

Model IMRT-2LFC IMRT Thorax Phantom

The Model IMRT-2LFC thorax phantom is designed to address the complex issues surrounding the commissioning and comparison of treatment planning systems while providing a simple, yet reliable method for verification of individual patient's treatment plans and delivery.

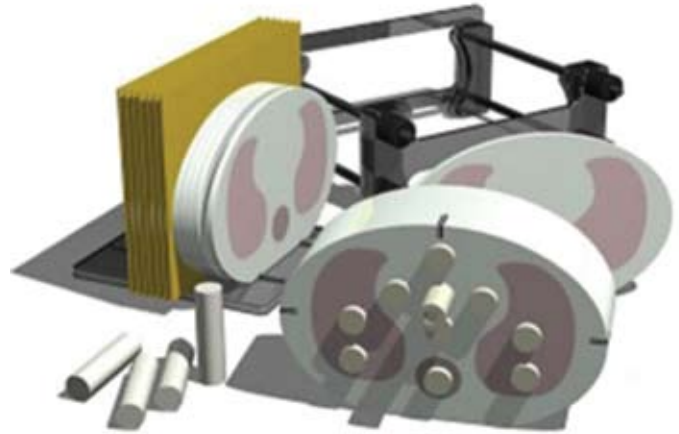
The phantom is elliptical in shape and represents an average human torso in proportion, density and structure. Measuring 30 cm x 30 cm x 20 cm thick, the phantom is manufactured from unique proprietary materials that faithfully mimic water within 1% from 50 keV to 25 MeV.

Tissue-equivalent, interchangeable rod inserts for ion chambers allow for point dose measurements in multiple planes within the phantom. Hole placement allows for verification in the most critical areas of the chest. One half of the phantom is divided into 12 sections, each section is 1 cm thick, to support film dosimetry with not only standard radiographic films but also Gafchromic film. Optional inserts are available to support a variety of other detectors including TLDs, MOSFETs and diodes.

The surfaces of the phantom are etched for ease of laser alignment. An alignment plate and compression device are included.

Features:

- ▶ Check dose distributions in sensitive areas
- ▶ Check depth dose and absolute dose
- ▶ 2D and 3D isodoses
- ▶ Verify individual patient treatment plans
- ▶ Calibrate film with ion chamber
- ▶ Verify heterogeneity corrections



Model IMRT-2HN includes:

1 x	15 cm tissue-equivalent thorax section, drilled to accommodate rods
12 x	1 cm thorax sections
1 x	3 cm end section
1 x	15 cm water-equivalent insert with chamber cavity*
1 x	15 cm bone-equivalent insert with chamber cavity*
1 x	15 cm lung-equivalent insert with chamber cavity*
5 x	15 cm water-equivalent rods
1 x	15 cm bone-equivalent rod
4 x	15 cm lung-equivalent rods
1 x	set of 5 CT to film fiducial markers
1 x	alignment plate
1 x	compression device

*Specify chamber type

Accessories

002BR	Single breast attachment
002HCV	Homogeneous section to accommodate 002FC or 002GC
002LCV	Thorax section to accommodate 002FC or 002GC
002SPH	5 cm long rods for 5mm dia. TLD's (set of 5)
002FC	6.35 cm ³ film stack with 3 spacers
002GC	6.35 cm ³ dosimetry gel stack with 3 spacers
002CTF	CT to film fiducial markers (set of 5)
002ED	Electron density reference plugs (set of 5)
002RW15	Water-equivalent rod insert (specify chamber cavity)
002RB15	Bone-equivalent rod insert (specify chamber cavity)
002RL15	Lung-equivalent rod insert (specify chamber cavity)
002CS	Foam-lined carrying case