#### vötschtechnik®

#### 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.

Vötsch Industrietechnik, a subsidiary of 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 also 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.

#### Vötsch Industrietechnik GmbH

Heat Technology Greizer Straße 41-49 35447 Reiskirchen/Germany Phone +49 6408 84-73 info-wt@v-it.com www.heatevent.de





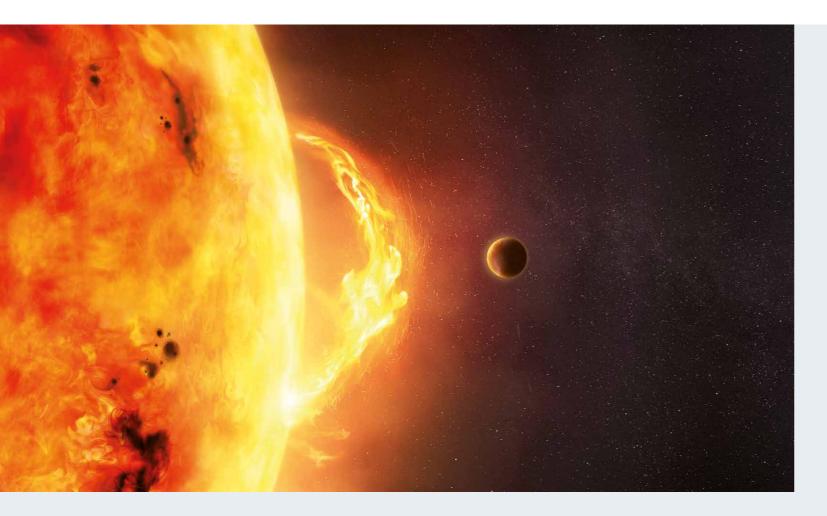


WT-HeatEvent-01.1E/PP 1.0/10 2016



## You can count on it!

Whether lightweight CFK components or optical lenses - you want to manufacture reliable high-quality products on the shop floor. We provide you support to do so.



#### Heat for your products

Reproducible results plus the product quality connected to it, minimum space requirements, short processing times and a high level of productivity are the requirements in all industrial production areas. Your components and materials can be reliably, quickly and energy-efficiently heat-treated at temperatures of up to 400 °C with the Heating and Drying Cabinets HeatEvent from **vötsch**technik®. In this way, you can manufacture excellent products 24/7.

### Competence for each process

No matter how you want to use it - we have the right oven. Thanks to the high flexibility in standard and special zones, we are able to meet your exact requirements so you can receive customised solutions in virtually all areas. Whether electric, gas or oil, heat transfer media, infra-red radiation or microwaves - from the different types of heating we offer the best solution for your particular process.

## Often copied, never matched.

Heating and Drying Cabinets HeatEvent from vötschtechnik®.

#### Completely thought through

For over 100 years, we have considered your needs and we know what is important for you in your processes: reliable and reproducible production results in the shortest time. Therefore, we design our ovens to meet these needs. Thanks to the high-performance, even temperature control in the working chamber, your products are subjected to the same conditions whatever their shape and properties. High heat output, good air exchange and short recovery times after the door has been opened ensure short processing times.

#### Perfectly manufactured

Currently, more than 20000 of our Heating and Drying Cabinets are in use. This success is primarily attributed to quality and quality is our greatest principle. In order to ensure reliable and trouble-free operation, we draw on modern production methods and only use high-quality material and components. In this way, the quality remains consistently at a high level without any ifs and buts.

### Absolutely low maintenance

Our ovens are very easy to operate and easy to service. The intelligent and coordinated control elements alongside the intuitive user interface ensure easy operation. Easily accessible components guarantee short service times. A fault diagnosis and inspection system, installed as standard, additionally optimises maintenance and repair times.





#### Overview of customer benefits:

- Smallest footprint with the largest effective space
- Low energy consumption thanks to IE3 motors, optimised heat output, insulation and reliable door sealing designs
- World's largest range of options and accessories in addition to comprehensive basic equipment

 $\mathbf{2}$ 

## More equipment, right from the start.

Basic equipment setting standards.

#### **Exterior**



#### Easy access

You have full access to the effective space when the door is opened at an angle of just 90°. Combined with a front access switch box, it has the smallest space requirement in its class. Therefore, you have more free space without reducing the furnace capacity.

#### • A device that grows with your requirements

The innovative housing construction and the flexible configurability of the control system allows the easy subsequent addition of further components during the production phase or after delivery. If your processes change, we simply adjust your device.

### **Regulation & Control**



#### Intelligence included

The S!MPAC® control system, which is included as standard, allows the creation of complex temperature programs and the automation of your processes - also in accordance with AMS 2750E or CQI-9.

#### • Become independent

The innovative WebSeason® user interface allows you to also monitor your processes using a smartphone or tablet when you are out and about. Thanks to the individual allocation of user rights, several users can access the device at the same time.

#### Safety



### • Don't miss out on anything

In addition to the target temperature setting, the individually adjustable test material protection system ensures process safety. Digital and analogue inputs and outputs allow for comprehensive sensor technology and the control of numerous actuators – all without a complex bus system. Thanks to a potential-free contact, even the smallest interference is discovered and communicated to the higher-level monitoring system.

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 Heating and Drying Cabinets oven and for documenting the process parameters.



4

## Tailor-made testing.

Optional equipment for individual solutions.



#### Interior



#### • Some like it really hot

If required, the standard temperature range can be increased from 220°C up to 400°C.

#### • When speed is the key

The drying process can be additionally accelerated by an increased air exchange rate. Faster cooling can also be achieved in this way.

#### Bespoke feeding

Even temperature control without adhesion is achieved for bulk material by using a rotary drum. Whether push loading drawers, grates, insertions or loading trolleys - we have a suitable solution for every application.

## **Regulation & Control**



#### • Set standards in communication

The SIMPATI® software allows for easy operation, documentation and archiving of your batch records.

#### • 100% traceability

The optional module S!MPATI® Barcode Scan is an ideal addition for batch registration and stock management. The process data is simply scanned and in this way it allows batch numbers and product IDs to be entered almost without any errors and process workflows to be automatically allocated to the individual products.

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

Developed exclusively for you:

The unique software package for the perfect batch record.



## Play it safe.

Dryers and Ovens, in which flammable substances are released.

In the case of processes such as drying surface coatings, sizing varnish and impregnating resins the released substances (e.g. solvents) could mix with air to form an explosive mixture. If an ignition source is also present, there may be an explosion. The Dryers and Ovens HeatEvent F from **vötsch**technik® meet the advanced safety requirements of EN 1539 and allow the drying and heat treatment processes to be safely controlled by limiting the amount of solvents.

#### **Exterior**



#### · Optimal ventilation

So that no explosive solvent-air mixtures are formed in the effective space, a defined amount of hot air is constantly conducted away by an exhaust air fan and is replaced with fresh air.

#### Everything sealed

In order to prevent flammable materials from penetrating and mixing in the heat insulation, all points where the construction elements meet in the interior space are welded to create a seal.

#### • Turn down and relax

The outward airflow can be reduced by 25 % after the end of the main evaporation phase. This allows for enormous energy and CO<sub>2</sub> savings - and, as a result, cash savings!

### Safety



#### Total monitoring

Observing the EN 1539 standard is no joke for us. We do not leave anything to chance and monitor absolutely everything - from the circulation and exhaust airflows to the maximum temperature and the minimum drying temperature profile. The safety-related parts of the control system meet the performance level d to optimally minimise risks.

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

Safe control of the drying and heat treatment processes using tailor-made special equipment.



#### Ask the experts:

The permitted amount of flammable material is heavily dependent on the intended purpose. Contact us and we will design an ideal safety concept for you.

8

# Convincing technology. Reliable results.

## The performance data at a glance:

Heating and Drying Cabinets HeatEvent								
Туре		HeatEvent 60/60	HeatEvent 60/90	HeatEvent 75/125	HeatEvent 100/150	HeatEvent 125/200	HeatEvent 150/200	HeatEvent 200/200
Working chamber volume	m³	0.216	0.324	0.7	1.5	3.125	4.5	8
Working chamber dimensions, WxDxH	mm	600 x 600 x 600	600 x 600 x 900	750x 750x1250	1000x 1000x1500	1250 x 1250 x 2000	1500x 1500x2000	2000 x 2000 x 2000
External dimensions, WxDxH	mm	1000 x 850 x 1595	1000x 850x1895	1710x 1190x2150	1960x 1440x2400	2210x 1690x2900	2460x 1940x2900	2960 x 2440 x 2900
Footprint, WxD	mm	1000×850	1000x850	1710×1190	1960x1440	2210×1690	2460x1940	2960x2440
Rated temperature	°C	220/ 300/350	220/ 300/350	220/300/ 350/400	220/300/ 350/400	220/300/ 350/400	220/300/ 350/400	220/300/ 350/400
Temperature distribution, spatial at 220°C (recirculating air mode)	K	±2	±2.5	±2	±2	±2	±3	±3
Temperature distribution, spatial at 300°C (recirculating air mode)	К	±2.5	±3.5	±4.5	±2.5	±2	±4	±4
Time to heat to 220°C	min	18	22	18	18	23	35	35
Recovery time to 220°C after 30 sec	min	2.5	2.5	2.5	2.5	3	3.5	3.5
Heat output (220°C)	kW	7.2/14.4	14.4	9/18	13.2/26.4/ 39.6	26.4/39.6/ 52.8	39.6/52.8/ 66	52.8/79.2
Recirculating air volume flow	m³/h	1200	1200	2400	3400	5400	6000	6000
Exhaust air volume flow	m³/h	30	30	60	60	60	60	60
Hordes	max.	8	10	12	15	20	na	na
Approximate weight	kg	295	330	550	820	1150	1400	1770
Rated voltage	V AC	400 3/PE	400 3/PE	400 3/PE	400 3/PE	400 3/PE	400 3/PE	400 3/PE
Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Protection class		IP54	IP54	IP54	IP54	IP54	IP54	IP54
Additional features for Dryers and Ovens HeatEvent F								
Solvent quantity at 220°C	g	11.5	15.6	31	51	79.3	93.4	126.4
Solvent quantity at 300°C	g	5.9	8	16.2	27	42.8	51.2	71.2
Exhaust air volume flow in solvent production	m³/h	102	138	240	360	480	480	480
Vapour chamber volume	m³	0.369	0.502	1.285	2.447	4.615	6.431	10.957

## Become more efficient.

You'll save time and money with our solutions.

#### Get the most out of your test facility.



Create your own perfect testing process with the S!MPATI® software simulation package.

Process management/documentation/networking

- Up to 99 systems can be networked
- Programmes for automatic processes
- Documenting, visualising and managing process data
- Traceability of process data for seamless quality control



### We measure ourselves by our service!

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

Our services - plenty 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 **weiss**technik® expert near you.

10