

Hip Phantom

QRM-Hip

A Phantom for Computed Tomography (CT) bone density measurements of the hip-region. Different inserts, e.g. titan implants are available on request.

The Hip-Phantom comprises a water-equivalent phantom body, made from CTWATER[®], and two cylinders with a specified bone mineral density of 800 (cortical bone) and 100 mg (cancellous bone) hydroxyapatite (HA) per cm³ respectively. The bone-simulating cylinders have an outer diameter of 30 mm and a wall thickness of 5 mm (cortical bone), the inner part is 20 mm in diameter (spongious/cancellous bone) and is available in different HA concentrations (typically 100 mg HA / cm³).

The phantom is routinely tested in a CT-scanner to confirm the homogeneity of the materials and the HA concentration.

The phantom body is available as well in tissue equivalent plastic (38 HU at 120 kV).

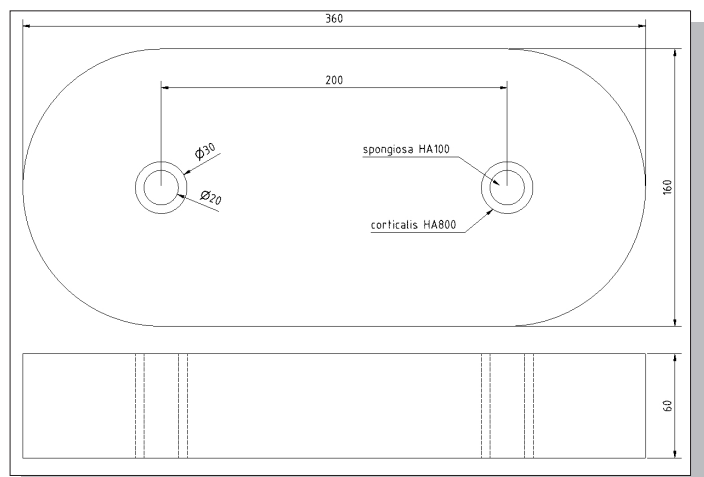
Specifications

Base material CTWATER[®] or
tissue-equivalent resin
Phantom cross section 360 x 160 mm
Phantom depth 60 mm
Bone equivalent inserts:
Outer diameter 30 mm
Inner diameter 20 mm
Cortical bone 800 mg HA/cm³
Spongious/cancellous bone 100 mg HA/cm³

Different corticalis diameters and densities/HA-concentrations are available. Please contact us: info@qrm.de



The QRM-Hip-Phantom



Schematic drawing of the phantom.