

# 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-alloyed, tempered materials, plastics, and painted surfaces. That's why corrosion resistance is an important quality indicator and safety feature for many products. With the **weiss**technik Corrosion Alternating Test Chambers SaltEvent 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 SaltEvent SC/KWT.

### 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 additionally shorten downtimes and optimise 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.





The Fraunhofer Institute for Chemical Technology ICT has carried out a qualification examination of the corrosion salt spray chamber. Test Report No.: US 07916/2016 confirms compliance with the normative requirements.

#### Better than the norm!

The structural design of the device enabled an up to 60% better temperature distribution to be achieved than that required by DIN EN ISO 9227.

The highly precise temperature and spray distribution allowed a very homogeneous test climate to be generated, whereby deviations in the corrosivity measurements amounted to no more than 12% of the normative requirements (±20 g/m<sup>2</sup>), distributed over 6 reference sheets in the test space.

# 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 demineralised 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.

#### · Always ready to use

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

A solenoid valve feeds demineralised 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 WEB $Season^{\circledR}$

WEB Season®

You can use the innovative user interface **WEB**Season 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, **WEB**Season provides a new dimension of flexibility and efficiency.

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



Reliable control as a standard:

Digital measurement and control system for operating and monitoring the test chamber.



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# Tailor-made testing.

Optional equipment for individual solutions.



# **Exterior**



# · Optimal air conditioning

With the air conditioning expansion of up to 40  $^{\circ}$ 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  $SO_2$  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 software **S!M**PATI®, operating, documenting and archiving your test sequences is as easy as child´s play.

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.



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# Convincing technology. Reliable results.

# The performance data at a glance:

Туре			SaltEvent SC/KWT 500	SaltEvent SC/KWT 1000
Test space volume		I	504	1028
Test space dimensions <sup>1</sup>	Height with hood	mm	1140	1140
	Height without hood	mm	720	720
	Width	mm	875	1670
	Width with spray duct	mm	765	1560
	Depth	mm	645	645
Exterior housing dimensions <sup>1</sup>	Height	mm	1370	1370
	Width	mm	2100	2925
	Depth	mm	980	980
Temperature range Salt spray test			5 K above ambient temperature up to +50 °C	
	Condensed water test		5 K above ambient temperature up to +42 °C	
Temperature stability <sup>2</sup> in time		К	±1.0	±1.0
Water consumption	Salt spray test	l/h	0.4	0.4
	Condensed water test	ı	18.0	34.0
Consumption of brine	Salt spray test	l/h	0.4	0.9
Air throughput <sup>3</sup>	Salt spray test	m³/h	1.4	1.4
	Standard climates	m³/h	7.0	7.0
Calibration values⁴ for test	Salt spray test	°C	+35	+35
space temperature	Condensed water test	°C	+40	+40
Calibration value⁴ for pressure humidifier temperature		°C	+49	+49

 $<sup>^1</sup>$ Production-related tolerances of up to  $\pm 10$  mm are possible.

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 software package S!MPATI®.

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:



24/7 Service Helpline:

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

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

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<sup>&</sup>lt;sup>2</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>3</sup>At 0 °C and 1 bar.

<sup>4</sup>Factory calibration.

The performance data refer to +23 °C ±2 K ambient temperature, 230 V/50 Hz nominal voltage,

# 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.

weisstechnik
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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