

# Quantitative Tests with Anthropomorphic Structures for Advanced CT Evaluation

## Liver Phantom (CCT288)



**The Liver Phantom  
combines the advantages of objective test  
objects and anthropomorphic elements for  
evaluation of advanced  
iterative processing.**

# Liver Phantom

## Phantom Design

The phantom was developed in collaboration with physicists from ImTECH at Oslo University Hospital. The phantom includes low contrast test objects designed both for ROC tests along with a conventional low contrast pattern insert, iodine contrast pattern insert, metal artifact inserts, and beads for MTF calculations.

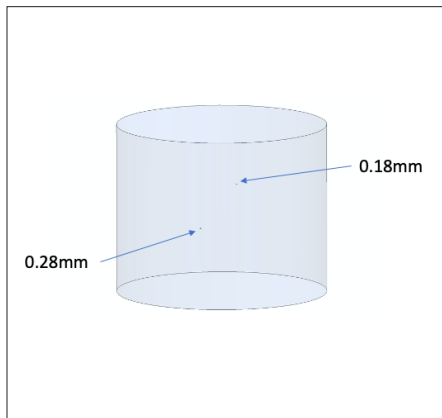
The phantom represents a simplified torso with a 25cm x 35cm oval shape and a length of 15cm. The phantom is cast from RANDO® tissue simulating material and contains simplified liver and bone structures. The liver is cast out of a higher density tissue material and the vertebrae and ribs are cast from simulated bone materials.

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## Phantom Analysis

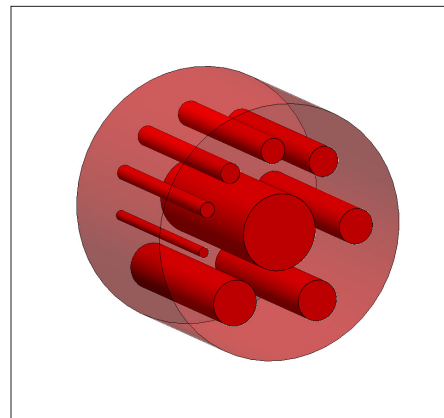
The phantom has seven removable 5cm diameter cylinders, which can be replaced with various test objects. Three of the rods are cast from RANDO® material and four from Liver material.

The test objects supplied with the phantom include:



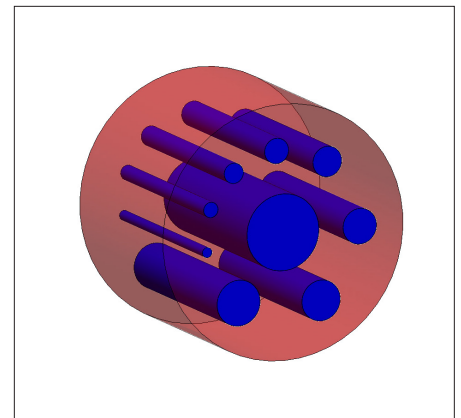
### CCT255

An MTF bead insert with 0.18mm and 0.28mm tungsten carbide beads.



### CCT253-1

A Low Contrast insert with 2, 3, 4, 5, 6, 7, 8, 9, and 15mm diameter 1% low contrast rods.



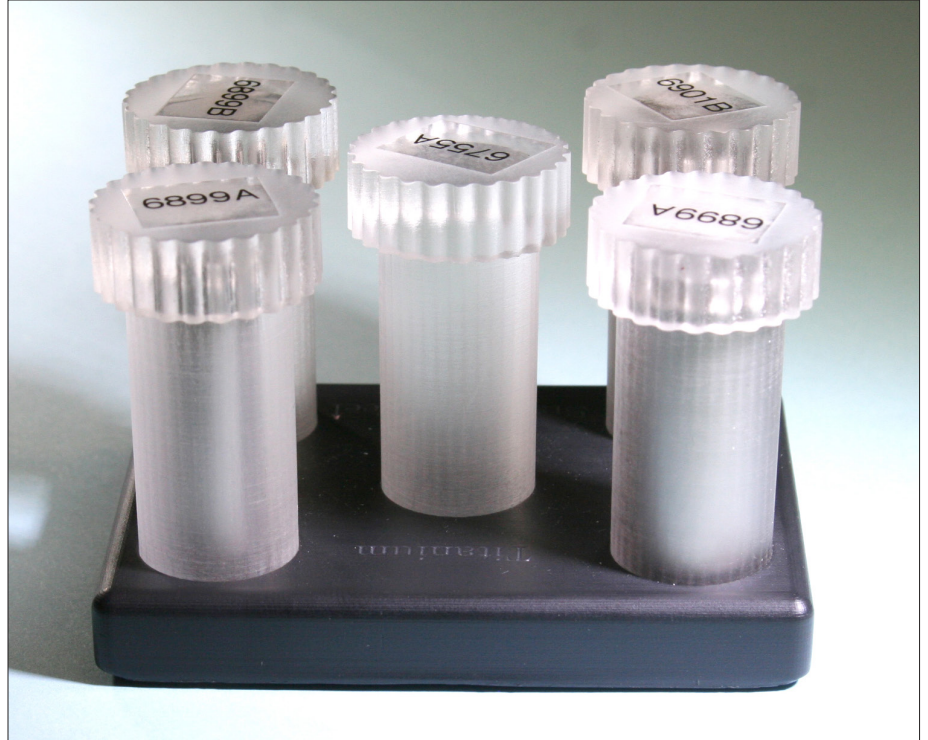
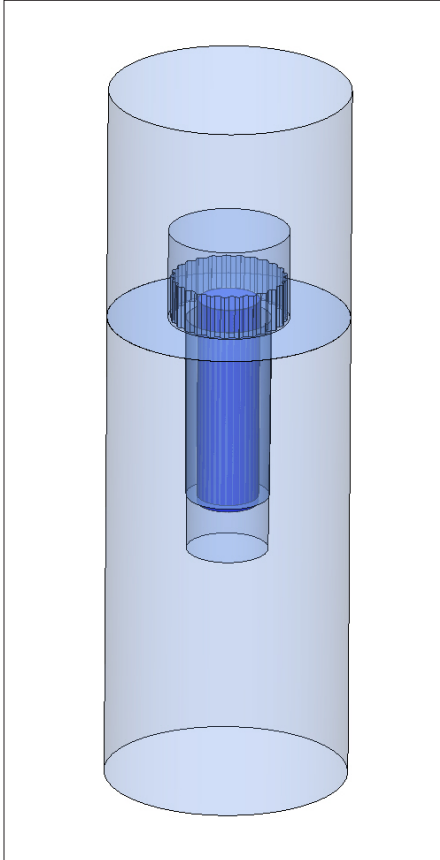
### CCT253-I2.5

An Iodine Contrast insert for dual energy systems with 2, 3, 4, 5, 6, 7, 8, 9, and 15mm diameter 1 mg/ml iodine contrast rods.

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## Phantom Analysis, continued



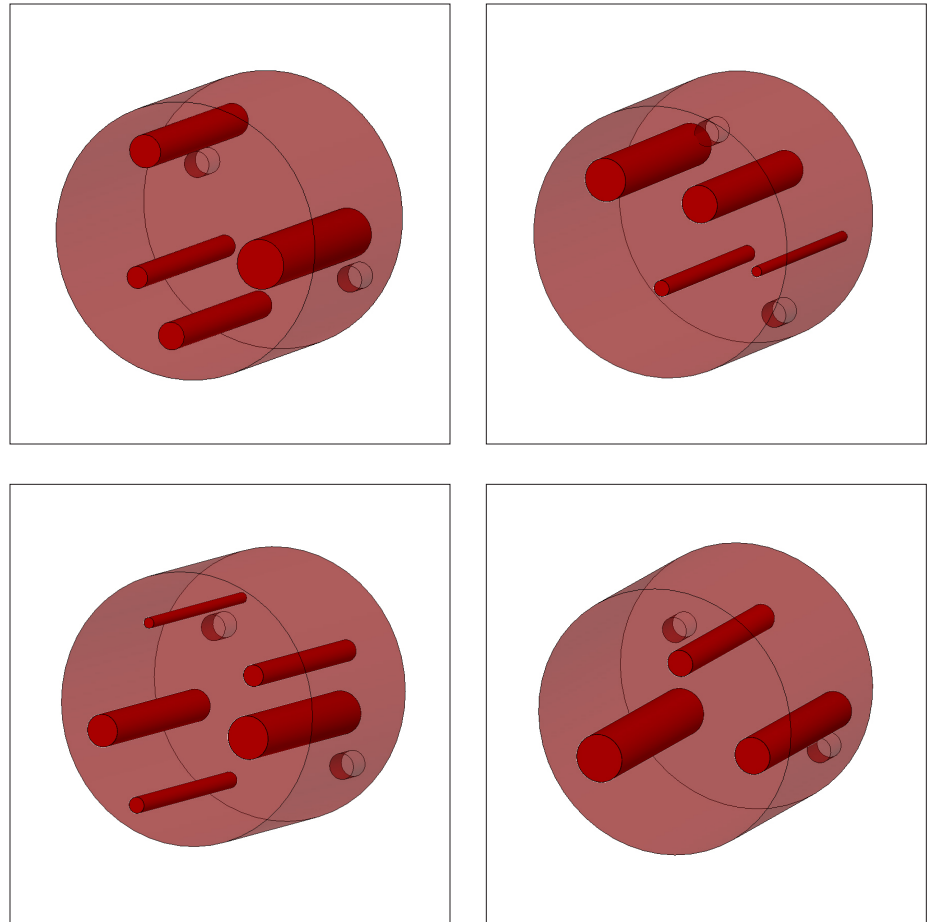
### **MCP091**

A Metal Artifact insert holder with the CTP748 Metal artifact insert set including 12.7 and 6.35mm diameter rods made from stainless steel and titanium.

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## Phantom Analysis, continued



### **CCT274**

A set of four Low Contrast Rods designed for receiver operating characteristic curve (ROC) assessments.

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## **Liver Phantom Kit**

The Liver Phantom is supplied with two cases, one to carry the phantom and the second for the extra inserts.

In addition to the standard inserts we can also build custom inserts to address your specific research requirements.



**For more information on the Liver Phantom,  
contact**

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