

Air Dehumidifying Systems



Keep your processes dry!

Sometimes the industrial environment just has to be "extra dry". And this is where we can support you!



Powerful. Independent. Safe.

Be it in the automotive, food or pharmaceutical industries, air dehumidifying systems on the basis of adsorption rotors ensure perfect climatic ambient conditions. Individually planned and perfectly tailored to your process, the adsorption/dehumidification process can be combined with conventional pre and post conditioning, which also makes fully independent air-conditioning units possible.

Individual. Innovative. Experienced.

We have now integrated our extremely specialised technical expertise at the **weiss**technik site at ATS Hamburg for your benefit. In doing so, we are expanding the comprehensive portfolio to include the field of industrial air dehumidification for highly sensitive production processes as well as for conveyance, storage and packaging of bulk materials. Whatever the sector or the application, we can develop the optimum solution for you.

Perfection in performance, equipment and design.

Air Dehumidifying Systems.

Precisely engineered.

We know what matters for your tests: reliable, precise and reproducible results. That's why we design our facilities 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.





Our highlights:

- Compact design
- Independently working system
- Individual solutions thanks to optimum adaptation to our customers' requirements

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More equipment right from the start.

Basic equipment setting standards.

Exterior



· Compact design

All **weiss**technik Air Dehumidifying Systems are custom designed as compact individual systems. Single components and functional elements combined on a standard base frame allow the targeted definition of the process control in an independently working system.

Regulation & Control



• Reliable control in series

Based on your requirements, our Air Dehumidifying Systems are independently controlled in the process control and monitoring by **S!M**PAC®, the digital measuring and control system. The process and sensor data is transferred via a data bus to higher level controlling units or control centres.

Interieur



· Art of engineering for better performance

Each system is constructed on the basis of our comprehensive expertise in the engineering of ventilation systems. The ongoing performance optimisation regarding the selection of standard and special components ensures e.g. the future-proof improvement in energy efficiency.

Process optimisation

The integration of each **weiss**technik Air Dehumidifying System is tested for possible optimisation throughout the whole process in close coordination with our customers. In this way, optimisation potential can be reliably identified and, if needed, implemented.



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

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Tailor-made for you.

Optional equipment for individual solutions.



Exterior



Individual design

Our Air Dehumidifying Systems are individually designed and planned as special systems for industrial air de-humidification according to your needs. In doing so, the design is adapted to the spatial conditions. Design or choice of housing and functional elements is tailored to the specific requirements of the pharmaceutical, chemical, food and automotive industries.

Interior



• Targeted air-conditioning

With the integration of technical process measures for the pre and post conditioning of the supply air flow, our Air Dehumidifying System can be designed and implemented as complete air-conditioning unit.

• Cost-effective with series components

Also in the construction of specialist systems we prefer to use series-produced functional components such as fans and sensors. That way you can economically plan the cost and time for project planning, servicing and maintenance.

Regulation & control



Desired networking

If requested, the controlling and monitoring of the process can also be controlled, e.g., by a Siemens system.

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Dehumidification as central element.

Dry air in the technical building equipment protects products, research and processes.

Air-conditioning is an important component in building equipment. Dry air prevents corrosion, mould growth and also the clumping of powders and bulk materials. Combined air dehumidification, air purification and air-conditioning systems ensure ambient conditions that are independent of the climatic external conditions.

Adsorption dehumidifier for industrial air-conditioning

Durable and efficient adsorption dehumidifiers are the central components of the ventilation and air-conditioning system. An integrated adsorption rotor achieves reproducible and continual air dehumidification. The adsorption dehumidifier guarantees very high dehumidification capacities with an extremely low residual water content of up to 0.001 g/kg air or a dew point of -70 °C.

Depending on the structural conditions, the ventilation and dehumidification system can be positioned either next to the chamber or externally on the roof of the building. The integration of filter units in the airflows ensures the air quality, e.g., as per clean room class ISO 7. The systems can be designed to compensate the humidity load of the workers (approx. 150 g/h per person) and they can be equipped with sluices and special exhaust systems for explosion-proof areas.



System expertise from a full-service provider

Systems for air-conditioning are used among other applications in the pharmaceutical and food industries, in the aviation and automotive sectors and in many fields of the electronics industry. As a leading partner for building and system technology for environmental simulation, weisstechnik is equipped with many years of experience and excellent testimonials in the most varied fields of production, research and development.

Thanks to the targeted integration of expertise in the field of ventilation and air-dehumidifying technology, weisstechnik is currently the only company that offers complete systems of technical building equipment and air-conditioning systems from a single provider. This benefit simplifies planning, optimises implementation, reduces subsequent costs and improves the result.

Convincing technology. Reliable results.

The performance data at a glance.

Individual system construction

- Supply air volume flow: 300 m³/h to 110,000 m³/h
- Supply air dew point: to -70 °C (x = 0.001 g/kg)
- Integrated pre and post conditioning
- Integration of energy efficient functional components
- Compliance with hygiene and pharmaceutical standards as well as specific equipment provisions
- Compliance with specific construction requirements
- External dimensions:

Height: 1100 mm to 4000 mm
Width: 1500 mm to 10000 mm
Depth: 800 mm to 3500 mm
Weight: 450 kg to 7000 kg





We measure ourselves by our service!

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

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



24/7 service helpline: +49 1805 666 556

Passionately innovative.

We work in partnership to support companies in research, development, production and quality assurance. With 21 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.



Heating Technology

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

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