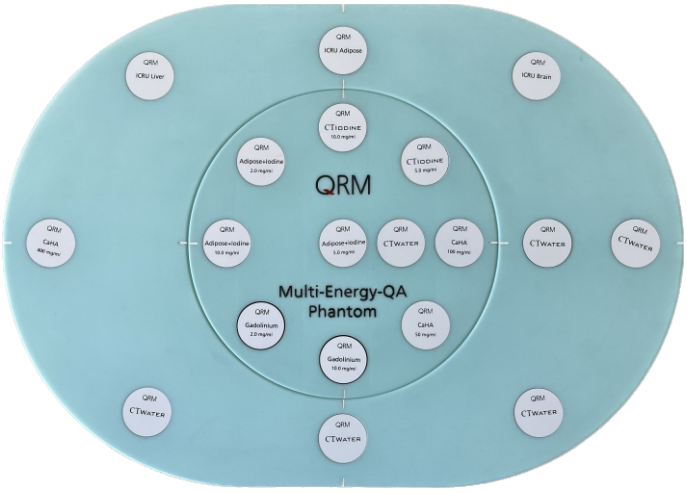
QRM A PTW COMPANY

QRM-10150

Multi-Energy QA Phantom

Test different types of Multi-Energy, Dual-Energy and Photon-Counting CT Protocols.
Perform System QA on DECT and PCCT systems.
Investigate water and fat enriched with iodine and calcium.



Multi-Energy QA Phantom

The phantom is designed to test different types of CT modalities with dual-energy, multi-energy or photon-counting setups.

Image acquisition and image processing at multiple energy levels is improving visualization for computed tomography. The QRM Multi-Energy QA phantom is ideally suited to test multi-energy spectral CT protocols and post-processing techniques.

The phantom consists of a removable/stand-alone head phantom (Ø 160 mm cylinder) with 10 holes (Ø 25 mm) to house different inserts and an oval (QRM-10150) or an optional circular (QRM-10151) body, equipped with 9 bores. Body and Head section are made of water-equivalent material (CTwater).

The phantom is equipped with a set of 26 inserts including rods enriched with several contrast media (water+iodine, adipose+iodine) as well as calcium (water+calcium hydroxyapatite), each material with different concentrations. Additionally, water- and soft tissue-equivalent inserts (adipose, liver, brain - ICRU Report 44 and 46) are included. Mass density, concentration and electron density are provided for all materials.

Multi-Energy QA Phantom on stand and optional ring

V20230714QL
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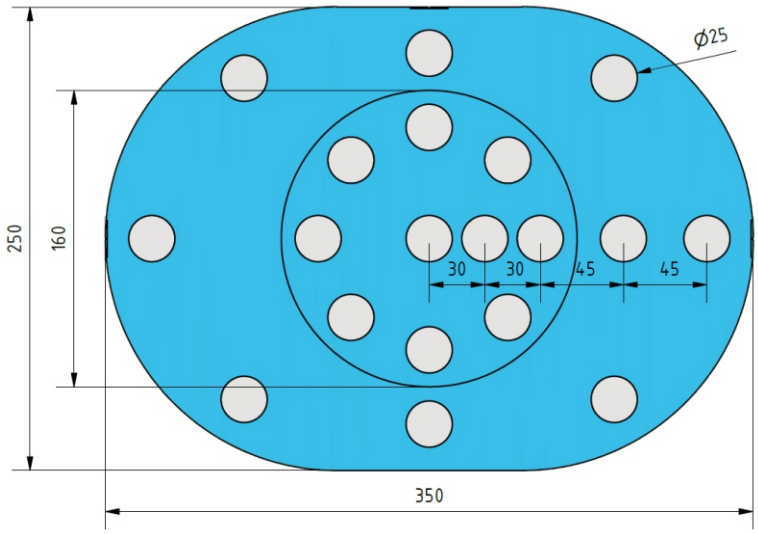
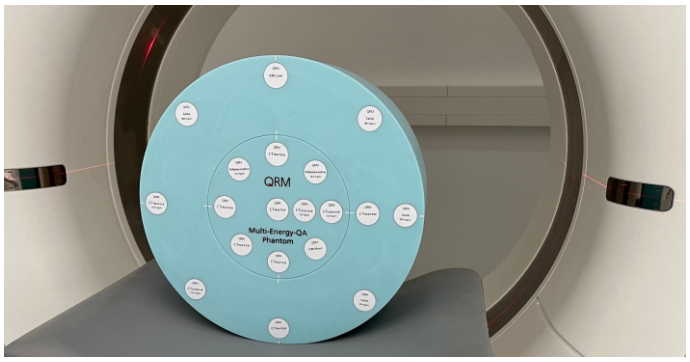
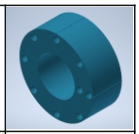
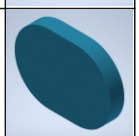
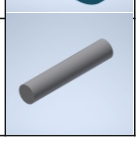
Multi-Energy QA Phantom





Optional circular body ring

Optional available

Ring D320	CTWATER® D320mm / H125, 9 holes	
Inserts Gadolinium	Gadolinium® 5 inserts: 2, 5, 10, 15, 20 mg/ml	
Inserts ICRU Tissues	Tissue equivalents ICRU 44/46 Soft Tissue, Bone	
Additional Extension slabs	axial extension water equivalent	
Customized Inserts	upon request	

Specifications

Body:
Phantom diameter: 250 mm x 350 mm
Phantom length: 125 mm
Holes: 9 pcs., 25 mm diameter

Head insert:
Phantom diameter: 160 mm
Phantom length: 125 mm
Holes: 10 pcs., 25 mm diameter

Material: CTWATER® (water-equivalent)

Inserts:
Diameter: 25 mm
Length: 125 mm

Phantom weight: 6.0 kg
Icludes Stand
Includes Transport Case

26 inserts included

- CTWATER® (3 pcs.)
- Water + Iodine (6pcs.):
  0.5, 1.0, 2.0, 5.0, 10.0 and 15.0 mg/cm³
- Adipose + Iodine (6pcs.):
  0.5, 1.0, 2.0, 5.0, 10.0 and 15.0 mg/cm³
- Water + Ca hydroxyapatite (5pcs.):
  25, 50, 100, 200, 400 mg/cm³
- ICRU Liver + Iron (3 pcs.)
- ICRU Adipose (1 pcs.)
- ICRU Brain (1 pcs.)
- Tube (Fillable rod) (1 pcs.)

Calibration protocol:
Physical density, concentration, electron density, electron density relative to water
(additional values upon request)

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