

Micro-CT Low Contrast Phantom

As a useful tool for evaluation of contrast detectability the MicroCT Low Contrast Phantom provides four inserts of two different contrast levels, each in two different dimensions.

The MicroCT Low Contrast Phantom is a cylindrical phantom in which small details (cylindrical inserts) at a specified contrast with respect to the background allow for an estimation of the low-contrast resolution of a Micro-CT scanner.

The difference in CT-numbers (HU) can be as low as -40 HU and -80 HU, respectively^[1]. Actual values vary slightly depending on scanner geometry, calibration and tube voltage.

Specifications

Base material resin

Low contrast inserts:

Diameter 1 mm / 2.5 mm
approx. contrast -4 % / -8 %

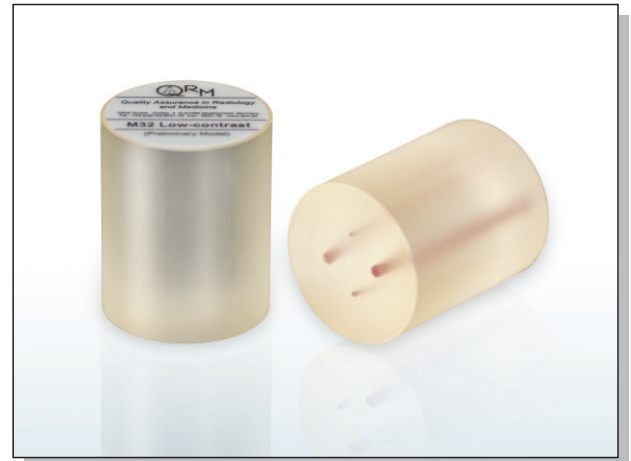
Dimensions for mouse-size phantom:

Diameter 32 mm
Length 40 mm
Weight 35 g

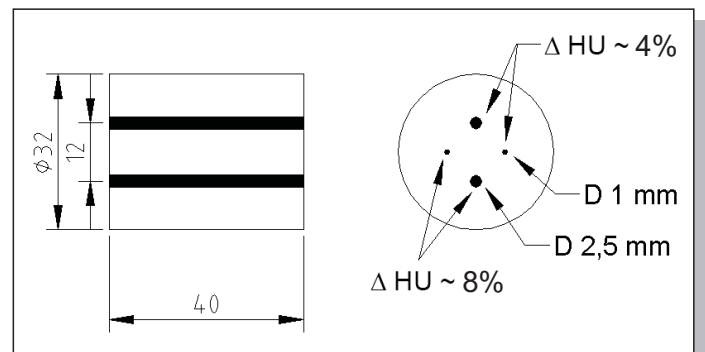
Other dimensions and contrast steps upon request: info@qrm.de

References:

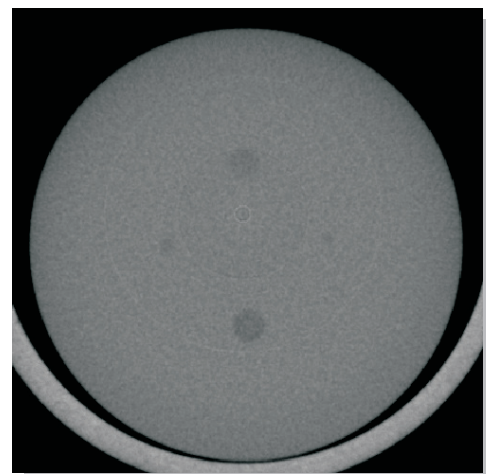
- [1] Kalender, W., Durkee, B., Langner, O., Stepina, E., Karolczak, M.: Comparative Evaluation: Acceptance Testing and Constancy Testing for Micro-CT Scanners. *Biomedizinische Technik* 50 (2005), 1192-1193



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Schematic drawing of the Phantom



Micro-CT scan of the phantom.