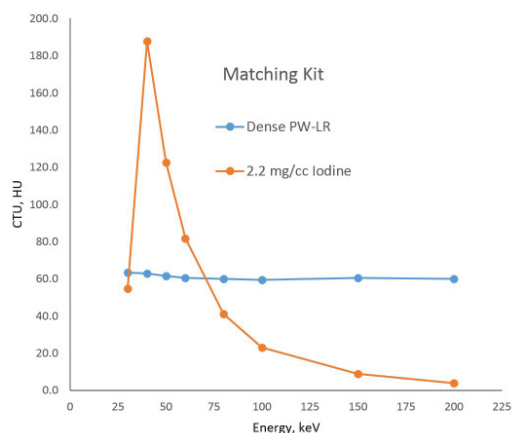
- Iodine, calcium, blood, & adipose inserts allow for testing tissue discrimination
- Verify quantitative accuracy & clinical protocols
- Verify performance reproducibility for a single scanner and across departments
- High accuracy in Iodine and Calcium inserts by minimizing “beam hardening”
- Allows for variable insert positioning
- Various inserts from CIRS 062M/MA can be used for extensive testing
- Imaging QA Phantom (CIRS 062QA-35) can be nested inside scattering section

900 Asbury Ave • Norfolk, Virginia 23513 • USA
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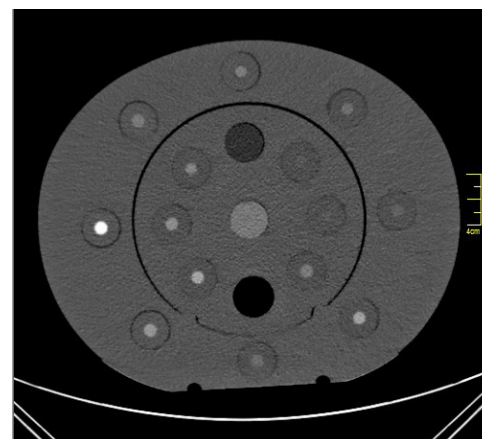
WWW.CIRSINC.COM

CIRS

Tissue Simulation & Phantom Technology



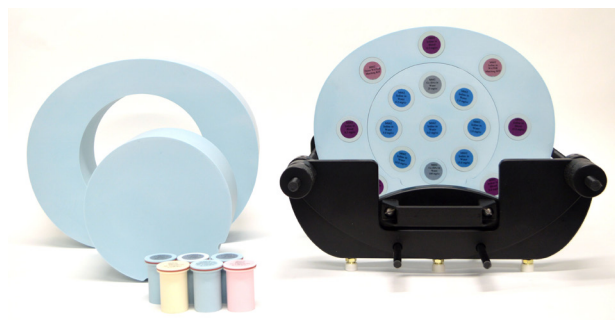
MONO-ENERGETIC 50 KEV SCAN



MONO-ENERGETIC 100 KEV SCAN

SPECIFICATIONS

DIMENSIONS	33 cm x 27 cm x 25 cm (13" x 11" x 10")
DIAMETER OF HEAD	18 cm (7.1 in)
MATERIAL	Plastic Water® - LR
INSERTS	25 solid inserts & 1 water fillable insert (each insert is labeled accordingly)
7 IODINE IN WATER INSERTS	Concentrations of 0.2, 0.50, 1.00, 2.00, 5.00, 10.00 & 15.00 mg/cc
6 IODINE IN BLOOD INSERTS	Concentrations of 0.00, 0.50, 2.00, 5.00, 10.00 & 15.00 mg/cc
6 CALCIUM INSERTS	Concentrations of 10, 20, 40, 60, 120 and 240 mg/cc
MATCH KIT (SET OF 2)	Dense PW-LR (+6%) 2.2 mg/cc Iodine in PW-LR
5 TISSUE EQUIVALENT INSERTS	Muscle, Adipose & Water
PHANTOM WEIGHT	49 lbs



MODEL 662 INCLUDES

QTY	DESCRIPTION
1	Body (50 mm thick)
1	Head (50 mm thick)
2	Annulus Head Insert (100 mm thick)
2	Annulus Body Insert (100 mm thick)
7	Iodine in Water Plugs (Ø 10 mm Core)
6	Iodine in Blood Plugs (Ø 10 mm Core)
6	Calcium Plugs (Ø 10 mm Core)
1	Match Kit (Dense PW-LR & 2.2 mg/cc Iodine in PW-LR (Ø 10 mm Core))
1	Muscle Equivalent Plug
2	Adipose Equivalent Plug
2	Water Equivalent Plug
1	Water-fillable Plug, Ø 1" removable vial inside (Real water data provided)
1	Holder/Support set
1	Soft Carry Case
1	User Guide
-	12 Month Warranty