PH-75C | TR-A

Multi Energy CT Quality Assurance Phantom-TR-A type

MECT CT

"Aqua Slab" CTQA phantom with equidistance placement of inserts, meeting international recommendation

SHOW MORE!

FEATURES

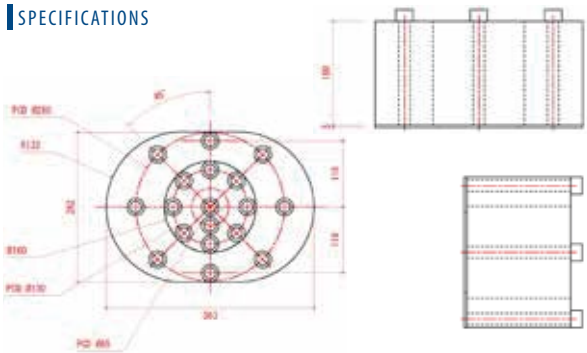
- The sectional areas of the assembled phantom with the truck phantom and the independently used inner phantoms are equal to those of the CTDI body and the head phantom respectively
- The holes to accommodate sample inserts and dosimeters for evaluation are placed concentrically at equidistance from the isocenter, along with the one placed off the center, meeting international recommendation for CTQA

APPLICATIONS

- Study for ME-CT image analysis, artifact reduction, contrast media

DESCRIPTIONS

SPECIFICATIONS



41941-

Optional Rods (Inserts) for PH-75A/B/C

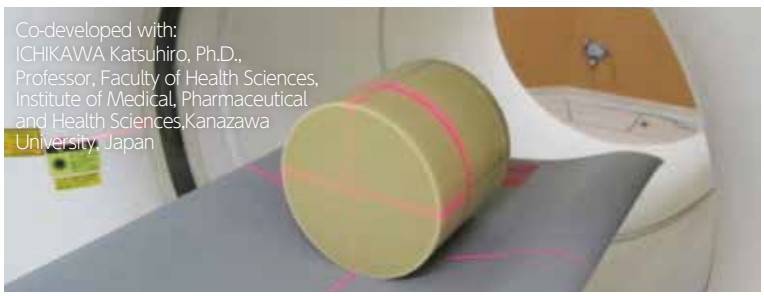
MECT CT

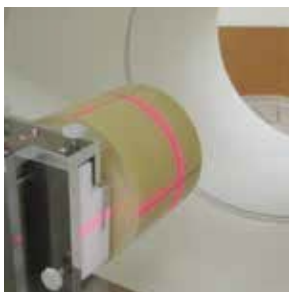
PH-80 | 41948-000 / 41948-100

Daily QA Phantom WEM "Aqua Slab"

MECT CT

Water Equivalent Material "Aqua Slab" updates tasks of daily QA





SHOW MORE!

FEATURES

- Phantom made of water equivalent material "Aqua Slab"
- Help to save time and costs of preparing water phantoms for researchers

APPLICATIONS

- Daily QA of CT

DESCRIPTIONS

SET INCLUDES

1	aqua slab phantom

MATERIALS

Polyurethane

SPECIFICATIONS

Dimensions : [41948-000] W20×D20×H20 cm
[41948-100] W20×D20×H21.5 cm
Weight : 41948-000 / 6.4Kg
41948-100 / 6.5Kg

Kyoto Kagaku New Lineup
Multi-Energy CT Phantoms

For Quality Assurance and Research

OVERVIEW

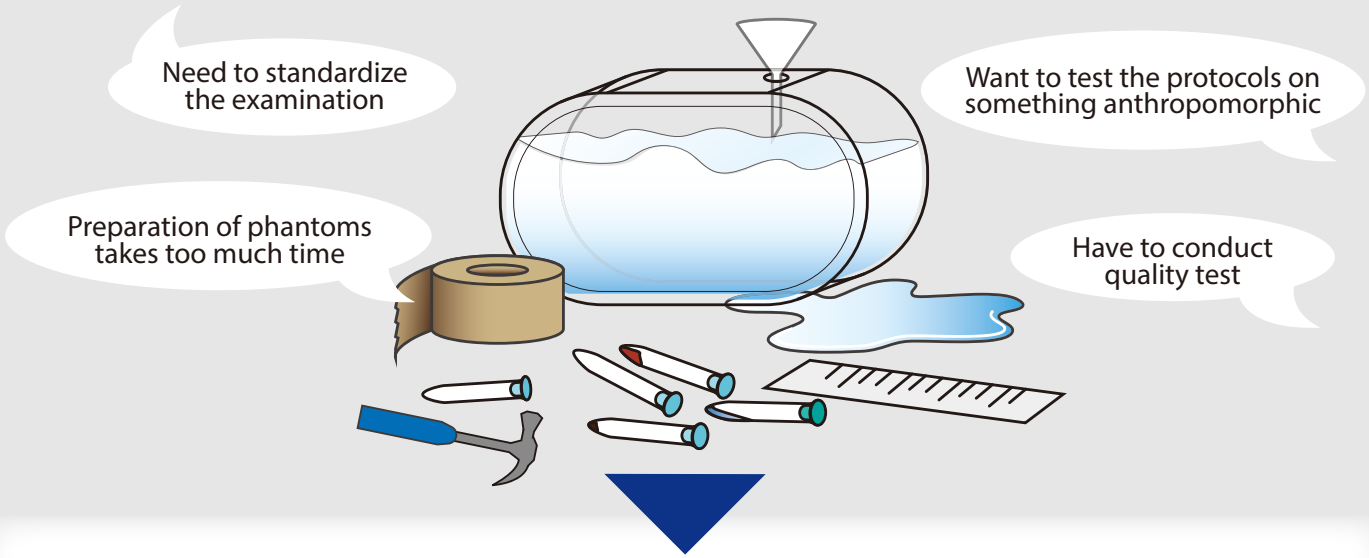
Multi-Energy CT (MECT) or Dual Energy CT (DECT) is a new frontier of rapidly advancing medical imaging, and now entering clinical practices in hospitals.
The technology enables material differentiation, elemental decomposition and material quantification.
Such features are expected to bring us better diagnosis, improved image quality, reduction of radiation exposure, reduction of contrast agent volume and opens possibility of functional imaging.

Meanwhile, further studies are awaited in various field such as quality management of CT equipment, verification of protocols, expansion of clinical application, to derive the maximum benefits from the technology.

Kyoto Kagaku supports researchers and clinicians with up-to-date innovative phantoms.

BACKGROUND

In many MECT/DECT studies, water phantoms have been used. However, using real water can impose considerable work in preparation and handling. At the same time, using acrylic containers limits the design of phantoms.



New lineup of Kyoto Kagaku Multi-Energy CT phantoms assists you promptly, saving your time and energy

PRODUCT LINEUP

Phantoms can be made in complex and detailed shapes including anatomical structures

Angiographic CT Head Phantom ACS
Head with MECT compatible arteries

CT Abdomen Phantom
Abdomen with MECT compatible vessels and liver

Sample product
Gout Foot Phantom

Iodine concentrations can be custom-ordered Contact us!

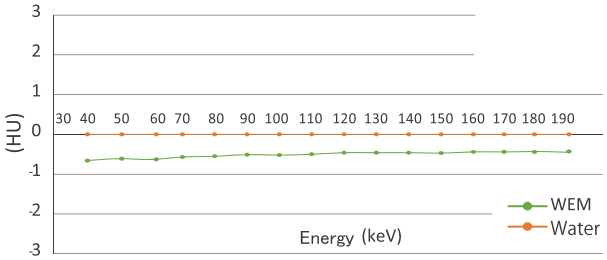
Multi Energy CT Quality Assurance Phantom
Phantom for quality assurance.
A variety of research samples can be inserted using small containers.

Vital factor for Multi-Energy-CT Phantom "Water Equivalent Material"

About Water Equivalent Material (WEM)

WEM has high equivalency to water in diagnostic energy ranges(40-190KeV)

Co-developed with; Professor Ichikawa Katsuhiro,
Faculty of Health Sciences, Institute of Medical,
Pharmaceutical and Health Sciences,
Kanazawa University, Japan



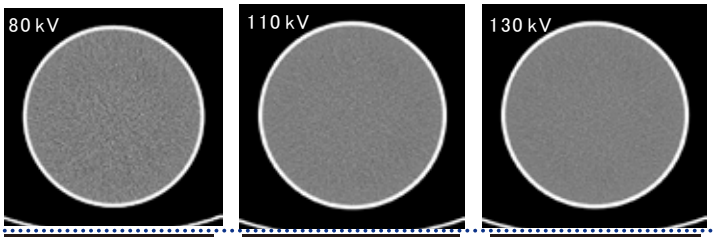
Experiment

Place the material inserts on water tank

Rods are not shown in the CT images!!

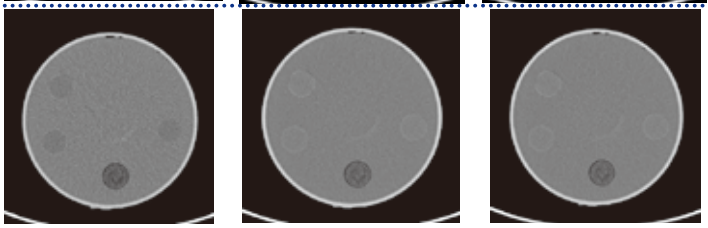
WEM

Nine rods of WEM are "invisible" under CT



conventional materials

Two rods of WEM and for conventional materials for phantoms

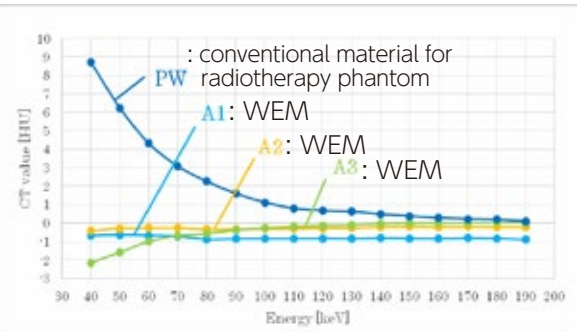


Supports iodine quantification and material-decomposition

Unlike conventional "water substitute" materials the Water Equivalent Material maintain water equivalency under low energy range. This feature support studies that involve iodine quantification.

Save time and trouble for study and expand possibilities

Save time, costs and efforts to design and produce custom acrylic water phantoms.
Unlike water phantoms, phantoms with solid materials reduce the troublesome process to change water and inside rods.



Ryota Matsui, Ishikawa Katsuhiro, Hiroki Kawashima, "Development of highly precise Water Equivalent phantom for CT machine"
Ichikawa Lab, Kanazawa Univ.
http://ichiken.w3.kanazawa-u.ac.jp/img/file2.pdf
(cited 2019-05-20)

CONCLUSION

1. Kyoto Kagaku Multi-Energy CT phantoms may save time and cost of preparing custom made phantoms for the researchers.

2. Water Equivalent Material(WEM), enable to create phantoms with innovative designs while ensuring credibility of water phantoms.