

Dynamic Thorax Phantom Radiation therapy and Medical Imaging

Anthropomorphic chest phantom for respiratory gating.

Dynamic Thorax Phantom represents the respiratory motion of a human chest for respiratory gating methods. The cases can be combined or modified digitally to create different examples for research and planning.



Features

Dynamic Thorax Phantom is designed to represent the movement of human lungs.

A male chest torso phantom with KYOTO KAGAKU original human tissue substitute materials.

Simple operation with the wireless tablet.

The pulmonary nodule and the diaphragm move independently with the respiratory cycle.

Three dimensional movement of the pulmonary nodule (linearly and rotationally).

TLD can be inserted to simulate the nodule.

Controllable parameter includes respiratory rate, range of movement of diaphragm, range of linearly movement and the rotation to the nodule.

Six preset respiratory patterns are prepared.

Respiratory patterns can be modified and saved.

Up to three different respiratory patterns can be run in sequence.

Three operation modes are prepared: basic mode, combination mode and user mode.



Controllable Parameters

respiratory rate: 6-24 cycles/min.

movement of diaphragm:

0-38 mm / 0-1.5 inch

linearly movement of nodule unit:

38-64mm / 1.5-2.5 inch

rotation of nodule unit: 50-70 degrees

Evaluation Applications

Research and planning in respiratory gating
CT, dosimetry and radiation therapy.

Specifications

Set Includes:

1 drive unit

1 chest phantom

1 mediastinum phantom with right pulmonary vessels

1 nodule rotation unit

1 diaphragm block

1 set of simulated nodules

1 controller

1 storage case