

Forearm Phantom

QRM-Forearm-Phantom

A Phantom for Quantitative Computed Tomography (QCT) measurements of the forearm to calibrate CT values to Bone Mineral Density (BMD).

The QRM-Forearm-Phantom was developed for calibrating CT values to BMD. Its shape is optimized to the anatomy of an adult forearm. It is placed between the forearm and the CT coach pet directly.

The phantom consists of two solid cylindrical rods, of water-equivalent and bone-equivalent material, respectively.

Specifications

Base materialtissue-equivalent resin
Phantom cross section..... 70 x 25 mm²
Phantom length 150 mm
Phantom weight 225 g
Bone eqv insert specified 200 mg HA/cm³
Water equivalent insert 0 HU (80 - 140 kV)

References

- [1] K. Engelke, W. Timm, B. Stampa, E. Paris, T. Fuerst, C. Libanati, H.K. Genant.
Quantitative Computed Tomography (QCT) of the forearm using clinical CT scanners. Presented at "29nd Annual Meeting of the American Society for Bone and Mineral Research", Honolulu, HI (2007).
JBMR 22 Suppl 1, S193



The QRM-Forearm-Phantom



CT-scans of a Forearm - and below the calibration phantom [1]

