

QUART mam FS

Conventional Mammography Test Phantom



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Phantom for image quality tests in mammography



The QUART mam FS phantom is designed for QA/QC in conventional mammography. Originally a QUART design, the phantom is now part of DIN and IEC standard regulations for this area of application.

Only one exposure is required to collect all necessary parameters to determine the imaging quality of the x-ray system. After the exposure, the test image is evaluated visually.

The QUART mam FS phantom complies with IEC 61223-3-2, DIN 6868-7 and DIN 6868-152, as well as the „European Guidelines for Quality Assurance in Mammography Screening“ (EPQC).

Phantom and Test Procedure

QC tests are carried out at initial equipment installation to establish a visual reference. On a regular routine basis, they are meant to ensure the constancy of the system's imaging capabilities. Any deterioration in imaging performance would be revealed by the visual evaluation of the test images. The evaluation of grey values, as traditionally required for conventional x-ray technology, is carried out using a densitometer.

Phantom Description

- _ Phantom Dimension: 240 x 180 x 45 mm
- _ Extension available: additional 20 mm PMMA slab
- _ Reference mark: 60mm from thorax wall side
- _ Phantom Center mark at thorax wall side
- _ 2 Rows of steel balls to check field alignment at thorax wall side
- _ Resolution Test: Line Pair Test Object (8.0 - 12.0 Lp/mm; rotatable; 0.05 mm Pb)
- _ 7 Low-contrast objects
- _ 3 Objects for densitometric evaluation
- _ Various structures for Field Geometry evaluation
- _ Insert area for dosimeter detector

Test Parameters

- _ Spatial Resolution
- _ Low-Contrast
- _ Radiation Field Alignment
- _ Image Homogeneity
- _ Optical Density
- _ Artefacts, Image Flaws, etc.
- _ Dose Indicator (dosimeter required, e.g. QUART dido/time M)

Delivery includes

- ✓ QUART mam FS Test Phantom
- ✓ Manual
- ✓ Transport Case with Foam Insert

