

BREAST CALCIFICATIONS – PENTAGONAL CLUSTER

Age
Category

Adult

Body
Region

Breast

Target
Modality

Mammography,
Tomosynthesis

Diagnostic
Features

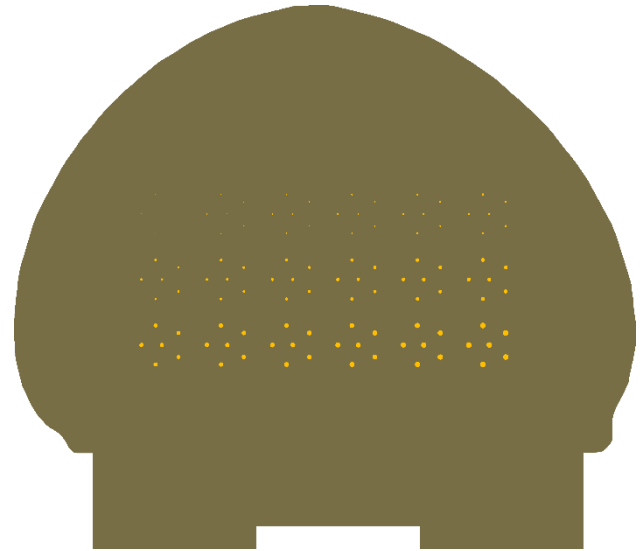
Calcification pattern

This accessory fits the following phantom:

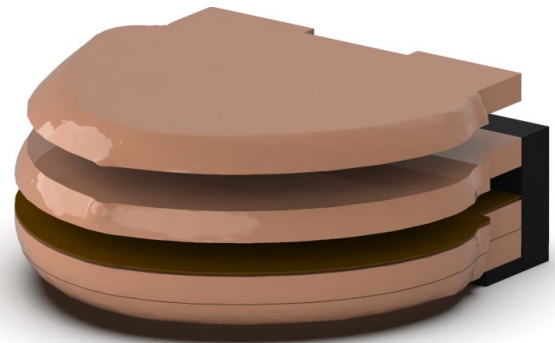
- Breast phantom
SKU: 59-01

This calcification insert simulates microcalcifications found in human breast tissue. It incorporates copper dots ranging from 50 μm to 390 μm in diameter, exhibiting absorption properties similar to microcalcifications in the diagnostic energy range.

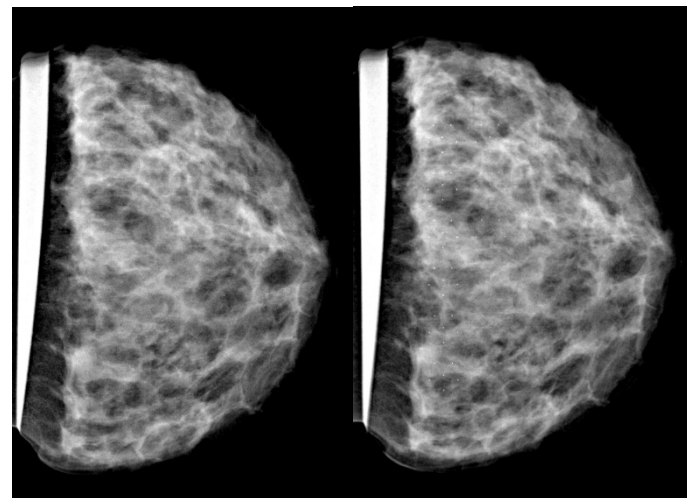
The calcification pattern is compatible with breast phantom 59-01 for use in mammography and breast tomosynthesis, facilitating image quality assessment and training. It was also designed to enable evaluation of diagnostic software, including AI tools.



Calcification template.



Breast phantom 504 with inserted calcification template.

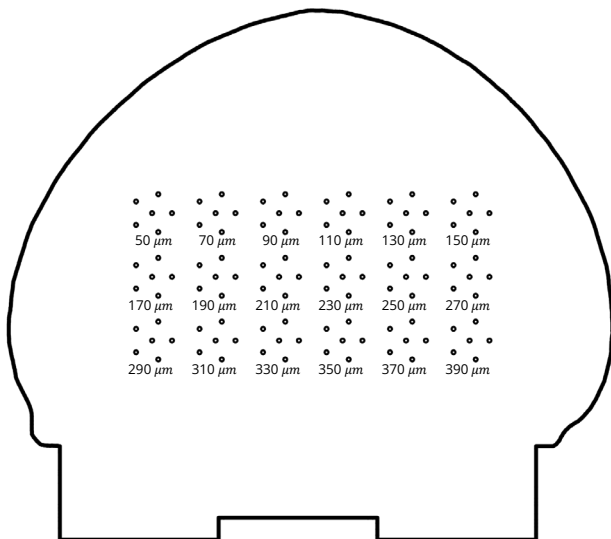


Breast phantom.

Calcification template inserted.

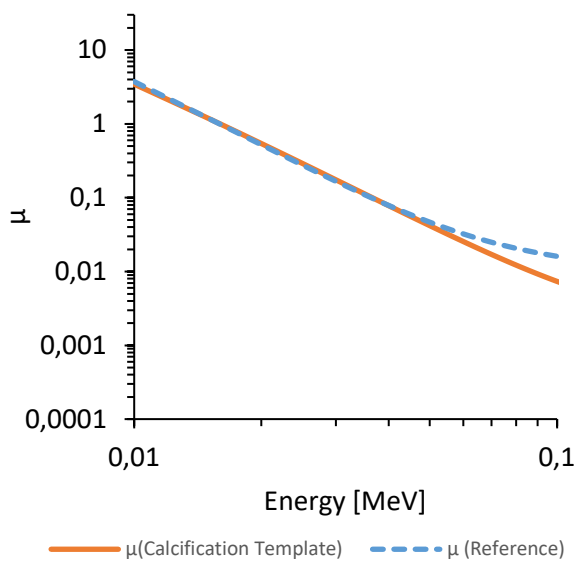
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Microcalcifications



Drawing indicates diameter of microcalcifications of the insertable calcification pattern.

Attenuation properties



Calculated linear attenuation coefficients of the calcification pattern (copper dots) in comparison to hydroxyapatite particles ($\rho=3,18 \text{ g/cm}^3$, $250\mu\text{m}$ diameter) as model substance for human breast microcalcifications

Specifications

Total size	127 x 138 x 0.1 mm
Total weight	Approx. 10 g
Components	1 flexible slab
Base material	Polyimide
Calcification material	Copper, 18 μm

Diagnostic features

Insertable calcification pattern with calcifications of 50, 70, 90, 110, 130, 150, 170, 190, 210, 230, 250, 270, 290, 310, 330, 350, 370 and 390 μm thickness, arranged in groups of 6 dots in pentagonal shape with a central dot.

Within the energy range of 10-100 keV, the calcification pattern has similar absorption properties to human breast microcalcifications.

General indications

- Protect from direct sunlight.
- Do not expose to temperatures above 120 °C.
- The product is not certified as medical device.

For more information visit
www.phantomx.de