

The Virtual Water™ Tomophantom

is made from a proprietary, homogeneous material which has been shown to be water equivalent to within 0.5%¹. When fully assembled, the phantom is 30.0cm in diameter and 18.0cm thick. It has 32 ion chamber cavities and 20 density insert cavities. Each phantom comes with a full set of water equivalent inserts for filling these cavities.

On the rear of the phantom, the two most centrally located ion chamber cavities are 1.0cm (top half of phantom) and 0.5cm (bottom half of phantom) from the film plane. The remaining ion chamber cavities are spaced at 1.0cm intervals, relative to these two cavities. By simply rotating the phantom on its base, point measurements can be taken with 0.5cm resolution along any transverse plane through the center of the phantom.

Phantom Features:

- Water equivalent
- Film plane with reference markers on the top half.
- Configure with or without heterogeneities.
- 20 cavities for density plugs located at 6.5cm and 11.0cm radius
- Alignment scribe lines every 10 degrees
- Physical density of 1.047 g/cc +/- .01 g/cc
- Electron density .562 +/- .003 e/g/cc

¹M. R. McEwen and D. Niven, "Characterization of the phantom material Virtual Water™ in high-energy photon and electron beams," Med. Phys. 33, 876-887 (2006).

