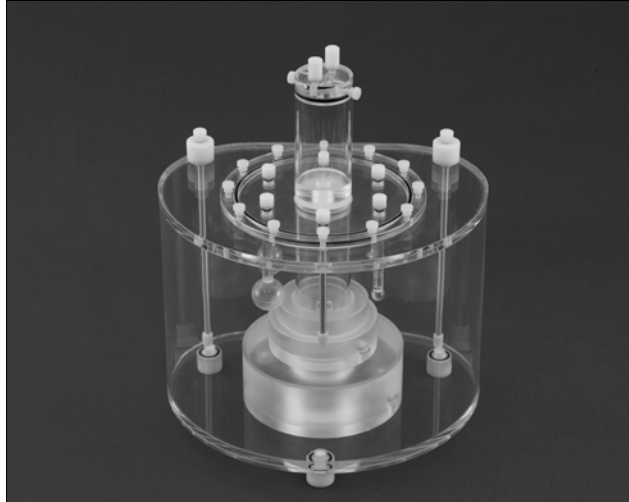


# PET CT Phantom™



*PET-CT Phantom™*

## **Specifications:**

### **Main Cylinder:**

Interior length of phantom: 18.0 cm

Fillable spheres (5) inner diameter: 10 mm, 13 mm, 17 mm, 22 mm, and 28 mm.

Distance from sphere plane to inside wall: 7.0 cm

Volume of empty cylinder: ~9.7 liters

### **Main Cylindrical insert dimension:**

Outside diameter: 5.1 cm

Length: 18.0 cm

### **Top Cylinder:**

Cylinder outside diameter: ~5.1 cm

Cylinder inside diameter: ~4. cm

Cylinder inside height: ~8.2 cm

Cylinder outside height: ~12.0 cm

Volume of empty cylinder: ~408 mL

### **Three Aluminum Tubes:**

One 5 inch long: ~1.7 mL

Two 7 inch (ea): ~ 2.5 mL

### **Stepped Bone Ring**

Pre-filled with liquid bone composition, not to be opened

The volumes for the bone ring are:

Outer volume: ~256 mL

Inner volume: ~110 mL

## **PET-CT Phantom™**

### **Model PET/CT/P**

#### **Main Features:**

- The PET-CT Phantom™ includes internal structures (three rods and six spheres) which when imaged with both modalities can demonstrate how accurately the two image sets are aligned.
- In addition, a single sample of radioactive water is attenuated by water, bone, and CT contrast material (as well as air only) to determine how accurately the CT-based PET attenuation correction works.

#### **Main Applications:**

- Acceptance testing of PET/CT and SPECT/CT systems
- Routine quality evaluation of PET/CT and SPECT/CT Systems
- Evaluation of new image fusion software
- Evaluation of new attenuation correction algorithms
- Aluminum tubes are for registration
- The outer 2" OD micro cylinder is for comparing attenuation region to non attenuation region
- The 6" ring is for contrast solution
- Research