

Semianthropomorphic Liver Phantom

This phantom can be used in CT and FD-CT for the examination of low contrast details in the liver region. The phantom is also a good choice to analyze computer aided diagnoses (CAD) procedures.

The QRM-Liver-Phantom is designed in a modular construction principle. The phantom is made up of three changeable parts: the anthropomorphic abdomen phantom body, the liver insert and the spleen insert.

The abdomen body comprises spine with vertebral bone and a shell of soft tissue equivalent material. The plastics used in this anthropomorphic phantom mimic human tissues in the thorax with respect to density and X-ray attenuation characteristics (tissue-equivalent solid of typically 35 HU +/- 5 HU at 120 kV).

The liver insert contains multiple oval and spherical lesions of different size, shape and in two different densities.

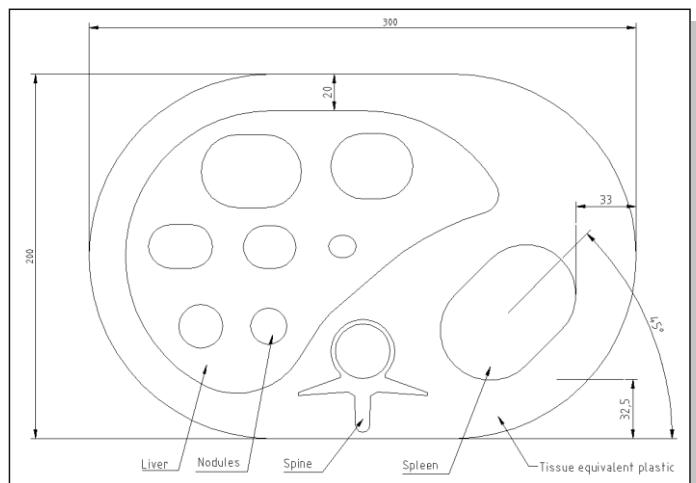
The shape of these tumors can be adapted in size and density upon your request.

The spleen insert is solid homogeneous material comprising the same density as the phantom body.

Tumors or other structures are available upon request.

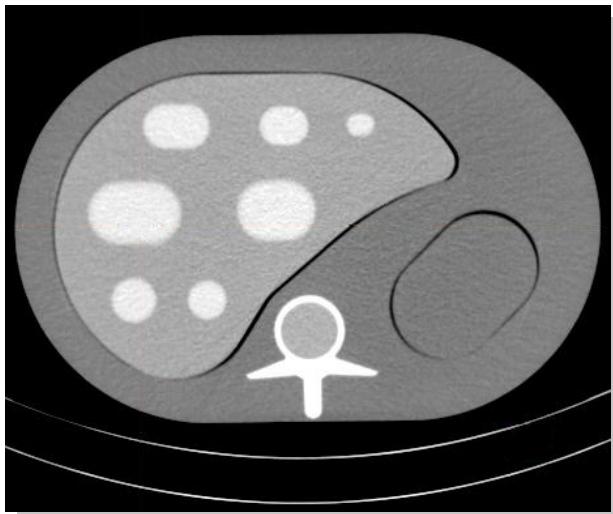


QRM-Liver-Phantom with exchangeable liver insert

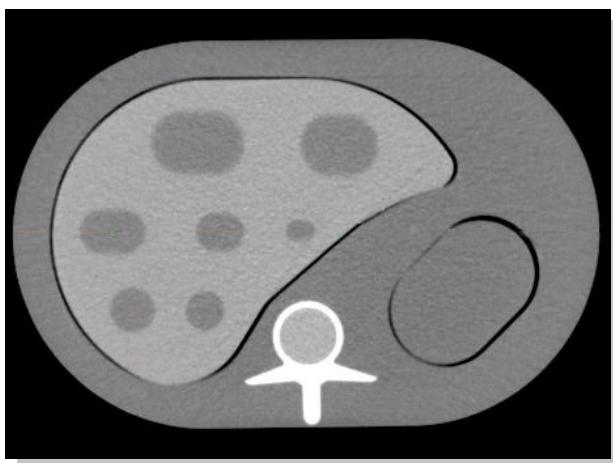


Schematic drawing of the Liver Phantom.

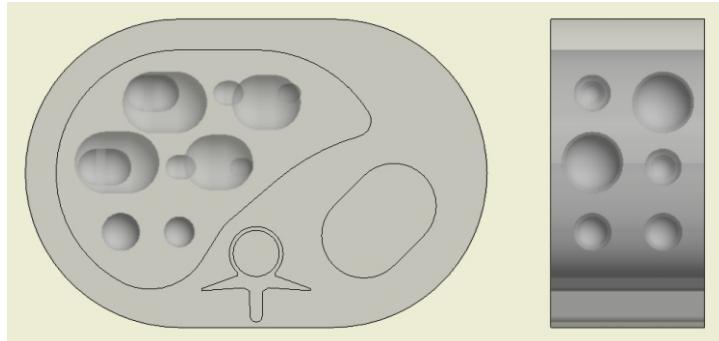
Semianthropomorphic Liver Phantom



CT-slices of the Liver Phantom with hyperdense liver nodules at a standard abdomen protocol.



CT-slices of the Liver Phantom with hypodense liver nodules at a standard abdomen protocol.



Standard setup with two planes of nodules.

Specifications

Phantom size 300 x 200 x 100 mm
Phantom weight (total) 4200 g
Base material resin

Approximately CT values at 120 kV

Abdomen Body.....	35 HU
Liver Insert.....	90 HU
Liver Nodule Typ 1.....	45 HU
Liver Nodule Typ 2.....	180 HU
Spleen Insert.....	90 HU

Extension Rings (fat rings) are also available in different sizes to simulate obese patients.