Flanged Jaszczak ECT Phantoms

Components of Deluxe Jaszczak Phantom™

Flanged Jaszczak ECT Phantom
(See next page for available models)

Main Features:
- ECT phantoms with protruding flanged top and with 3.2 mm cylinder wall thickness

Main Applications:
- For use with SPECT and PET systems
- System performance evaluation (collimator, artifacts, calibration, reconstruction parameters)
- Acceptance testing
- Routine quality, assurance and control
- Evaluation of center-of-rotation error
- Evaluation of non-uniformity artifact
- Evaluation of changes of radius-of-rotation on spatial resolution
- Evaluation of reconstruction filters on spatial resolution
- Evaluation of attenuation and scatter compensation
- Research

Specifications of Cylinder:
All clear material: PMMA
Cylinder inside diameter: 21.6 cm
Cylinder inside height: 18.6 cm
Cylinder wall thickness: 3.2 mm

Specifications of Insert:
All clear material: PMMA
Rod diameters: Vary with insert, see next page
Height of rods: 8.8 cm
Solid sphere diameters: Vary with insert, see page 3
Height of center of spheres from base plate: 12.7 cm

Cold Rods
Cold Spheres
Line Sources
Uniform
(The images were obtained with the Deluxe Jaszczak Phantom™ Model ECT/DLX/P)

- Glass capillary tubes (user supplied) with 12 cm length may be positioned without removing top cover plate as a result of a unique design of filter caps, one on axis, one 8.6 cm from axis-of-rotation
Flanged Jaszczak Phantom Models

Ultra Deluxe Jaszczak Phantom™
Model ECT/UL-DLX/P
- For use with ultra-high spatial resolution SPECT and PET systems.

Specifications:
Rod diameters: 3.2, 4.8, 6.4, 7.9, 9.5 and 11.1 mm
Solid sphere diameters: 9.5, 12.7, 15.9, 19.1, 25.4, and 31.8 mm

Deluxe Jaszczak Phantom™
Model ECT/DLX/P
- For use with high to very high spatial resolution SPECT and PET systems.

Specifications:
Rod diameters: 4.8, 6.4, 7.9, 9.5, 11.1 and 12.7 mm
Solid sphere diameters: 9.5, 12.7, 15.9, 19.1, 25.4, and 31.8 mm

Standard Jaszczak Phantom™
Model ECT/STD/P
- For use with medium to high spatial resolution SPECT and PET systems.

Specifications:
Rod diameters: 6.4, 7.9, 9.5, 11.1, 12.7 and 19.1 mm
Solid sphere diameters: 12.7, 15.9, 19.1, 25.4, 31.8, and 38 mm

Benchmark Jaszczak Phantom™
Model ECT/BEN/P
- For use with ECT systems with poorer spatial resolution, larger radius-of-rotation, low cut-off reconstruction filters and count densities mimicking clinical scans.

Specifications:
Rod diameters: 9.5, 11.1, 12.7, 15.9, 19.1 and 25.4 mm
Solid sphere diameters: 12.7, 15.9, 19.1, 25.4, 31.8, and 38 mm