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WEK-062M Electronic Density Phantom

>>>Instruction<<<

The WEK-062M electronic density phantom is designed to account for tissue heterogeneity in radiation therapy planning. It can be used to establish precise correlations between CT data and the electronic densities of various tissues. The phantom consists of two nested discs representing the head and abdomen, respectively. Nine different tissue-equivalent electronic density plugs can be placed at 17 distinct positions within the scanning area. The phantom also includes a water bottle stopper that can be filled with any liquid.

Electronic density head insert:
Diameter 180 mm x 50 mm
Abdominal phantom dimensions: 330 mm x 270 mm x 50 mm

WEK-062M electronic density phantom, the WEK-062M electronic density phantom component consists of:
Lung: Inhaled lung, Exhaled lung
Chest: 50% glandular tissue / 50% fat
Solid trabecular bone: 200 mg/ml HA
Liver, muscle, fat
Dense bone: 800 mg/ml HA
Dense bone: 1250 mg/ml HA with water injection plug

Compared to the electronic density of water

Tissue/Component	Electron Density Value
Phantom Base Material (Water Equivalent)	1
Adipose Tissue	0.95
Breast Tissue (50% Glandular / 50% Adipose)	0.976
Solid Dense Cortical Bone - 1250 mg/cm³ Hydroxyapatite (HA)	1.622
Solid Trabecular Bone (Inner Bone) - 200 mg/mL HA	1.19
Average Rib Solid Dense Bone - 800 mg/cm³ Hydroxyapatite (HA)	1.52
Lung Tissue (Inspiration)	0.2
Lung Tissue (Expiration)	0.55
Liver	1.1
Soft Tissue, Kidney, Muscle	1.02