

# HAND PHANTOM METACARPAL FRACTURES

Age  
Category

Adult

Body  
Region

Extremities

Target  
Modality

Radiography, CT

Diagnostic  
Features

Bone fractures



This phantom simulates a right hand with two metacarpal fractures. It covers the entire hand including fingers, metacarpus, carpus and the distal parts of the ulna and radius.

The phantom can be used in radiography and CT (including CBCT) to evaluate and optimize imaging performance and post-processing applications, including AI-enabled applications. It is also suited for training purposes.

The phantom provides a detailed and realistic simulation of soft and bone tissue.



# HAND PHANTOM METACARPAL FRACTURES



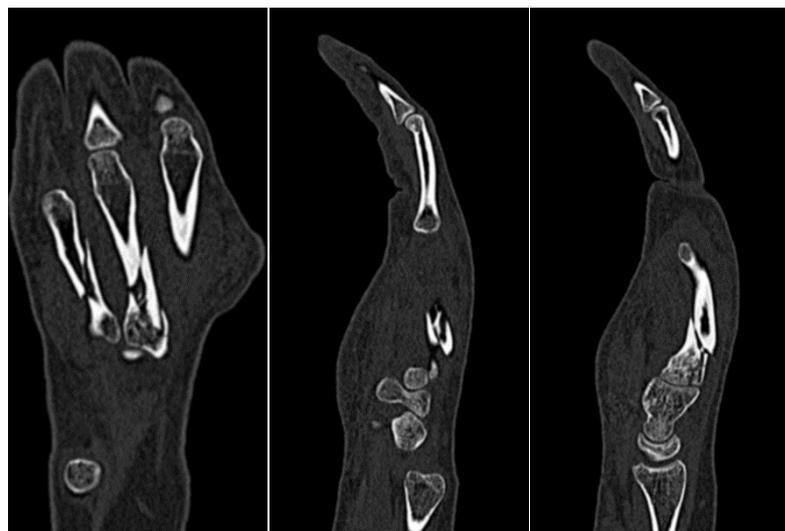
## Specifications

Size	Approx. 110 x 200 x 69 mm 4.3 x 7.9 x 2.7 in
Weight	Approx. 450 g 15.9 oz
Base material	Cellulose-polymer composite
Optimal tube voltage	120 kVp (cf page 3) - adaptable upon request -

## Diagnostic features

Realistic simulation of bones and soft tissue.

- Fractures of the 3rd and 4th metacarpal



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

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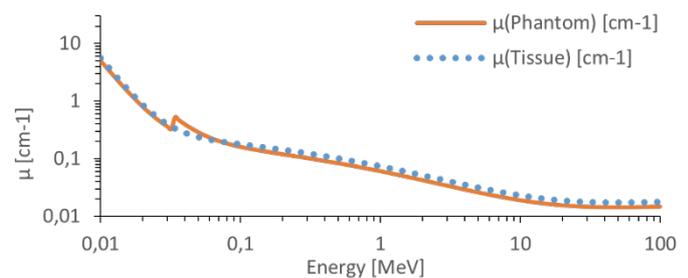
## General indications

- 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.
- If external damage is observed, it is recommended to consult PhantomX.

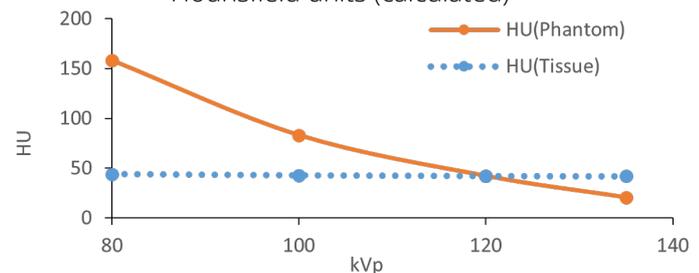
## Attenuation properties

### Soft Tissue

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

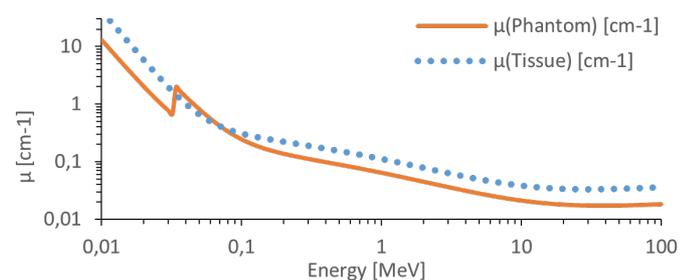


Hounsfield units (calculated)

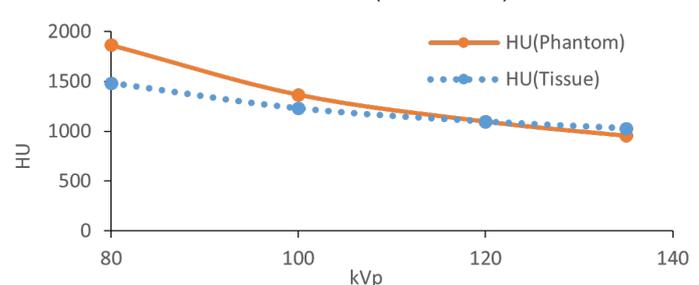


### Bone Tissue

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



Hounsfield units (calculated)



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