



Solid Phantom

Measurements and experimental works, taking possible interaction with parts of human body adjacent to objects under tests into account, are becoming more and more significant as required for example, in development of antennas for cellular phones.

To serve such requirements, various types of PHANTOM simulating shapes and dielectric properties of human body are being used. Many of those PHANTOM's, however, are composed of either liquids in containers or some other materials such as ceramics and are not necessarily easy to handle due to their heavy weights, etc.

Our recently developed SOLID PHANTOM could overcome major drawbacks of other competitive products by using "hollow micro spheres", which contains synthetic resins mixed with electrically conductive fibers, resulting in light and easy to control, and flexible for various contour through molding process.

Features

- * Light and easy to handle
- * High impact resistance and excellent durability
- * Versatility in final shapes
- * No decomposition, no souring
- * Easy to control dielectric properties simulating different parts of human body
- * Specific gravity: 0.7-0.8 g/cc



PH series has upper body set including, PH-HEAD, PH-CHEST, PH-LA, and also has whole body set plus lower body.

Whole body set is moveable and can take both the standing position and sitting position.
(In the case of creating standing position, using attached acrylic assisting tool.)

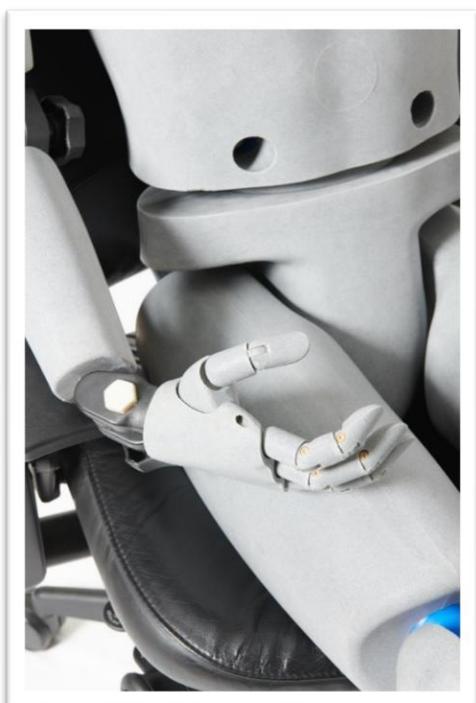
Not only there is a joint in 15 locations, but also base of the finger has become a spherical joint as shown in the photograph, finger movable phantom, can hold objects in natural way as people would in reality.



↑ A joint of right arm



↑ Left hand



↑ Right hand



↑ A joint of right leg

Only each joint parts do not perform a dielectric constant control but it is made without any metal parts.

In addition, There are PH-EL(Left ear) and PH-ER(Right ear) which can be used measurement of Bluetooth headphones and PH-HEAD-E which has to be attached to the left and right ears on the head.

Ear part is made from special silicon resin and rich in flexibility so, wearing earphone is also possible as shown in the center photo below.

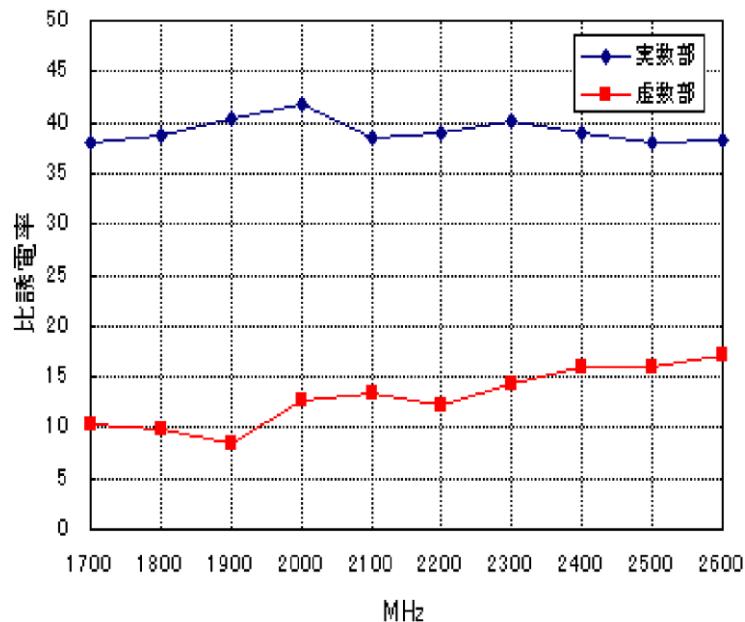


Fig.1 Characteristic of PHANTOM for 2GHz

*The absorption performance evaluation of radio wave absorber is based on our company's waveguide method and NRL arch method.

(In the case that the product has metal back surface)

*The numbers on the table are typical values, not guaranteed values.

Also, the specification may change without advance notice.

Disclaimer

The information on this catalog is reliable, however, this does not guarantee the legal liability and does not permit or recommend patent invention without a license.

Please use the information for considering or confirming the specification of the product since it is provided for development, research, and examination.

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