

CT Torso Phantom Specification

Notice Handle the phantom carefully. It is very fragile and heavier than it looks.

Figuration: This phantom is made with the substance in which the embedded artificial bone made from Japanese male skeleton model is. It is the torso style, whose both arms are cut at the shoulder in the rising position, and both legs are cut at the crotch.

Material : Urethane base resin(SZ-50) (Soft tissue and organs)
Epoxy base resin (Synthetic bones)

Weight : Approx. 45 kg

* The product has two 3mm dia holes made in the chest wall to prevent the damage caused by atmospheric pressure change that may occur in transit.

Internal Organs		Hounsfield Number*	Note
Soft tissue around each organ		Approx. 8	
Brain	Whole	Approx. 40	
	Brain Ventricle	Approx. 10	
Eye Balls		Approx. 20	
Aorta		Approx. 40	
Grate Vein		Approx. 40	
Trachea	Up to the first branch	Approx. -800	It is made with the foamed urethane to the first branch, and with the pipy material to the third branch.
	The second -the third branch	Approx. 8	
Heart		Approx. 40	
Pulmonary Blood Vassal		Approx. 8	It is made up to the fourth branch
Cartilage in Costae		Approx. 90	
Liver	Whole	Approx. 70	The portal and vein are embedded
	Vein	Approx. 40	
Gallbladder		Approx. 20	
Pancreas		Approx. 30	
Spleen		Approx. 50	
Kidney	Whole	Approx. 30	
	Vein	Approx. 40	
	Urethra	Approx. 10	
Urethra		Approx. 10	
Urinary Bladder		Approx. 10	

*The Hounsfield Number above is indicated only as a guide and might be different from the actual measured number under the various condition.

Storage Important Notes

Thank you for choosing our Phantom for CT.

Since this phantom is made of resin, contraction and expansion of resin may occur due to changes in temperature. A slight gap between organs may appear by contraction of resin. This air gap may be seen in the areas of resin in radiographic images.

To avoid this problem, store the phantom in environment of between 20 (68°F) and 25 degrees Celsius (77°F).

Please store away from direct sunshine, high temperature low temperature and high humidity

If the air gap image appears in unexpected position, keep the phantom in environment of between 20 (68°F) and 25 degrees Celsius (77°F). for minimum one week.

Our Phantom for CT is inspected by an X-ray CT scanner and the radiographic images. Please accept that the slight air gap is permissible range under our quality standard.

For any issues or inquiries, please contact us at any time.

Information of product inspection

Head Phantom for CT imaging equipment

This is information regarding product inspection of our Head Phantom for CT imaging equipment. Head Phantom was inspected under the following condition.

X-ray tube voltage	120 KV
mAs	220 mAs
Table Speed	1.5 sec/rot
DAS	0.6mm x 16 DAS
Pitch	1.0mm
Slice Thickness	0.75 mm

CT image reconstruction was made by 2 different Window Level (WL) and Window Wide (WW) in order to check air bubbles and similarity to human brain. Both the width is 5mm.

Composition of Head Phantom is as follows.

Tissue	Estimated HU Value
Brain (White matter and Gray matter)	40
Ventricle	10
Gel as filler between skull and brain	0

1) Similarity Check	WL 40	WW 2000 (-960HU ~ -1040HU)
2) Air bubbles Check ^{*)}	WL 40	WW 300 (-110HU~ 190HU)

Please give us your understanding that it is impossible to manufacture the phantom with no air bubble.

If you have any inquiry, please contact us at any time.