

weisstechnik

**Test it. Heat it. Cool it.**

Our solutions are deployed around the world in research, development, production and quality assurance of numerous products. Our experts from 21 companies are at your service in 14 countries, ready to provide support to ensure high operational reliability of your systems.

Weiss Umwelttechnik is one of the most innovative and significant manufacturers of environmental simulation systems. With these testing systems, we can simulate all climatic conditions around the globe and beyond, under accelerated conditions. Whether temperature, climate, corrosion, dust or combined shock testing: we have the proper solution. We supply systems in all sizes, from standard versions up to customised, process-integrated facilities - for high reproducibility and precise test results.

Vötsch Industrietechnik, a subsidiary of Weiss Umwelttechnik, offers a wide product portfolio in the field of heating technology. With an experienced team of engineers and designers, we develop, plan and produce high-quality and reliable heating technology systems for virtually any field of application. Products include heating/drying ovens, clean room drying ovens, hot-air sterilisers, microwave systems and industrial ovens. The portfolio reaches from technologically sophisticated standard versions to customised solutions for individual production operations.

A further Weiss Technik company, Weiss Klimatechnik, also offers reliable climate solutions wherever people and machinery are challenged: in industrial production processes, hospitals, mobile operating tents or in the area of IT and telecommunications technology. As one of the leading providers of professional clean room and climate solutions, we deliver effective and energy-saving solutions. Our experts will guide you from the planning to the implementation of your projects.

Weiss Pharmatechnik, a subsidiary of Weiss Klimatechnik, is a competent provider of sophisticated clean room and containment solutions. The product range includes barrier systems, laminar flow facilities, security workbenches, isolators and double door systems. The company emerged from Weiss GWE and BDK Luft- und Reinraumtechnik and has decade-long experience in clean room technology.

**Weiss Umwelttechnik GmbH**

Greizer Straße 41-49  
35447 Reiskirchen/Germany  
T +49 6408 84-0  
info@wut.com

**Vötsch Industrietechnik GmbH**

Environmental Simulation  
Beethovenstraße 34  
72336 Balingen/Germany  
T +49 7433 303-0  
info@v-it.com

www.weiss-technik.com



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# Emission Test Chambers EmissionEvent VOC



Image contains optional equipment



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# Only with us can you discover the invisible.

Play it safe when testing the emission behaviour.



## The challenge: Realistic environmental conditions.

All components and materials used in vehicles or indoor spaces can release highly hazardous VOCs (Volatile Organic Compounds). These organic substances, which evaporate very quickly or become gaseous at low temperatures, include hydrogen carbonate, alcohol, aldehyde and organic acids. For detecting VOCs and determining concentrations, a method is required that simulates different environmental conditions in a realistic and standardised manner. Our EmissionEvent VOC Test Chambers make analysis easy, safe and reliable.

## Lots to test? No problem!

When testing your products, you must adhere to numerous test standards and carry out long-term tests. Our test chambers are designed for these situations. Our models cover a wide range of applications and satisfy every need. For specific requirements, you can upgrade every system with many options based on your individual needs.

EmissionEvent VOC is the most flexible device for testing emissions - tailor-made for your individual analytical methods.

# Perfection in performance, equipment and design.

Emission Test Chambers EmissionEvent VOC.

## Completely thought through.

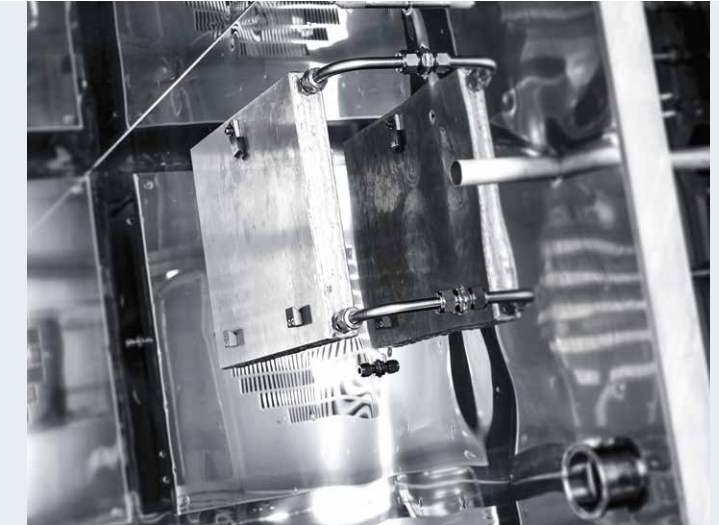
We know what matters for your tests: reliable, precise and reproducible results. That's why we design our test chambers to meet exactly these demands. Because incorrect results lead to incorrect conclusions. With this in mind, we already eliminate any interference factors during the design phase, relying on our comprehensive expertise and years of experience.

## Perfectly manufactured.

For us, quality is our daily business. We use only high-quality materials and manufacture many of the components for our test chambers in-house. In addition, we also have regular quality checks in place throughout the entire production process.

## Absolutely low maintenance.

Set up, plug in, start the test. The intelligent, compatible control elements and intuitive user interface guarantee easy operation. Easily accessible maintenance elements ensure minimal service times. Diagnostics and inspection systems in every machine additionally shorten downtimes and optimise maintenance periods.



## Highlights at a glance:

- Defined and reproducible temperature and humidity conditions in an emission-free test space
- Fogging cooling system for analysing condensable VOC components
- New, environmentally friendly refrigerant



**i** Our innovative Test Chambers are available as weissttechnik or vötschtechnik.

# More equipment, right from the start.

## Basic equipment setting standards.

### Exterior



- **Safely into the future - using the new refrigerant**  
The R134a refrigerant is used in all EmissionEvent Emission Test Chambers. With a GWP value of just 1430, it already meets the EU regulations from 2020 onwards. As a result, we are already surpassing today the statutory standards of tomorrow. This future-proofs your tests, making them easier to maintain and more environmentally friendly.

### Interior



- **Comparisons made easy**  
Defined temperature and humidity conditions enable the tests to be precisely reproduced.
- **Disruptive effects excluded**  
The test space without background emissions and the use of emission-free components and materials minimise the falsification of test results.

### Regulation & Control




- **Everything under control**  
Greater convenience and better usability with **SIMPAC®**.  
The Emission Test Chambers are equipped with **SIMPAC®**, the digital measuring and control system for operating, monitoring and documenting.



Image contains optional equipment

You can find further details on equipment in our technical descriptions. **Contact us.**

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# Tailor-made testing.

Optional equipment for individual solutions.



Image contains optional equipment

## Exterior



- **Mobile and flexible**

A combination of two fixed and two swivel castor rollers ensure greater mobility in the moveable version.

## Interior



- **Tailor-made analyses**

A diverse range of possible options enable the system to be individually adjusted for meeting the most varied requirements for standards and testing tasks.

- **Fogging effect becomes traceable**

In order to investigate the effect, a complete fogging cooling device can be integrated. This causes condensable VOC components to accumulate on the glass pane for subsequent analysis.

## Regulation & Control



- **Set standards in communication**

With SIMPATI® software, operating, documenting and archiving your test sequences is as easy as child's play.

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Developed exclusively for you:  
The unique software package  
for the perfect test process.



# Convincing technology. Reliable results.

The performance data at a glance:

Type			VOC/240	VOC/1000
Test space volume (usable)	I		240 (201)	1000 (916)
Conditioning			Air jacket temperature control	
Temperature range	°C		+20 °C bis +130 °C	
Temperature deviation over time	K		±0.1 bis ±0.3	
Temperature homogeneity spatially	K		±0.5	
Humidity range	%		5 bis 95	
Dew point range	°C		+5 bis +60	
Humidity deviation over time	%		±1 bis ±3	
Desorption temperature			Adjustable up to max. +240 °C	
Test space dimensions	Width	mm	600	750
	Depth	mm	560	1630
	Height	mm	600	750
External dimensions (max.)	Width	mm	1350	1350
	Depth	mm	2500	3550
	Height	mm	1985 (2190)	2030 (2275)
Weight		kg	ca. 1000	ca. 1200
Sound pressure level		dB(A)	61	63
Rated power (max.)		kW	7.4 (18.3)	7.6 (18.3)
Electrical connection			3/N/PE AC 400 V ±10%, 50 Hz	
Factory calibration +23 °C and +65 °C				

<sup>1</sup>In steady state, depending on temperature.

<sup>2</sup>Can be reduced by disassembling components

The performance data refer to +25 °C ambient temperature, and an altitude of ≥ 1000 m over mid sea level, 400 V nominal voltage, without specimen, optional equipment and heat compensation.

The product needs fluorinated gases for functioning. It contains the refrigerant 134a.

We reserve the right to make any technical alterations.

# Become more efficient.



Our solutions will save you time and money.

Get the most out of your test facility.



Create your own perfect testing process with the SIMPATI® software package.

Process management/documentation/networking

- Up to 99 systems can be connected
- Programs for automated processes
- Documentation, visualisation and management of process data
- Traceability of process data for seamless quality control



We measure ourselves by our service!

Our services - lots of good arguments:

- Global service network
- Wide selection of preventive maintenance
- Reliable spare part supply
- Special deployments available any time
- Training programmes for our customers
- Certified proper disposal of outdated devices

You can always find a weisstechnik expert near you.

**24/7-Service-Helpline:**  
**+49 1805 666 556**

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# You love the particular?

## Special equipment for your special applications.

Particularly in the automotive and electronics industries, the use of special test methods will become increasingly important in the future. Whether you require a reinforced test space, a drive-in version, increased cooling and heating performance, volume compensation with a Tedlar® bag or equipment for structural tests - we will tailor your test chamber to meet your individual needs. With all necessary accessories. Get in touch with us.

### Application examples

#### EmissionEvent VOC 5000 Emission Test Chamber

For example, for determining VOCs from the engine compartment of motor vehicles

Equipment packages:

- Automotive test methods
- Expansion for VOCs from the engine block complete with gearbox and tank

Test space volume: approx. 5000 l  
Temperature range: +20 °C/+130 °C  
Humidity range: 30 to 95 % RH  
Desorption: +240 °C

#### EmissionEvent VOC 8000 Emission Test Chamber

For example, for determining VOCs from interior objects (furniture, office equipment) and electrical/electronic equipment in offices (printer, PC, etc.)

Equipment package:

- VOCs from building materials according to ISO 16000-9 electrical appliances ECMA

Test space volume: approx. 8000 l  
Temperature range: +20 °C to +130 °C  
Humidity range: 30 to 95 % RH  
Desorption: +240 °C

### Emission tests in SHED chambers

With the introduction of the Euro 6 emissions regulations, more rigorous testing of vehicle emissions has become necessary. Our temperature- and climate-controlled SHED Chambers meet the latest European, US and Asian standards. Our SHED Chambers (Sealed Housing for Evaporative Determinations) are equipped with the necessary analysis technology and test bench software for conducting tests and documenting the results. These are standard for measuring fuel evaporation and are required by vehicle manufacturers in order to demonstrate, by means of the prescribed verification procedures, compliance with the permissible limits set by legislators (EU, EPA, CARB, NSCN) prior to receiving approval.

Our range of products: Mini-SHED, ORVR-SHED, VT/VV-SHED, RL-SHED.

#### SHED Test Chamber WT 12'+15-45 SHED\*

Temperature range: +15 °C to +45 °C, with volume compensation  
Test space: 12 m<sup>3</sup>

\*Selected system - further designs on request, please get in touch with us.



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