



# Corrosion Alternating/Recirculating Air Test Chambers SC • SC/KWT • SC/UKWT



Stand the test of time.



# Test whatever you like.

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



## Corrosion firmly under control.

High humidity, salty air, seawater, and gritting salt - many small and large things in daily life are exposed to corrosive atmospheres. Corrosion does not just affect base metals, but also high-alloys, tempered materials, plastics, and painted surfaces. That's why corrosion resistance is an important quality indicator and safety feature for many products. With the **weisstechnik**<sup>®</sup> Corrosion Alternating Test Chambers SC & SC/KWT, you can simulate the effect of salt spray, condensation and standard climates - individually, combined and automatically. 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.

## Corrosion Alternating Test Chambers.

### 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. No installation necessary. 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 shorten downtimes and optimize maintenance periods.



### Reliable measurement results are possible thanks to:

- Optimal spray mist distribution due to a precision two-component nozzle
- Extremely stable temperatures due to a double-shell construction with internal insulation and heated compressed air humidifier with water level control
- Adjustable flow meter and doser for solution
- Test space and hood construction in accordance with all standards: any droplets created by the spray cannot drip on the samples tested.

# More equipment, right from the start.

## Basic equipment setting standards.

### Exterior



- **Everything is sealed**

The hood and test chamber are hydrostatically sealed using a U-shaped profile. The resulting groove is automatically filled with demineralized water and prevents salt spray from getting into the laboratory - safely and permanently.

### Interior



- **Stay flexible**

The brine solution required for the tests is stored in a removable, portable brine tank. This tank is easy to clean and can be fully disconnected without using any tools if required.

- **Test more (SC)**

The specimen can be distributed on the support beams or the floor grid. Beams can be placed at 2 different heights, the pipes can be arranged in a given pattern. This maintains flexibility while testing different samples.

- **Always ready to use (SC/KWT)**

The corrosive atmosphere can be removed from the test space using a ventilation device so that cyclic corrosion tests in accordance with VDA 621-415 can be carried out without optional equipment. The installation room does not require additional air-conditioning for this purpose.

- **Fully automatic (SC/KWT)**

A solenoid valve feeds demineralized water into the compressed air humidifier and fills the test space for the humidity test matching the requirements given in DIN EN ISO 6270-2. Draining water from the test space is also done automatically.

### 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.



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

# Tailor-made testing.

Standard and optional equipment for individual solutions.



Reliable control as a standard:  
Digital measurement and control system for  
operating and monitoring the test chamber.

WEB Season®

## Exterior



- **Fresh air (SC)**  
Using a ventilation system complying with DIN 50014-5, the corrosive test chamber air can be removed from the test chamber.
- **Optimal air conditioning (SC/KWT)**  
With the air conditioning expansion of up to 40 °C/93 % RH, the basic model can be used for tests in accordance with DIN 60068-2-52, severity level 1-6. The humidity in the test space can then be measured and regulated; temperature monitoring is also adapted.

## Interior



- **Precise measurements**  
You can measure the corrosive precipitation rate automatically at up to 8 points in the test space. The mean value of the precipitation rate is displayed and updated throughout the test.
- **Safe dosages**  
The unit can also be equipped for tests in an alternating climate with an atmosphere containing SO<sub>2</sub> in accordance with DIN 50018 using an automatic gas dosing device. The additional lock prevents an accidental opening while the test is running.

## Regulation & Control



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

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

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



# Convincing technology. Reliable results.

## The performance data at a glance:

Type			SC & SC/KWT 500	SC & SC/KWT 1000
<b>Test space volume</b>		liters/cu ft	504/17.6	1028/35.3
<b>Test space dimensions</b>	height with hood	mm/inches	1140/45	1140/45
	height without hood	mm/inches	700/27	700/27
	width	mm/inches	875/34	1675/66
	width with spray duct	mm/inches	765/30	1575/62
	depth	mm/inches	645/25	645/25
<b>Exterior housing dimensions</b>	height	mm/inches	1370/54	1370/54
	width	mm/inches	2100/82	2930/115
	depth	mm/inches	970/38	970/38
<b>Temperature range</b>	Salt spray test		5 °C above ambient temperature up to +50 °C	
	Condensed water test		5 °C above ambient temperature up to +42 °C	
<b>Temperature stability in time<sup>1</sup></b>		°C	±1	±1
<b>Water consumption</b>	Salt spray test	liters/hour	0.4	0.4
	Condensed water test	liters	18	34
<b>Consumption of brine</b>	Salt spray test	liters/hour	0.4	0.9
<b>Air throughput<sup>2</sup></b>	Salt spray test	m <sup>3</sup> /h	1.4	1.4
	Standard climates	m <sup>3</sup> /h	7.0	7.0
<b>Calibration values<sup>3</sup> for test space temperature</b>	Salt spray test	°C/°F	+35/+95	+35/+95
	Condensed water test	°C/°F	+40/+104	+40/+104
<b>Calibration value<sup>3</sup> for pressure humidifier temperature</b>		°C/°F	+49/+120	+49/+120

<sup>1</sup>The evidence of temperature stability takes place at ambient temperature of +23 °C ±2 °C in the middle of the test space with empty chamber and in a steady state, without specimen, heat radiation and optional equipment.

<sup>2</sup>At 0 °C and 1 bar.

<sup>3</sup>Factory calibration.

The performance data refer to +23 °C ±2 °C ambient temperature, 230 V/50 Hz nominal voltage, without specimen and optional equipment. The permitted ambient temperature is between +18 °C and +30 °C. The max. permitted humidity must not exceed 75 % RH.

We reserve the right to make any technical changes.



Type		SaltEvent SC/UKWT 1000	
<b>Test space volume</b>		<b>l</b>	1028
<b>Test space dimensions<sup>1</sup></b>	Height with hood	<b>mm</b>	1140
	Height without hood	<b>mm</b>	720
	Width	<b>mm</b>	1670
	Width with spray duct	<b>mm</b>	1560
	Depth	<b>mm</b>	645
<b>Exterior housing dimensions incl. air conditioning unit<sup>1,2</sup></b>	Height	<b>mm</b>	1370
	Width	<b>mm</b>	2925
	Depth	<b>mm</b>	1880
<b>Temperature range</b>	Salt spray test Condensed water test Climate operation Drying/ventilation		5 K above ambient temperature up to +50 °C 5 K above ambient temperature up to +42 °C +23 up to +70 °C 5 K above ambient temperature up to +70 °C
<b>Dewpoint range</b>	Climate operation	<b>°C</b>	+12 bis +69
<b>Temperature stability<sup>3</sup> in time</b>	Salt spray test	<b>K</b>	±1.0
	Condensed water test	<b>K</b>	≤ ±2.0
<b>Humidity range</b>	Climate operation	<b>% r.F.</b>	20.0-98.0
	Drying/ventilation	<b>% r.F.</b>	≤ 30.0
<b>Humidity deviation in time</b>	Climate operation	<b>% r.F.</b>	≤ ±5.0
<b>Water consumption</b>	Salt spray test <sup>3</sup>	<b>l/h</b>	0.4
	Condensed water test	<b>l</b>	34.0
<b>Consumption of brine</b>	Salt spray test	<b>l/h</b>	0.9
<b>Air throughput<sup>4</sup></b>	Salt spray test	<b>m³/h</b>	2.0
	Ventilation	<b>m³/h</b>	15.0
<b>Calibration values<sup>5</sup> for test space temperature</b>	Salt spray test	<b>°C</b>	+35
	Condensed water test	<b>°C</b>	+40
<b>Calibration values<sup>5</sup></b>	Climate operation	<b>°C/% r.F.</b>	23/50 and 50/95
<b>Calibration value<sup>5</sup> for pressure humidifier temperature</b>	Salt spray test	<b>°C</b>	+49

<sup>1</sup>Production-related tolerances of up to ±10 mm are possible.

<sup>2</sup>Exterior housing dimensions when divided: System (H x W x D/mm) 1370 x 2925 x 980, air conditioning unit (H x W x D/mm) 910 x 2120 x 900.

<sup>3</sup>The evidence of temperature stability takes place at ambient temperature of +23 °C ±2 K in the middle of the test space when this is empty and in a steady state, without specimen, heat radiation and optional equipment.

<sup>4</sup>At 0 °C and 1 bar.

<sup>5</sup>Factory calibration.

The performance data refer to +23 °C ±2 K ambient temperature, 230 V/50 Hz nominal voltage, without specimen and without optional equipment. The permitted ambient temperature is between +18 and +30 °C. The max. permitted humidity must not exceed 75% RH.

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

# 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
- Training programs for our customers
- Certified proper disposal of outdated devices

You can always find a **weiss**technik® expert near you.

24/7 Service Helpline:  
1-800-361-6731



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 customized, 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 sterilizers, microwave systems, and industrial ovens. The portfolio reaches from technologically sophisticated standard versions to customized solutions for individual production operations.

Another 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.

## Stand the test of time.

### Weiss Technik North America, Inc.

Global Partner for Environmental Test Chambers  
3881 N. Greenbrooke Dr. SE  
Grand Rapids, MI 49512 USA  
(616) 554-5020  
Fax: (616) 554-5021  
www.weiss-na.com  
24/7 Service Support Helpline: 1-800-361-6731



Weiss Technik  
North America  
Calibration Services are  
accredited by A2LA to  
ISO/IEC 17025



Weiss Technik  
North America  
Quality System  
is registered to  
ISO9001:2008

