

SPECT Phantoms

Jaszczak SPECT Phantom



The Jaszczak SPECT Phantom provides consistent performance information for any SPECT or PET system. Multiple performance characteristics of camera-based

SPECT systems are evaluated from a single scan of the phantom.

On-axis and off-axis transverse line spread function may be easily measured without removing the cover plate. Measurements of full-width-half (or tenth) maximum can be readily determined, either in air or in water.

The Phantom is used for:

System performance valuation of:

- Collimator, Artefacts, Calibration, and Reconstruction Parameters
- Acceptance testing
- Routine quality, assurance and control
- Evaluation of centre-of-rotation error
- Evaluation of non-uniformity artefact
- Evaluation of changes of radius-of-rotation on spatial resolution
- Evaluation of reconstruction filters on spatial resolution
- Evaluation of attenuation and scatter

- Single slice volume sensitivity
- Total system volume sensitivity
- Lesion detectability

Phantoms are available in two models.

The Deluxe Phantom is used for high resolution cameras. The Standard Phantom is used for lower resolution.

Specifications

- Cylinder Interior Dimensions: 8.5" dia x 7.32" h (21.6 x 18.6 cm)
- Cylinder Wall Thickness: 0.125" (3.2 mm)
- Volume: 6.75 L
- Volume With Inserts: 6.1 L
- Cold Rod Insert Height: 3.46" h (8.8 cm)
- Height of Spheres From Base Plate: 5" h (12.7 cm)

SPECT Phantom, Deluxe

- Cold Rod Dimensions: 4.8 mm, 6.4 mm, 7.9 mm, 9.5 mm, 11.1 mm, 12.7 mm
- Solid Sphere Diameters: 9.5mm, 12.7 mm, 15.9 mm, 19.1 mm, 25.4 mm, 31.8 mm

SPECT Phantom, Standard

- Cold Rod Dimensions: 6.4 mm, 7.9 mm, 9.5 mm, 11.1 mm, 12.7 mm, 16.0 mm
- Solid Sphere Diameters: 12.7 mm, 15.9 mm, 19.1 mm, 25.4 mm, 31.8 mm, 38 mm

Phantom SPECT Deluxe

Phantom SPECT Standard

Optional Inserts

Triple Line

Hot Spot Insert

Ultra Deluxe Cold Rod

Hollow Sphere

Micro Hollow Sphere

Cardiac

