



Temperature Shock Test Chambers ShockEvent



Illustration is similar, contains options



www.weiss-technik.com

Test whatever you like.

From components to gearboxes and semiconductors - in research, development and quality control, you won't want to take any chances. We'll support you.



A load test for your products.

Environmental conditions have a great influence on the functionality and reliability of the electronic components, devices and systems. A normal temperature test is often not sufficient to detect latent weak points as quickly as possible. Samples must be subjected to multiple, shock-like temperature changes. With our Temperature Shock Test Chambers ShockEvent extremely fast temperature changes from -80 °C to +220 °C can be achieved. This helps you to reduce early failures and to increase the reliability of your products. Reproducible, certified and under accelerated conditions.

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.

Perfection in performance, equipment and design.

Temperature Shock Test Chambers ShockEvent.

Precisely engineered.

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 your needs 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 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:

- New, environmentally friendly refrigerant R449A
- WEBSeason® web-based user interface

More equipment, right from the start.

Basic equipment setting standards.

Interior



- **Testing without defrosting**
The integrated volume compensation system prevents icing in the cold chamber and makes a compressed air dryer unnecessary. Endurance tests with over 1,000 cycles can be run without defrosting.
- **Freedom for your specimen**
To prevent the test specimen from being caught between the lifting basket and the container wall, the movable basket is secured on all sides by removable mesh panels.

Exterior



- **Move safely into the future - using the new refrigerant**
The new refrigerant R449A is used in all Temperature Shock Test Chambers ShockEvent. The GWP value of just 1,397 ensures safe usage even after 2030 and the refrigerant does not have to be replaced. As a result, we are already surpassing the future statutory standards today therefore future-proofing your tests, making the equipment easier to maintain and more environmentally friendly.

Communication



- **Networking that matches**
Test and diagnostics information are sent to the PC via Ethernet interface or can be saved on a USB stick via the USB interface. Monitoring and checking are possible from any workplace computer.

Regulation & Control



- **Into the age of connectivity - with WEBSeason®**
You can use the innovative user interface **WEBSeason** to program, control and monitor your tests at any time and anywhere, even from your tablet or smartphone. Language and units can be set to suit the user and the settings can be saved. In this way, **WEBSeason** provides a new dimension of flexibility and efficiency.



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

Our innovative Test Chambers are available as **weisstechnik** or **vötschtechnik**.



Thanks to **greenmode®**, which comes as standard, **ShockEvent** is the most energy-efficient device in its class.

Tailor-made testing.

Optional equipment for individual solutions.



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Interior



- **Hotter? No problem**
If necessary, the standard temperature range of +220 can be extended to +250 °C.
- **Get involved**
A port with 125 mm diameter can be installed for introducing connections or additional devices into the movable basket.
- **Optimal stress for your specimen**
The variable transfer time of the movable basket between the hot and cold chamber makes it easy to determine the optimal stress condition for the test specimen, which is particularly useful for screening applications.

Regulation & Control



- **Set standards in communication**
With our software SIMPATI®, operating, documenting and archiving your test sequences is very easy.

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

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

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



Convincing technology. Reliable results.

The performance data at a glance.

Type		ShockEvent 60	ShockEvent 120	ShockEvent 120 P	ShockEvent 300	ShockEvent 300 P
Test space volumes	l	60	120	120	300	300
Maximum load in movable basket	kg	20	50	50	100	100
Test space dimensions, HxWxD, approx.	mm	370x380x430	410x470x650	410x470x650	610x770x650	610x770x650
Temperature range in hot chamber	°C	+50 bis +220	+50 bis +220	+50 bis +220	+50 bis +220	+50 bis +220
Temperature range in cold chamber	°C	-80 bis +70	-80 bis +70	-80 bis +70	-80 bis +70	-80 bis +70
Heating rate in hot chamber ¹	K/min	17.0	14.0	18.0	11.0	23.0
Cooling rate in cold chamber ¹	K/min	3.7	6.3	7.5	5.0	12.0
Heating rate in cold chamber, single chamber operation ¹	K/min	3.2	2.0	2.0	1.5	1.5
Temperature deviation in time ²	K	±0.3 bis ±1.0	±0.3 bis ±1.0	±0.3 bis ±1.0	±0.3 bis ±1.0	±0.3 bis ±1.0
Temperature homogeneity in space ³	K	±0.5 bis ±2.0	±0.5 bis ±2.0	±1.0 bis ±2.0	±0.5 bis ±2.0	±1.0 bis ±2.0
Changeover time between hot/cold chamber	sec	< 10	< 10	< 10	< 10	< 10
Adaptation time - temperature change tests	min	< 15 ⁴	< 15 ⁵	< 12 ⁶	< 15 ⁷	< 15 ⁸
Calibration value in hot chamber ⁹	°C	+125	+125	+125	+125	+125
Calibration value in cold chamber ⁹	°C	-40	-40	-40	-40	-40

¹As per IEC 60068-3-5. By selecting increased/decreased temperatures in the hot/cold chamber, the temperature change rate can be increased.

²In centre of effective space.

³Based on the set setpoint; in the temperature range from -65 °C to +200 °C.

⁴MIL-STD-883 E, method 1010.9, severity level D with 4.5 kg ICs distributed over 2 inlay shelves, measurements in the specimen.

⁵MIL-STD-883 J, method 1010.9, severity level D with 12 kg ICs distributed over 3 inlay shelves, measurements in the specimen.

⁶MIL-STD-883 F, method 1010.9, severity level D with 20 kg ICs distributed over 3 inlay shelves, measurements in the specimen.

⁷MIL-STD-883 J, method 1010.9, severity level F with 25 kg ICs distributed over 3 inlay shelves, measurements in the specimen.

⁸MIL-STD-883 F, method 1010.9, severity level F with 50 kg ICs distributed over 3 inlay shelves, measurements in the specimen.

⁹Factory calibration.

All stated performance data are based on +25 °C ambient temperature, 400 V/50 Hz rated voltage, without specimens, without additional equipment and heat compensation.

The product needs fluorinated gases for functioning.

Depending on the type, it contains refrigerants R449A and R23.

We reserve the right to make any technical changes without prior notice.

Become more efficient!

You save time and money with our solutions.

Get the most out of your test facility.



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

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!

24/7-Service-Helpline:
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Our services - lots of good reasons:

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

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Passionately innovative.

We work in partnership to support companies in research, development, production and quality assurance.
With 22 companies in 15 countries at 40 locations.

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Test it. Heat it. Cool it.



Environmental Simulation

The first choice for engineers and researchers for innovative, safe environmental simulation facilities. In fast motion, our test systems can simulate all the influences in the world as well as for instance in space. In temperature, climate, corrosion, dust or combined stress tests. With a very high degree of reproducibility and precision.



Heat Technology

Experienced engineers and designers develop, plan and produce high-quality, reliable heat technology systems for a broad range of applications from heating and drying cabinets to microwave systems and industrial furnaces.



Climate Technology, Air Dehumidification, Clean Rooms

As the leading provider of clean rooms, climate technology and air dehumidification, we consistently ensure optimal climatic conditions for people and machines. For industrial production processes, in hospitals, mobile operation tents or in the field of information and telecommunications technology. From project planning to implementation.



Clean Air and Containment Systems

With decades of experience and know-how, we guarantee the most sophisticated clean air and containment solutions. Our comprehensive and innovative range of products includes barrier systems, laminar flow systems, safety workbenches, isolators and airlocks.

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