

Model IMRT-2H5 IMRT Homogeneous Phantom

The Model IMRT-2H5 homogeneous 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 treatment plans and delivery.

The phantom is homogeneous and elliptical in shape. It represents human anatomy in size and proportion. Measuring 30 cm x 30 cm x 20 cm thick, the phantom is manufactured from unique proprietary materials that faithfully mimic water within 0.5% from 50 keV to 25 MeV.

Water-equivalent, interchangeable rod inserts for ion chambers allow for point dose measurements in multiple planes in the phantom and film calibration. The phantom also supports film dosimetry with not only standard radiographic films but also Gafchromic media at mid-plane in the phantom for analysis of dose distributions. 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, and CT markers ensure accurate film to plan registration. An alignment plate and compression device are included.

Features:

- ▶ Check 2D dose distributions
- ▶ Point dose measurements in multiple planes
- ▶ Quickly verify individual patient treatment plans
- ▶ Calibrate film with ion chamber



Model IMRT-2H5 includes:

2 x	.....	15 cm thick tissue-equiv. section, drilled to accommodate solid rods
5 x	.....	CT to film fiducial markers
5 x	.....	15 cm water-equivalent rods
1 x	.....	water-equivalent rod with chamber cavity*
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 5 mm 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