

Standard SPECT Phantom



Compact acrylic phantom for quality control of SPECT systems

Features

- ▶ Checks the resolution by acrylic rods of different diameters
- ▶ Checks the contrast by acrylic spheres of different diameters
- ▶ Checks the inhomogeneity by homogeneous radioactivity distribution

The standard SPECT phantom is used for the determination of the tomographic specifications of SPECT systems. The phantom consists of a circular acrylic vessel of 200 mm diameter and 214 mm height including various test inserts. Three parameters can be checked simultaneously during one measuring cycle:

- ▶ The tomographic resolution is tested by a number of acrylic rods of different diameters located in six phantom sections. The rod diameters are 4.0 / 6.0 / 8.0 / 10.0 / 12.0 and 15.0 mm.
- ▶ The tomographic contrast is tested by six fully acrylic spheres with diameters of 9.5 / 14.4 / 19.0 / 25.4 / 31.8 and 38.1 mm, simulating cold spots.
- ▶ The tomographic inhomogeneity is checked by a phantom volume with homogeneously distributed radioactive liquid. The height of the homogeneous volume is 26 mm.

The cover plate is sealed and firmly screwed to the phantom body. The phantom can be air-free filled through openings in the cover plate, which are sealed after the filling procedure. Flanges on the cover and bottom plates make it possible to roll the phantom and intermix the radioactive liquid.

The phantom wall thickness is 3 mm, and the thickness of the cover and bottom plates is 12 mm each. The total weight of the liquid filled phantom is 6.3 kg.

Ordering Information

L991359 Standard SPECT phantom