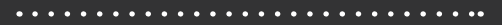




# Hybrid Absorbers



**COMTEST**<sup>®</sup>  
ENGINEERING

Controlled Electromagnetic Environments

Hybrid absorbers (HT-series) . . . . . 03  
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## CONTROLLED ELECTROMAGNETIC ENVIRONMENTS

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Comtest Engineering supplies high performance RF shielded rooms, reverberation and anechoic chambers. The company is located in The Netherlands and was founded in 1985.

We are a professional organization and recognized for quality and flexibility. Comtest high performance RF shielded doors, mode-stirrer systems and microwave absorbers have been internationally recognized as state of the art products.

Our skilled and experienced team is dedicated to satisfy your need to control the electromagnetic environment!

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# Hybrid absorbers

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## Green and sustainable

These closed cell polystyrene absorbers don't contain poisonous fire retardant chemicals. The absorbers are sustainable, 100% environmental friendly and fully compliant with REACH and ROHS.

## Quality control

Production of Comtest products is executed under tight quality control according to ISO 9001:2008 and ISO 14001:2004.

## Benefits

The benefits of the polystyrene absorbers are:

- ✓ Unique and enhanced product design:
  - ✓ Alternating taper design (vertical – horizontal)
  - ✓ Light weight
  - ✓ Removable tapers
- ✓ Hybrid absorbers are suitable for clean room class 4 as per ISO14644-1 / class 10 as per US Fed. Standard 209E
- ✓ Uniform carbon cell loading
- ✓ Compliant with fire retardancy ISO 11925-2 class E / DIN 4102 class B2 / UL94 HBF
- ✓ Rigidity and superior tensile strength (no drooping tips)
- ✓ Superior product life time (>25 years)
- ✓ Resilience to humidity



# Hybrid absorbers (HT-series)

The hybrid absorber is a high performance, ultra wide band, carbon loaded polystyrene absorber with an operating frequency from 20 MHz to 40 GHz. These hybrid absorbers are tuned for perfect performance in combination with ferrite tile model 1701-200 in (semi/full) anechoic chambers for EMC testing.

The base plate dimensions of these hybrid absorbers is 1200\*600mm. All absorbers have a modular design

of separate base plates and tapers. Upon customer request the hybrid absorbers can be equipped with white end caps.

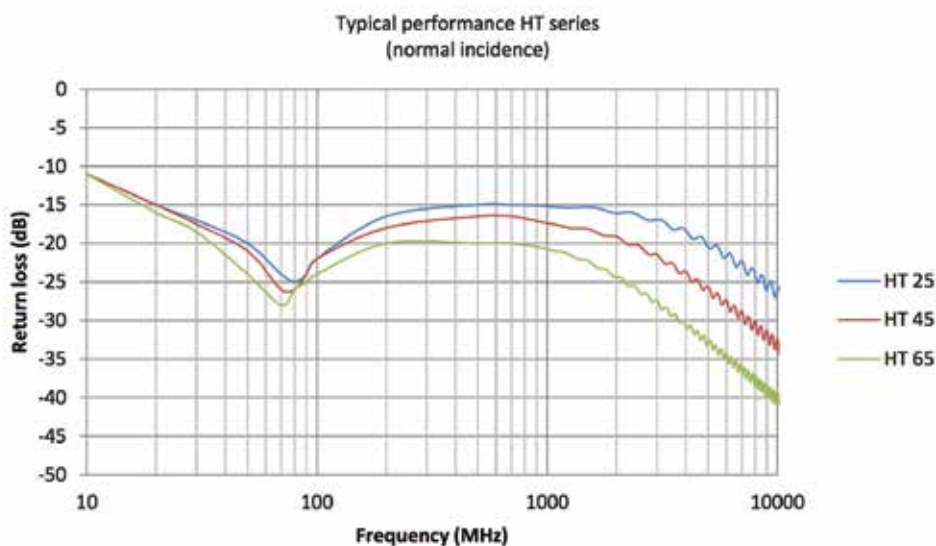
The HT hybrid absorber series consist of three different models:

- HT25 (height 250mm / 10")
- HT45 (height 450mm / 18")
- HT65 (height 650mm / 26")

## Specifications

Material	Closed-cell polystyrene
Dimensions	1200*600*450mm (height)*
Weight	5,7 Kg / m <sup>2</sup> *
Color	Dark Grey
Humidity resistance	No deterioration from moisture
Product life time	> 25 years
Power Handling	434 V/m
Frequency range	20MHz - 40GHz
Fire retardancy	ISO 11925-2 class E / DIN 4102 class B2
Clean room spec.	Suitable for clean room class 4 as per ISO14644-1 / class 10 as per US Fed. Standard 209E
White end cap	Upon request, 2 square caps per absorber
Reach & ROHS compliant	Yes

\*: HT45.



### Warranty

Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range purpose. These values are not intended for use in establishing maximum, minimum or ranges of values for specification purposes. Any determination of the suitability of the material or any use contemplated by the user and the manner of such use is the sole responsibility of the user who must assure that the material as subsequently processed meets the needs of this particular product or use. The given information is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification but we don't warrant the results to be obtained.

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## Wideband Ferrite Floor Absorber model 1701-000

The wideband ferrite floor absorber model 1701-000 is designed to facilitate the use of all semi anechoic chambers for full compliance immunity testing. In combination with the hybrid absorber model HT45 the wideband ferrite floor absorber is perfectly suited for a floor setup for immunity testing according to IEC/EN-61000-4-3. Dimensions: 602\*602\*20 mm / weight: 17kg.

## Ferrite Tile model 1701-200

The ferrite tile model 1701-200 is a sintered ferrite tile and delivers excellent electromagnetic absorption performance from 20MHz ~1GHz.

The ferrite tile can be directly glued to the shielding enclosure or screwed to an inner structure which enables easy installation. The ferrite tile is (also) suited for hybrid (cascade) solutions in combination with the hybrid polystyrene absorbers (HT series).



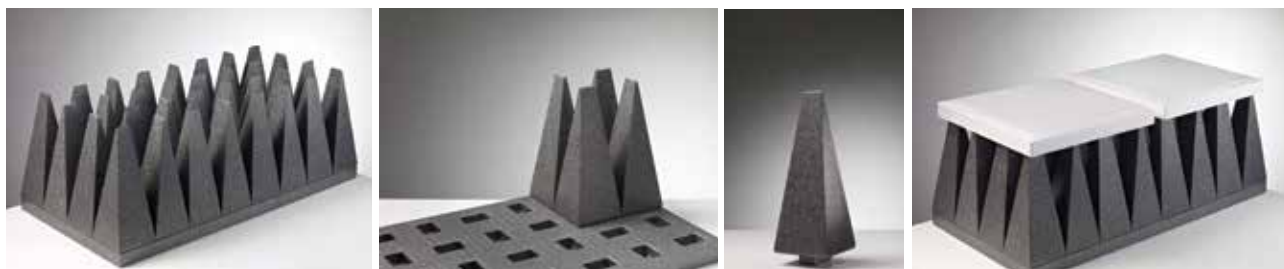
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## HT25



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## HT45



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## HT65

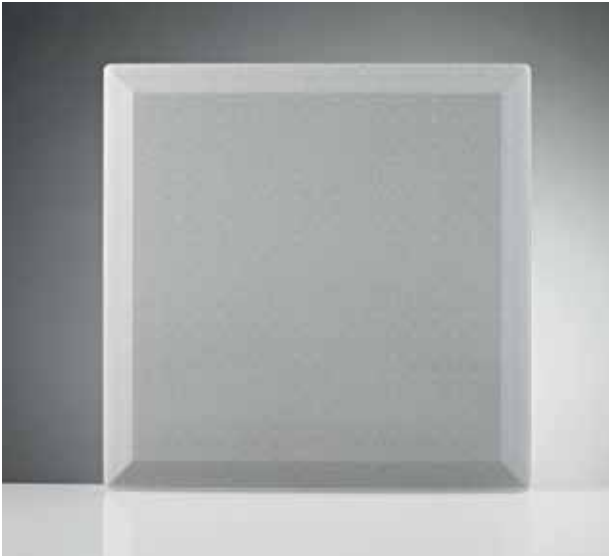


# End caps

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The purpose of white end caps is to enhance the light density inside anechoic chambers. End caps are also used to protect the absorber taper tips against damaging. The end caps are made of polystyrene and available in white and grey color. The grey ones are

use to protect absorber taper tips of floor absorbers during handling and stacking. It's also possible to mount your company logo plate to the end caps. The white end caps are offered as an extra option and are not needed to assemble Comtest absorbers.





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