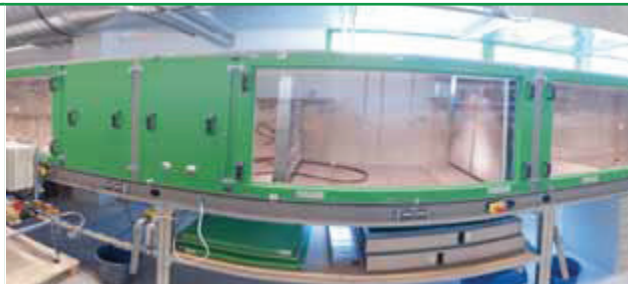
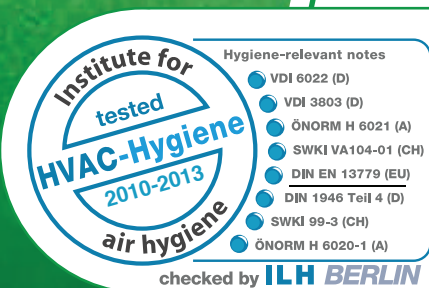


HygroMatik HDS

High Pressure Humidification
and Cooling

- ✓ Adiabatic
- ✓ Energy saving
- ✓ Energy conscious
- ✓ Safe and secure
- ✓ Hygienic
- ✓ Certified

CE



HygroMATIK[®]
WE HUMIDIFY THE AIR

The HygroMatik **HDS** adiabatic humidification system humidifies the air in air conditioning systems. High pressure nozzles produce a very fine mist which is quickly absorbed into the air in the humidification chamber.

This produces hygienic high-efficiency humidification.

✓ Adiabatic

High pressure humidification at approx 75 bar provides the ideal pressure for creating a very fine water mist. Evaporation cools the air adiabatically.

This can save up to 30 percent cooling capacity in summer.

✓ Energy saving

The HygroMatik **HDS** high-pressure system enables high humidification output at a very low energy consumption. The sophisticated design concept ensures most effective utilization of the de-mineralised water through the system's high efficiency and exact controllability. Minimal waste water makes the overall water consumption extremely low.

✓ Energy conscious

Humidification with fully demineralised water effectively avoids calcium deposits and guarantees very low maintenance effort.

The new HygroMatik **HDS** combines low energy consumption at very low maintenance with absolutely no requirement for chemical or biological disinfectants. The **HDS** ensures fast amortisation and long life expectancy by the use of high-grade components throughout.

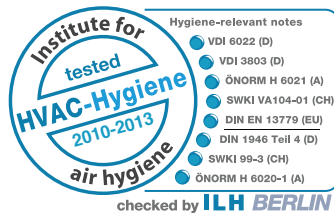
✓ Safe and secure

Highest operational security thanks to the compact design with lockable cabinets as well as constant sensor monitoring.



✓ Hygienic

The HygroMatik HDS Hygiene concept is designed to function without any chemical or biological disinfectants. Only demineralised water is present in the ambient air. The system contains no porous, water absorbing components. Standing water is effectively prevented and the whole system is automatically drained after a system shut-down. The water used for humidification comes into contact only with inert materials and is therefore absolutely hygienic. That means certified hygiene conformity.



✓ Certified

The HygroMatik HDS is certified in accordance with the German VDI 6022, 3803 and DIN 1946, the corresponding Austrian and Swiss standards as well as the European standard DIN EN 13779.

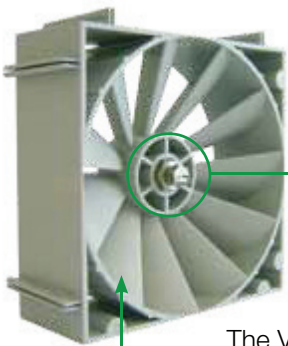
An approved and independent institute tested the HDS according to the state-of-the-art standards and fully verified total conformity (VDE Test Report Ref. No. 802300-3980-0001/85569).

The HygroMatik HDS is certified according to CE and **Hygiene-Conformity** for air conditioning and hospital applications. Hygienic. Tested. Certified. A system to be on the safe side.



The System

The HygroMatik HDS's modular design makes it suitable for all air ducting. It is also suitable for short humidification distances of only 0.9 meters. With exact humidity control of plus/minus 1%. The graphic display shows all messages and operational data and allows a user-friendly menu-driven operation. Constant supervision of all components and functions provide highest operational safety.



The Vortex wall assembled from highly developed Vortex modules mixes air and water mist effectively and over a very short absorption distance.



High-precision stainless steel high-pressure nozzles generate finest water mist.



Easy removable and cleanable, the droplet separator, made from fine high-grade metal mesh, prevents aerosol egress.



Technical Data HDS

Typ		HDS-1100-P	HDS-1100-P with Bypass	HDS-2200-P
Power rating	[kW]	0.94		1.6
Water capacity	[l/h]	46–260	12–180	90–520
Current connection	[A]	4.0		6.7
Voltage connection	[V/ph/Hz]	230/1/50	230/1/50	230/1/50
Control signal*	[V]	0–10	0–10	0–10
Dimensions Vortex modules		150 mm x 150 mm		
Number of nozzles		6–36	2–25	18–104
Absorption distance	[m]	0.9	0.9	0.9
Overall installation length	[m]	1.5	1.5	1.5
Pressure drop in duct – droplet separator, per step		30 Pa at 2.0 m/s velocity		

*others on request

Subject to technical amendments without notice

HygroMatik

Your partner for air humidification.

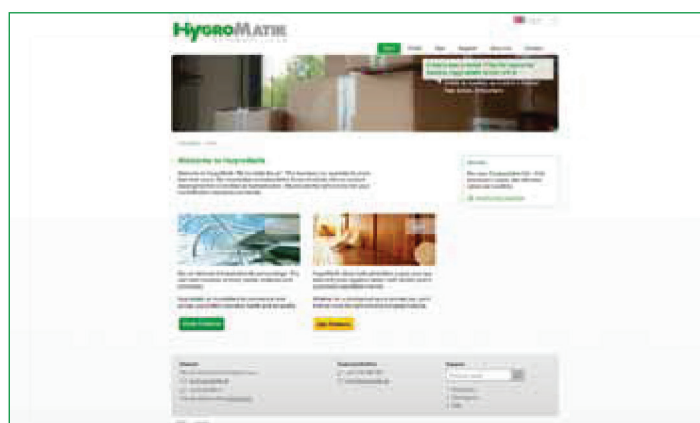
As Germany's largest manufacturer of humidifiers and humidification systems with 40 years of experience, we are the reliable partner for planning, installation and service.

HygroMatik high-pressure systems are the hygienic, energy efficient solution for high humidification outputs for office buildings, hospitals, production halls, laboratories and many other applications.



Please contact us.

Your local HygroMatik specialist will be happy to advise you on site and – with your support – establish the optimum solution for your application. Specialised distributors and trained installation companies worldwide are on hand to cover installation, commissioning and service.



HygroMatik online:

Please have a look at www.hygromatik.com, where manuals, specifications and other useful pdf's are available for download. And of course you will always find the latest product news.

HygroMatik-Hotline:

Please contact our **Technical Hotline** via phone, fax or e-mail. We will be pleased to help with all technical problems.

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