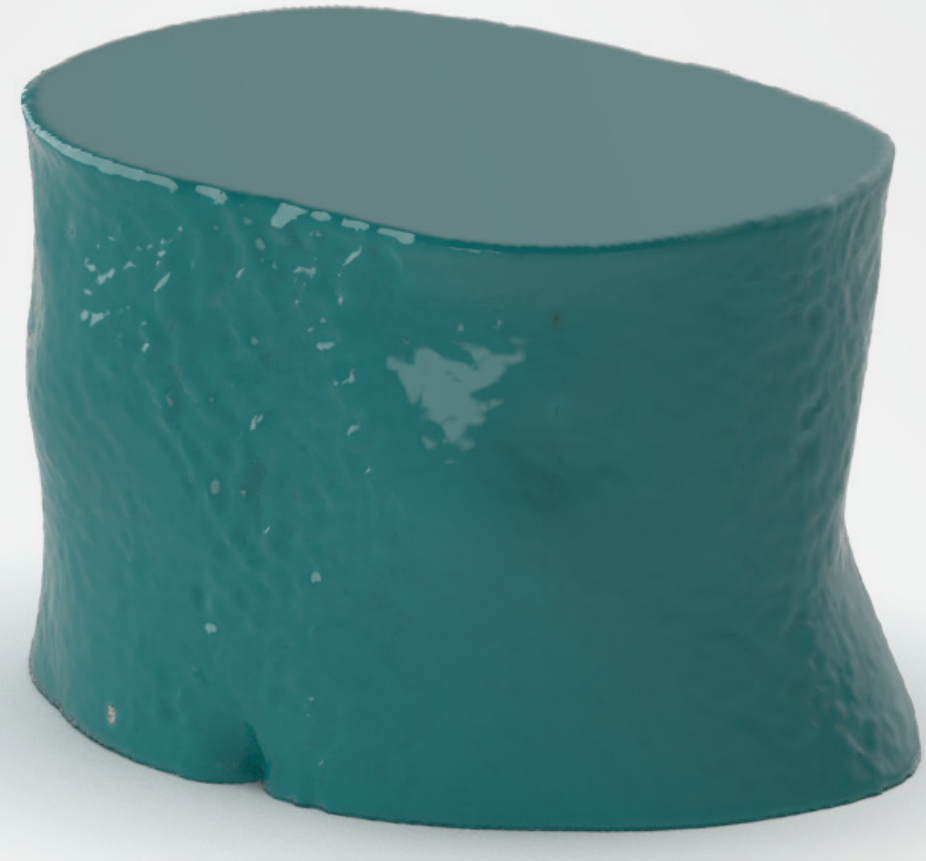
Abdomen Phantom

for CT, X-Ray and Radiation Therapy



Factsheet

Item No. NLP1100

ERLER ZIMMER

This phantom is created from real patient data and is manufactured using the latest technology.

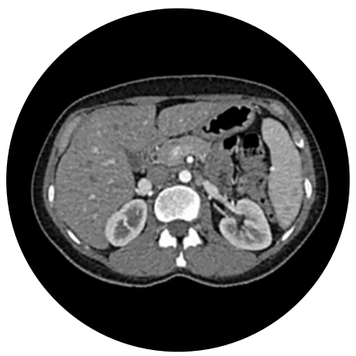
Bones, vessels and soft tissue are displayed authentically with realistic CT values for all tissues at 120 kVp tube voltage in the CT. If the phantom is mainly to be used with other tube voltages (e.g. 100 kVp), the calibration of the CT values can be adjusted accordingly if required. The phantom provides realistic tissue contrasts in X-ray imaging. Air spaces are filled by a material with about -80 Hounsfield units. The phantom provides a highly realistic simulation of a contrast medium enhanced abdomen (late arterial phase) of a patient. The phantom covers the abdomen from the tenth thoracic to the fourth lumbar vertebra. The liver and both kidneys are fully included.

Diagnostic features:

Realistic simulation of vasculature, bone and soft tissues, including the liver, gallbladder, pancreas, spleen, adrenals, kidneys, stomach, small intestine and colon.

Specifications

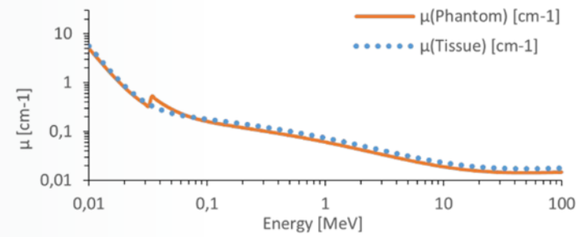
Size: approx. 27 x 18 x 17 cm
Weight: approx. 5.18 kg
Base Material: cellulose-polymer composite
Optimal Tube Voltage: 120 kVp (adaptable upon request)



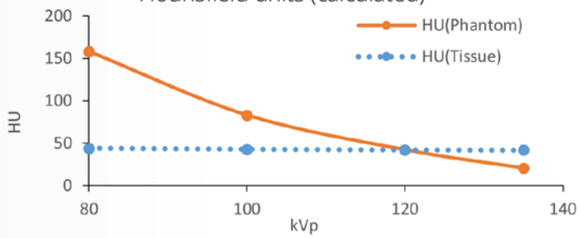
Attenuation properties

Soft Tissue

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

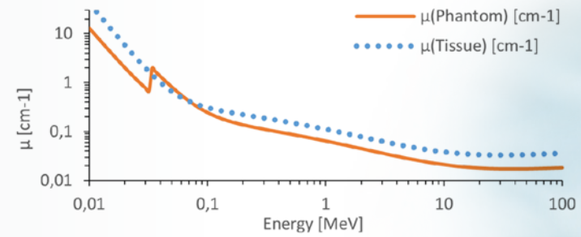


Hounsfield units (calculated)

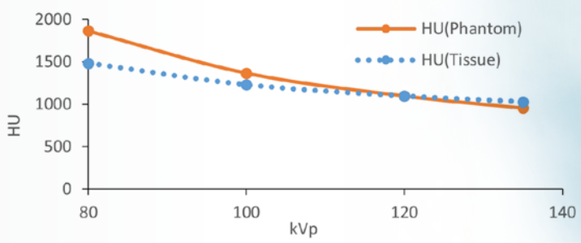


Bone Tissue

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



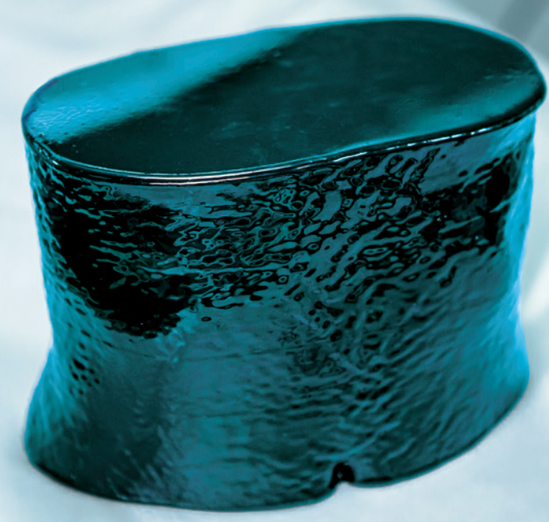
Hounsfield units (calculated)



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

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. -160 HU.
- Handle with care to prevent injury or damage.



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