

CT Dose Phantoms

Model 007 & 007A



COMPLY WITH FDA PERFORMANCE STANDARD

For all computed tomography systems, the Food and Drug Administration recommends measuring the CT Dose Index. Each section of the CIRS CT Dose Phantoms can provide separate dose information. The user can also measure maximum, minimum and mid-range values of the nominal tomographic section thickness when performing dose profile measurements.

Each phantom consists of a set of nesting 15 cm thick solid PMMA disks measuring 16 cm (head) and 32 cm (body) in diameter. The adult head disk is also suitable for pediatric body measurements. The Model 007A includes a third nesting disk measuring 10 cm in diameter for pediatric head measurements. Handles on the body and head are provided for ease in handling and maneuverability.

Through holes measuring 1.31 cm in diameter will accommodate standard CT probes. Acrylic rods are provided to plug the holes when not in use. The acrylic rods are machined to receive 1 mm diameter TLD rods.

The Model 007 and 007A CT Dose Phantoms are manufactured to comply with the FDA's performance standard, 21 CFR 1020.33 that details the measurement requirements.

Features

- Abdominal, Adult Head, Pediatric Head configurations
- PMMA disks and plugs with density of 1.19 g/cc
- 1.31 cm diameter holes sized for standard CT Dose probes
- Nesting PMMA disks minimize storage space
- Compatible with all CT scanners

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Tissue Simulation & Phantom Technology



An optional Support Bracket, Model 007-01, can be used to suspend the CT Dose Phantoms above the imaging couch and align it along the axis of X-ray tube rotation. This enables the phantom to be used to assess CT dose in helical mode or any mode that requires the extended travel of the imaging couch or a wide beam. This set-up might be used to address the dosimetry approach described in TG111. An additional application of the support bracket is to provide a body to simulate continuous scatter radiation from the patient during helical CT for dose safety measurements inside and outside the exam room.

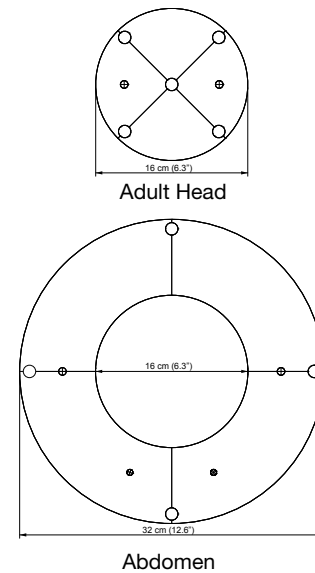
007 SPECIFICATIONS

OVERALL DIMENSIONS:	32 cm x 32 cm x 15 cm (12.6" x 12.6" x 5.9")
WEIGHT:	13 kg (29 lb)
MATERIALS:	PMMA

MODEL 007 INCLUDES

QTY	DESCRIPTION
1	Abdominal Cylinder
1	Adult Head Cylinder
9	Acrylic Rods*
1	Foam-Lined Carry Case
1	User Guide
-	48-Month Warranty

* Replacement Part No. 007-02



007A SPECIFICATIONS

OVERALL DIMENSIONS:	32 cm x 32 cm x 15 cm (12.6" x 12.6" x 5.9")
WEIGHT:	13 kg (29 lb)
MATERIALS:	PMMA

MODEL 007A INCLUDES

QTY	DESCRIPTION
1	Abdominal Cylinder
1	Adult Head Cylinder
1	Pediatric Head Cylinder
13	Acrylic Rods*
1	Foam-Lined Carry Case
1	User Guide
1	48-Month Warranty

* Replacement Part No. 007-02

