

# ABDOMEN PHANTOM

Age  
Category

Adult

Body  
Region

Abdomen

Target  
Modality

CT



This abdomen phantom can be used in CT for image quality evaluation and for training. It was also designed to enable evaluation of diagnostic software, including AI tools.

The phantom simulates a contrast medium enhanced abdomen in early portal venous phase.

The phantom provides a detailed and realistic simulation of soft and bone tissue, including small details such as lymph nodes. Air voids are filled with a cellulose-polymer composite of approx. -80 HU.

The phantom can be used for common methods of image quality evaluation such as visual grading analysis or contrast-to-noise measurement.



# ABDOMEN PHANTOM



## Specifications

Size	Approx. 268 x 189 x 149 mm
Weight	Approx. 5400 g
Base material	Cellulose-polymer composite
Optimal tube voltage	120 kVp (cf page 3) - adaptable upon request -

---

## Similar products

- Head phantom with low-contrast lesions
- Abdomen phantoms with low-contrast lesions

For more information visit  
[www.phantomx.de](http://www.phantomx.de)

# ABDOMEN PHANTOM

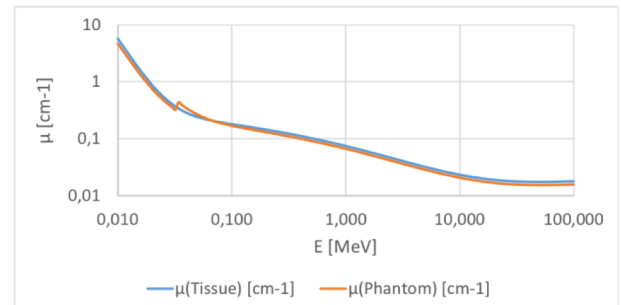
## General indications

- The phantom is made of a cellulose-polymer composite material with properties similar to hardwood. If handled carefully, it will last a long time.
- The phantom is coated with a protective layer. If the protective layer is undamaged, the phantom can be cleaned using a damp cloth (water or mild detergent).
- Protect from direct sunlight.
- Maintain a storage temperature of 10 °C to 30 °C. If the phantom is exposed to temperatures below -10 °C or above 45 °C, it can be severely damaged.
- The phantom is not equipped for dose measurements with dosimeters and it is not suited for material characterization with dual energy CT.
- The phantom is not certified as medical device.
- Air voids are filled with cellulose-polymer composite of approx. -80 HU.

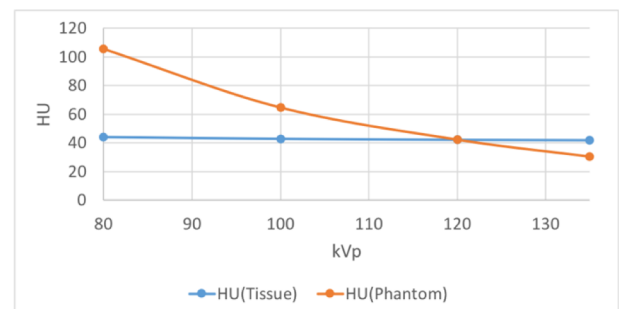
## Attenuation properties

### Soft Tissue

Linear attenuation coefficients [ $\text{cm}^{-1}$ ] (calculated)

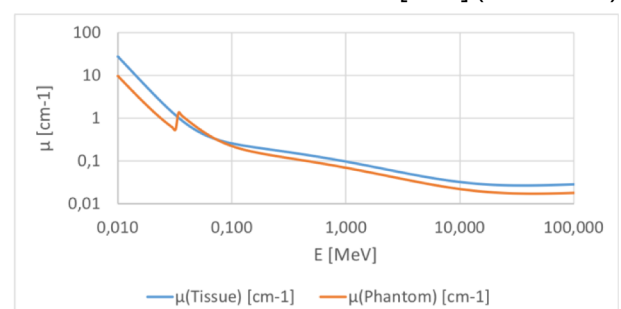


### Hounsfield units (calculated)

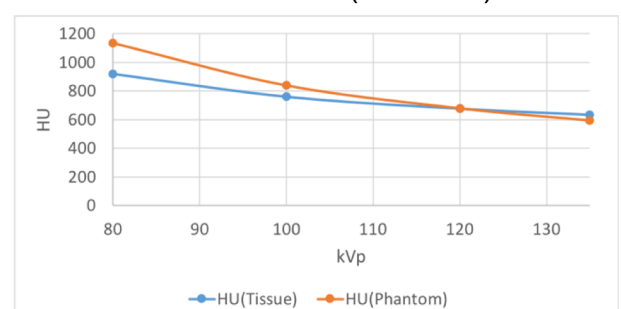


### Bone Tissue

Linear attenuation coefficients [ $\text{cm}^{-1}$ ] (calculated)



### Hounsfield units (calculated)



Phantom based on modified data, originally from Roth H, et al. (2015). A new 2.5 D representation for lymph node detection in CT [Data set]. The Cancer Imaging Archive. licensed under CC BY 3.0.

Tissue Reference: Woodard HQ, White DR. The composition of body tissues. Br J Radiol. 1986.