TIP OF THE SPEAR

Introducing the MT45-JT

a long-lasting, javelin-tipped, high performance polystyrene absorber.

Polystyrene absorbers are well known for their durability. Thanks to our enhanced Javelin Tip design, they finally offer the performance to match. The result is a high performance, closed-cell polystyrene absorber which can be used in various antenna measurement applications. An environmental-friendly product, that comes with a 25-year warranty. The MT45-JT. A new era in absorber technology.

DMAS
DUTCH MICROWAVE ABSORBER SOLUTIONS

The next step in polystyrene absorber technology

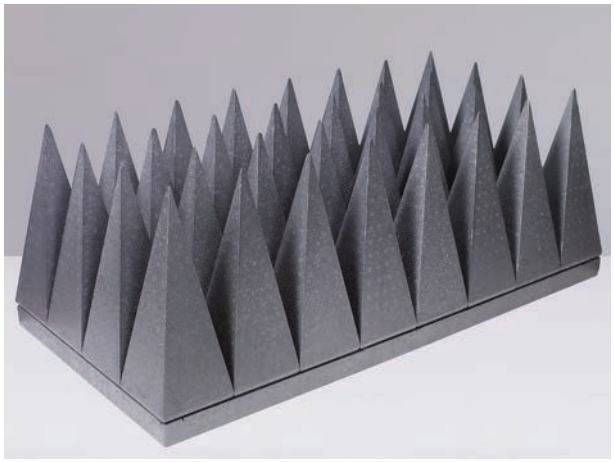
Polystyrene absorbers have always been far more durable and stable than their polyurethane foam counterparts. But in terms of performance, foam used to be the better option, until now that is. After years of development, we are ready to introduce an entirely new kind of polystyrene absorber that bridges the performance gap. It's the MT45-JT and it marks the start of a new era in absorber technology.

Introducing the MT45-JT

The MT45-JT owes its name to the recognizable Javelin tip it's equipped with. This specially designed tip allows the absorber to operate in frequencies from 600MHz all the way up to 110GHz (typical -30dB reflectivity or better) meaning our polystyrene absorber is now able to match the performance of traditional foam absorbers. Due to distinct features like eco-friendly, closed-cell material, stable performance and superior product life making it the best choice for use in antenna ranges and wireless OTA test chambers.

Polyurethane versus polystyrene

We have long been staunch advocates of polystyrene absorbers, since these offer many advantages over their polyurethane foam counterparts. With superior rigidity and tensile strength, our absorbers are compliant with all internationally recognized fire-retardant standards without the use of heavy chemicals or hazardous materials. Due to closed cell structure and characteristics of EPS material, our absorbers are highly resilient to changes in ambient humidity and temperature. This results in an extremely durable product that comes with a 25-year warranty and is expected to last well beyond that.



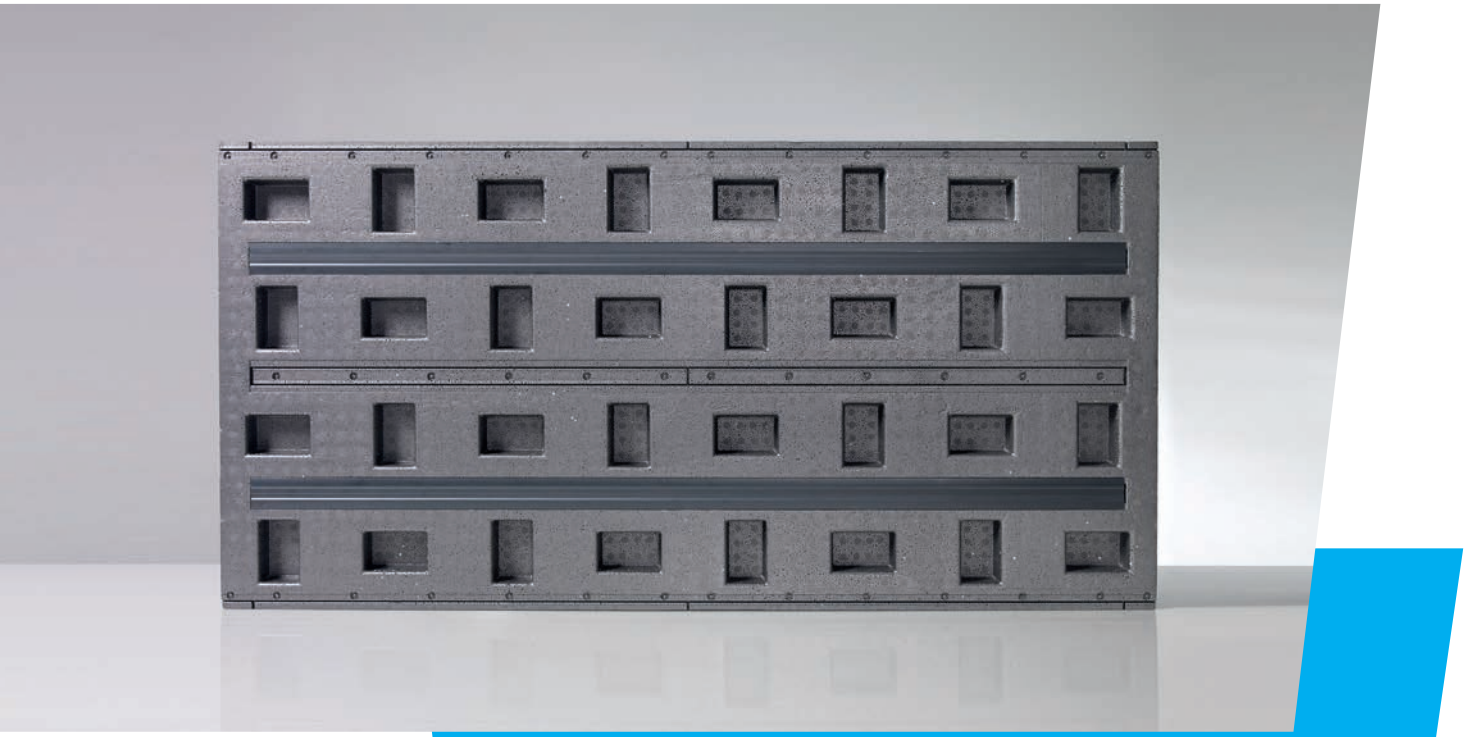
Features and benefits

- Closed-cell polystyrene material (no leakage of carbon particles)
- Uniform carbon cell loading resulting in stable performance
- Modular design using baseplate & pyramids (damaged pyramids are easily replaced)
- Easy installation method using screws and mounting strips
- Light weight product
- Rigidity and superior tensile strength (no drooping absorber tips)
- Resistant to humidity (does not absorb moisture from the air)
- Superior product lifecycle (25+ years)
- Environmentally friendly and compliant with REACH and RoHS directives
- Certified for use in clean room environments (ISO 14644-1 class 2)
- Compliant with internationally recognized fire-retardant standards

DMAS polystyrene absorbers are sustainable, eco-friendly and compliant with REACH and RoHS directives, meaning they do not contain poisonous fire-retardant chemicals.

No downsides

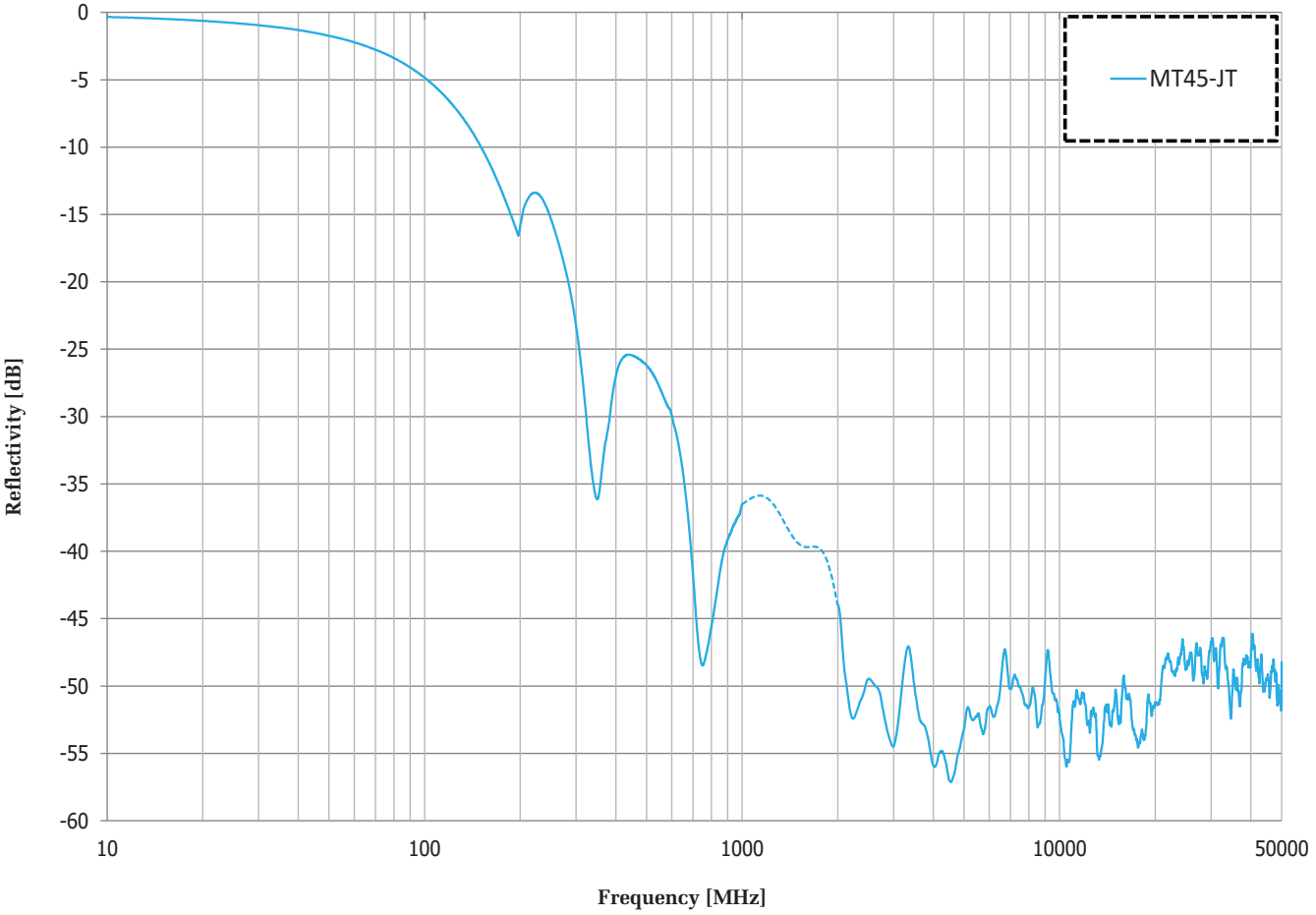
Taking all the above into account, means there are no longer any downsides to using polystyrene absorbers for microwave frequency testing. Thanks to the enhanced Javelin Tip design, DMAS new polystyrene absorbers offer performance that matches their incredible durability. Are you interested to equip your antenna range or wireless OTA test chamber with the latest polystyrene absorber technology? Contact us now via **info@dmas.eu** or visit **https://dmas.eu**.



MT45-JT specifications:

Description	Specification
Material	Expanded polystyrene (EPS)
Color	Dark grey
Dimensions	1200 x 600 x 450mm (L x W x H)
Nominal weight	7.4kg
Frequency range	600MHz – 110GHz (-30dB reflectivity or better)
Max. absorber temperature	+70°C
Max. incident power density	663W/m² / 0.43W/in² (CW)
Humidity resistance	Resistant to water and moisture
Product life cycle	25+ years
Quality control	IEEE Standard 1128 / ISO 9001
Fire retardancy	ISO 11925-2 class E / UL94-HBF / DIN 4102-1 class B2
Clean room	class 2 as per ISO 14644-1
REACH compliant	According to EC 1907/2006
RoHS 3 compliant	According to 2015/863/EC

Typical reflectivity at normal incidence:



	300MHz	500MHz	1GHz	3GHz	5GHz	10GHz	18GHz	30GHz	50GHz
MT45-JT	(≤) -20dB	(≤) -25dB	(≤) -35dB	(≤) -50dB	(≤) -50dB	(≤) -50dB	(≤) -50dB	(≤) -45dB	(≤) -45dB

Test results are collected in accordance with IEEE std 1128-1998. This standard suggests to use the arch measurements method at f > 1GHz and put certain limits on a sample size. Considering these limits, the arch set-up available in DMAS lab enables fair reflectivity measurements in 2GHz to 50GHz frequency range but can cause inaccurate results for 1GHz to 2GHz band following the IEEE std 1128-1998 method. In this respect the results shown at 1GHz to 2GHz frequencies are obtained through interpolation.

Warranty

Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range of 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.