

TIP OF THE SPEAR



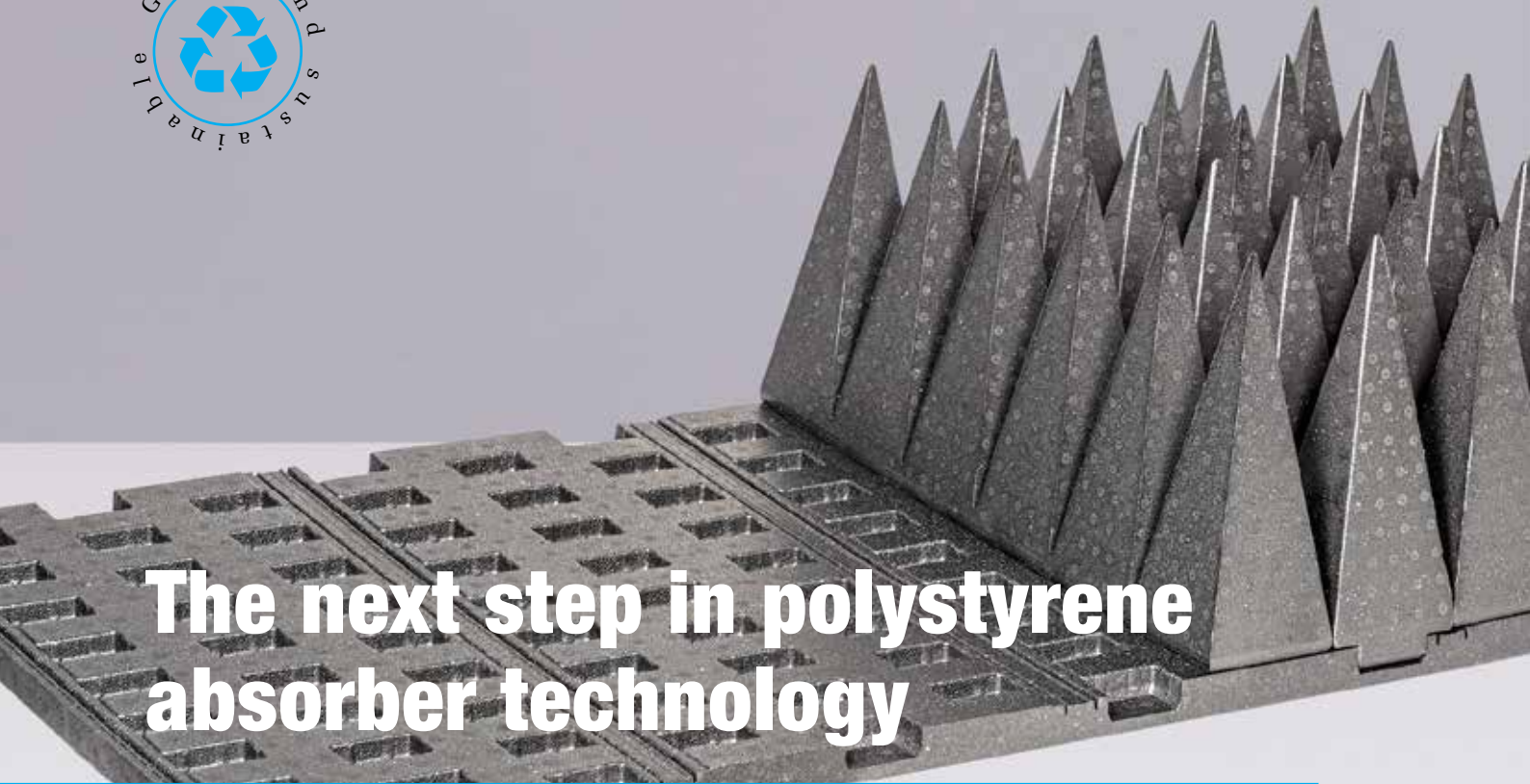
Introducing the new MT30-JT

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. Since the introduction of the JT family back in 2018, two absorber models were introduced. After successful introduction of the MT45-JT and MT65-JT absorbers, our newest model is the MT30-JT.

 Empower tomorrow's technology

COMTEST[®]
ENGINEERING



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 two years of development, we are ready to introduce an entirely new kind of polystyrene absorber that bridges the performance gap. It's the MT30-JT, our new Javelin-Tip absorber family member.

Introducing the MT30-JT

The MT30-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 400MHz all the way up to 50GHz (typical -20dB 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

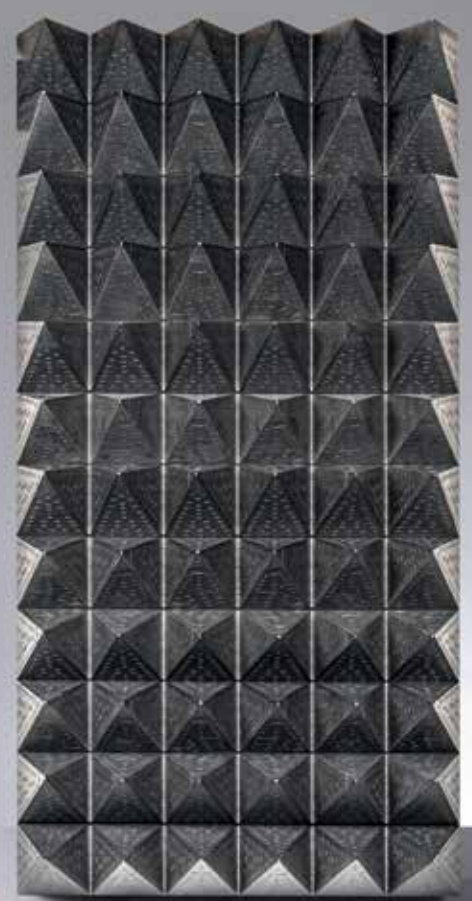
fire-retardant standards without the use of heavy chemicals or hazardous materials. Due to closed cell structure and characteristics of EPS material, our absorbers are highly resilient to changes in ambient humidity and temperature. This results in an extremely durable product that comes with a 25-year warranty and is expected to last well beyond that.



Features and benefits

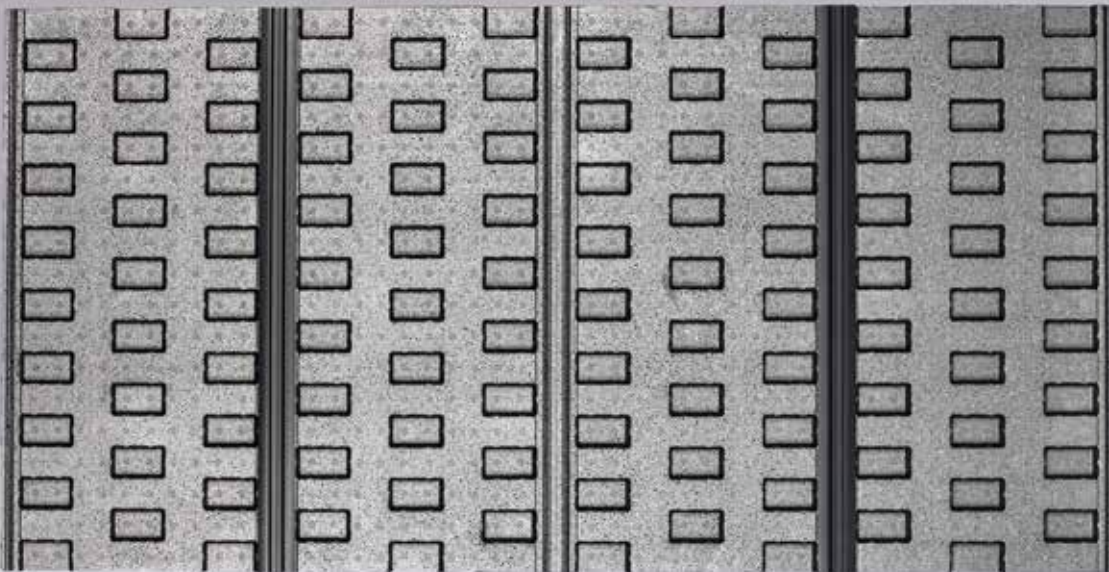
- Closed-cell polystyrene material (no leakage of carbon particles)
- Uniform carbon cell loading resulting in stable performance
- Modular design using baseplate & tapers (damaged tapers are easily replaced)
- Easy installation method using screws and mounting strips
- Lightweight product
- Rigidity 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 rooms (ISO 14644-1 class 2)
- Compliant with internationally recognized fire-retardant standards

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



No downsides

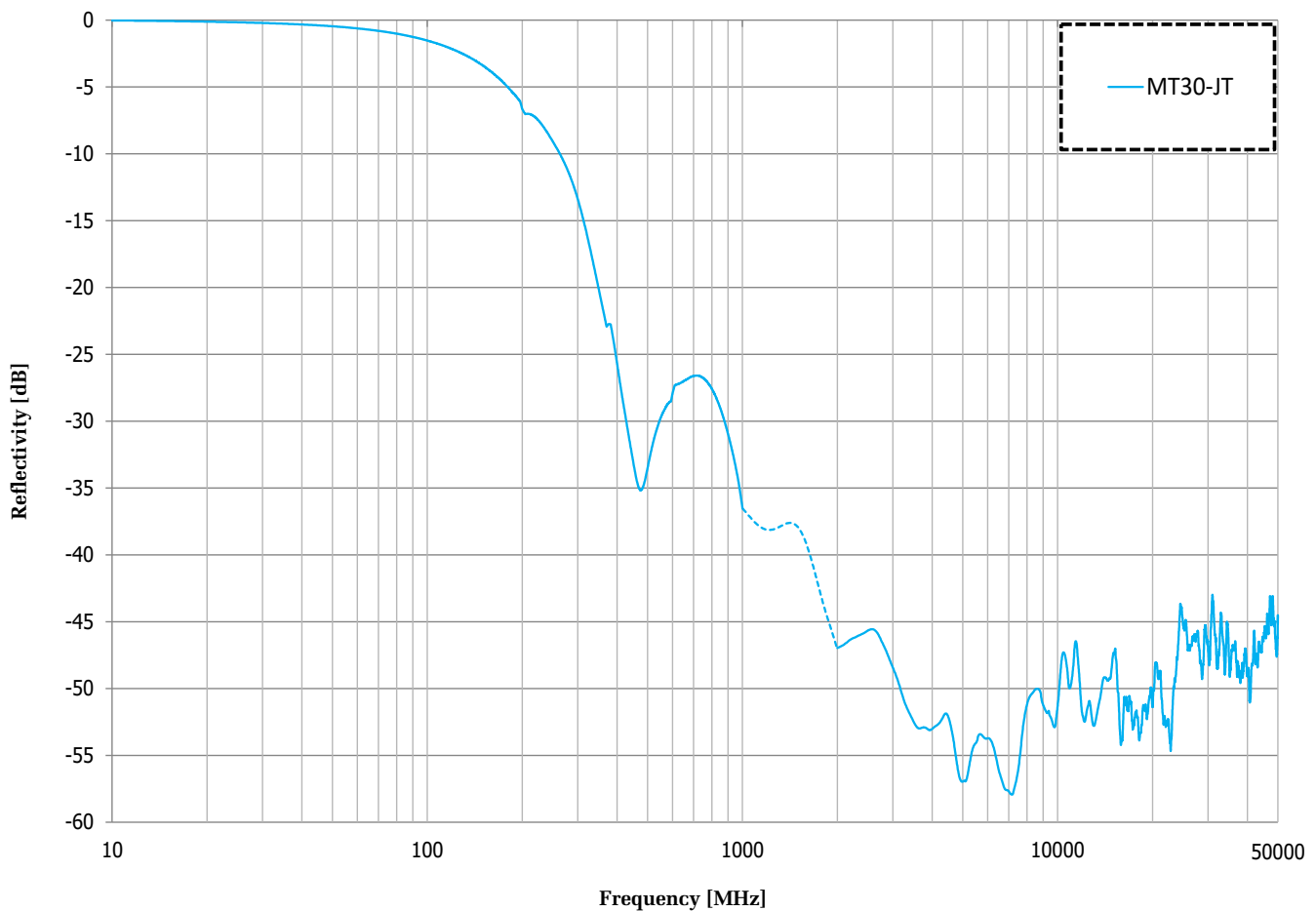
Taking all the above into account, means there are no longer any downsides to using polystyrene absorbers for microwave frequency testing. Thanks to the enhanced Javelin Tip design, Comtest's new polystyrene absorbers offer performance that matches their incredible durability. Are you interested to equip your antenna range or wireless OTA test chamber with the latest polystyrene absorber technology? Contact us now via support@comtest.eu or use our website's contact form.



MT30-JT specifications:

Description	Specification
Material	Closed-cell polystyrene
Color	Dark grey
Dimensions	1200 x 600 x 300mm (L x W x H)
Weight	7.1kg/m ²
Frequency range	400MHz – 50GHz (-20dB reflectivity or better)
Operation temperature	+5°C to +35°C
Power handling	600W/m ² (CW)
Humidity resistance	Non-hygroscopic
Product life	25+ years
Quality control	IEEE Standard 1128 / ISO 9001
Fire retardancy standards	ISO 11925-2 class E / UL94-HBF / DIN 4102-1 class B2 / ISO 4589-2
Clean room standard	ISO 14644-1 class 2
REACH compliant	According to EC 1907/2006
RoHS 3 compliant	According to 2015/863/EC

Typical reflectivity at normal incidence:



	500MHz	1GHz	3GHz	5GHz	10GHz	18GHz	30GHz	50GHz
MT30-JT	(≤) -25dB	(≤) -30dB	(≤) -45dB	(≤) -45dB	(≤) -45dB	(≤) -45dB	(≤) -40dB	(≤) -40dB

Test results are collected in accordance with IEEE std 1128-1998. This standard suggests to use the arch measurements method at $f > 1\text{GHz}$ and put certain limits on a sample size. Considering these limits, the arch set-up available in Comtest 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.