

TE Phantom for Mammography



Model 010 and 011A

A Refined Quality Assurance Tool for Today's Advanced Imaging Systems

The Tissue Equivalent Phantom for Mammography tests performance of mammographic systems. Objects within the phantom simulate calcifications, fibrous calcifications in ducts and tumor masses. Test objects within the phantom range in size from those that should be visible on any system to objects that will be difficult to resolve on the best mammographic systems.

CIRS resin material mimics the photon attenuation coefficients of a range of breast tissues. Average elemental composition of the human breast being mimicked is based on the individual elemental composition of adipose and glandular tissue reported by Hammerstein.

The Model 011A Breast Phantom contains targets that are engineered to test the threshold of the new generation of mammography machines. The Model 011A is 4.5 cm thick and simulates an average glandular tissue composition.

The Model 010 phantoms contain the same detail plates as the 011A but are manufactured in 4 cm, 5 cm and 6 cm thicknesses with various glandular equivalencies.

The methodology and design of these phantoms was developed by Dr. Panos Fatouros and his associates at the Medical College of Virginia.

