

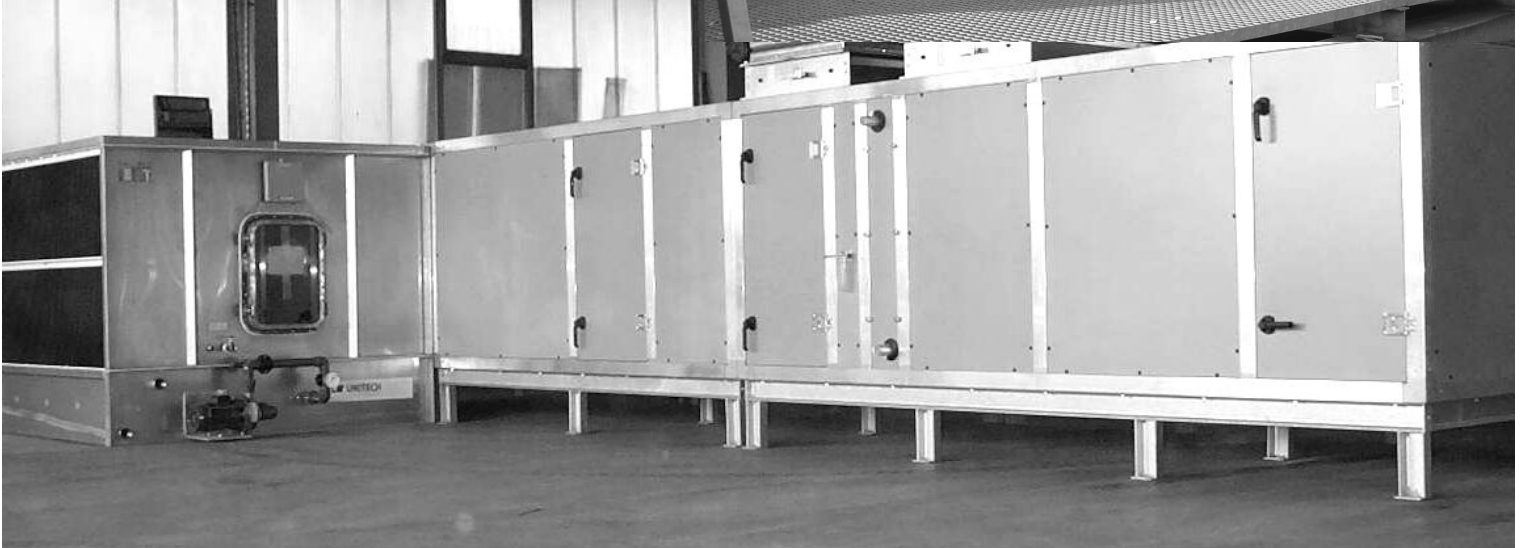
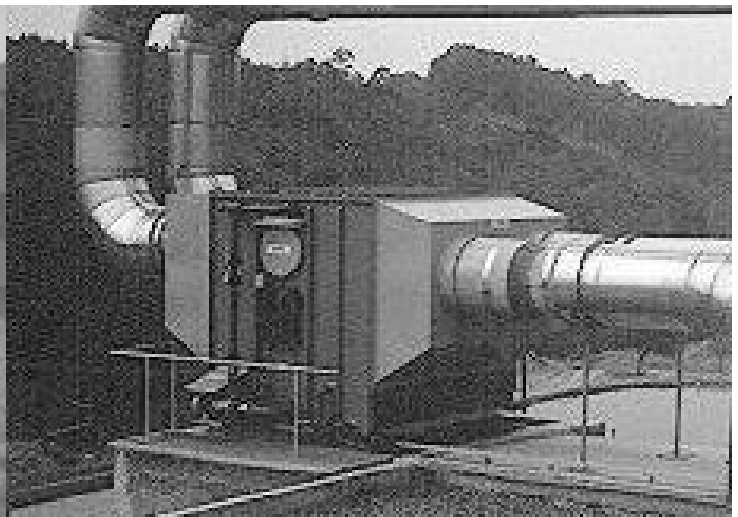


AIRWASHER - AIRHANDLING UNITS - DEHUMIDIFIER



PRODUCTS





UNITECH Kunststoff GmbH was founded in 1978 in the beautiful Hegau area, close to Lake Constance and the Swiss German border.

From the beginning UNITECH has manufactured **humidifiers** made from reinforced fibreglass and stainless steel. Only 2 years later the company started with the construction of **airhandling-units for special applications**.

Since 2004 UNITECH has been designing, constructing and manufacturing **de-humidifying systems & spray nozzle dryers**.

They resemble the construction of the companies' airwashers but are fully made to the customers' specifications.

UNITECHs' international experience ranges from manufacturing for the textile- and power plant-industry as well as clean-room units for the computer- and pharma-industry to air-conditioning of airports, hotels, offices and similar applications.

Our strength is the ability to provide **individually designed solutions** to meet all our customers' requirements.

This catalogue will give you an overview of our products and services. For any air-technical requirements, further questions or assistance please contact us.

UNITECH Kunststoff GmbH

Please visit our homepage: <http://www.unitech-gmbh.com>

UNITECH Humidifier

UNITECH humidifiers are designed to the customers' requirement in the following formats:

**AIRWASHER /
SPRAY-HUMIDIFIERS**

HONEYCOMBFILL-HUMIDIFIERS

HIGHPRESSURE-HUMIDIFIERS

made of longlasting **reinforced fibreglass** (FRP) or stainless steel for use in industrial and comfort air-conditioning systems for various purposes such as:

Humidification

Air-cooling (adiabatic)

Air-cleaning / Filtration

Heating- and Cooling-Washer.



The humidifiers provide **perfect hygienics** and **high reliability in continuous operation.**

An UNITECH humidifier is always a bespoke **item**, designed to specific customers' requirement.

Take advantage of our long term experience.

Please contact us.

Airwasher

Available in the well-proven low pressure design (nozzle pressure up to 2,5 bar).
Different humidification efficiencies of up to 98% can be selected.

Designed for

adiabatic air-conditioning / cooling

or alternatively as

heating- or cooling-washer.



Specialised construction for use in **waste-air treatment systems**, as a **highly efficient washer** in chemical or pharmaceutical industries for the removal or neutralisation of odours and contaminations such as dusts, aerosols and steams.

UNITECH airwashers provide **perfect hygienics** (in accordance to VDI 6022) and can easily be cleaned and maintained thanks to varied constructive attributes.

The airwashers are used in a wide range of applications, such as:

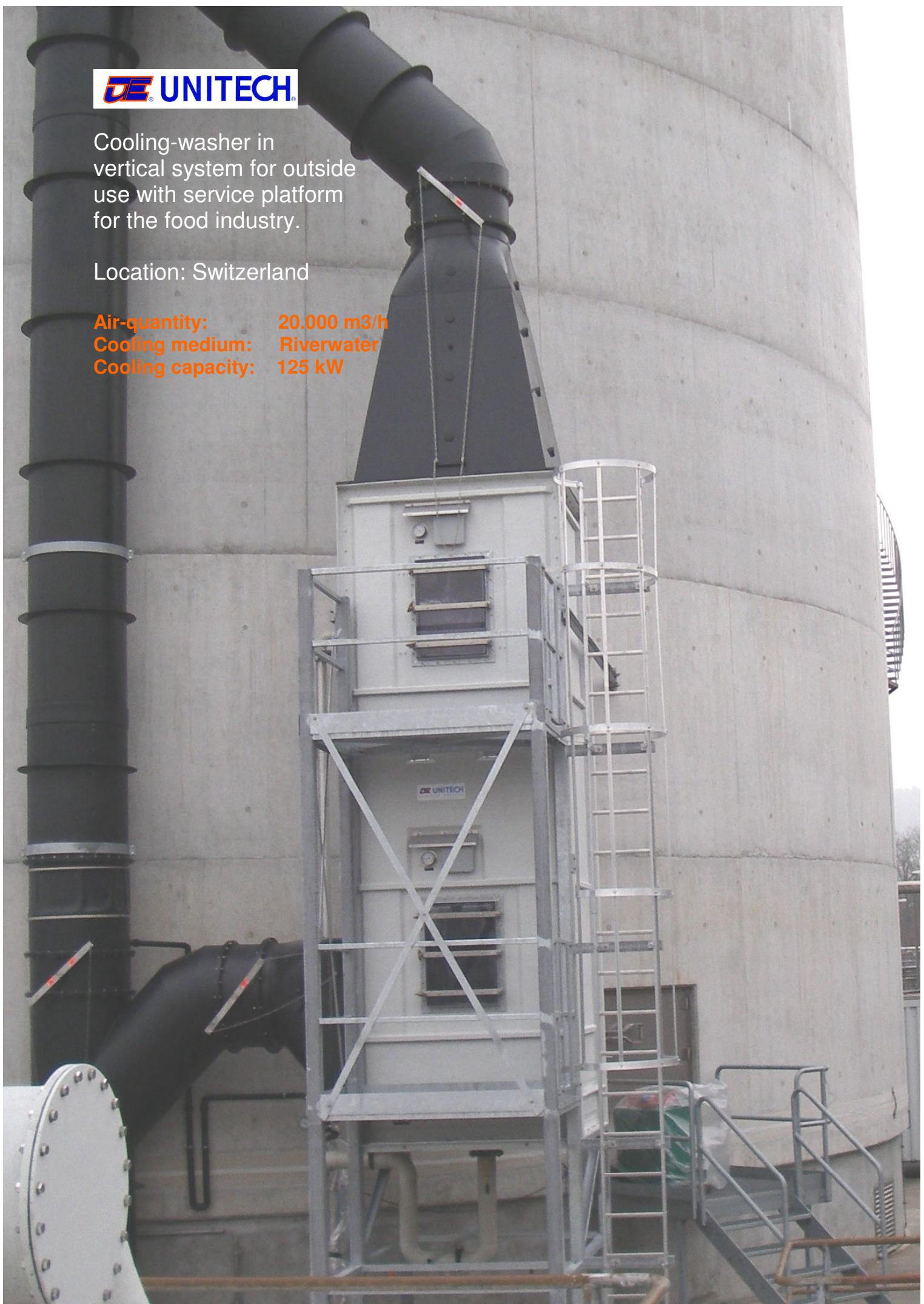
- **biofilter-systems**
 - **the chemical- and food-industry**
 - **galvanising**
 - **painting facilities**
 - **composting plants**
- etc.**



Cooling-washer in vertical system for outside use with service platform for the food industry.

Location: Switzerland

Air-quantity: 20.000 m³/h
Cooling medium: Riverwater
Cooling capacity: 125 kW



The logo for UNITECH Airwasher, featuring the UNITECH brand name in a blue and white box followed by the word 'Airwasher' in orange text.

UNITECH Airwasher

UNITECH airwashers provide the best conditions for an impeccable hygienic operation thanks to its maintenance friendly construction.

With a number of **optional features** such as:

UV-desinfection systems

Automatic bleed-off systems

Biozid metering devices

Silver-Ionisation-dosings

Hygienic controls

is it possible to adapt the airwashers to your special demands and to extend the maintenance intervals.

UNITECH offers you the complete **service** for your airwasher. This includes the renovation/update of existing units to the latest hygienic standard as well as the exchange of single components.

We also offer you a wide range of spare parts and accessories, such as

- **Eliminator profiles** (even as cassettes)
- **Spray nozzles and nozzle trees**
- **Waterproof light fittings**
- **Inspection doors**
- **Filters**

etc.



Honeycombfill-Humidifier

UNITECH honeycombfill-humidifiers are available as **complete** humidification / evaporative **units** with a housing of **reinforced fibreglass** or **stainless steel**.

Honeycombfill-humidifiers work on the **principle of evaporation**. Our fill-pack type **GLASdek** consists of impregnated fibreglass material, is non-organic and non-flammable and provides an outstanding humidity transfer with a low pressure loss.

Humidification efficiencies of up to **90%** can be achieved depending on air velocity through cross-sectional area.

UNITECH honeycombfill-humidifiers feature

very short length of housing
(not more than 1m required)

and

easily removable fillpacks

for ease of maintenance and exchange.

They are well suitable for installations in restricted spaces.

An installation of additional drop eliminators can increase the air velocity to 3,5 m/s.





Highpressure-Humidifier

UNITECH highpressure-humidifiers work with nozzle pressures of up to 80 bar.

The housing is made of longlasting **reinforced fibreglass** or **stainless steel**.

In contrast to airwashers, highpressure-humidifiers work without circulation water.

For operation **distilled water** (demineralised water) is required.

If desired UNITECH is able to supply the corresponding

osmosis system.

Highpressure-humidifiers satisfy the **highest hygienic demands.**

Designed as **adiabatic humidifier** respectively as **air-cooler.**

Humidification efficiencies of up to **90%** can be achieved.

For example our highpressure-humidifiers can be found in the medical and pharmaceutical industries.



UNITECH Airhandling-Units

For over 30 years UNITECH has been offering **individual designed** air handling units to meet our customers' demands. Today our units are operating worldwide. **Take advantage of our longterm experience!**

In order to be able to comply with all technical requirements we offer three different basic systems:

LARGE-SIZE-UNITS
(as large panel construction)

STANDARD-UNITS
(as frame system)

REINFORCED-FIBREGLASS-UNITS



Large-Size-Units

UNITECH large-size units are specially developed for large air quantities.

The construction consists of **galvanized** or **polyester coated 50mm sandwich panels** with **PU-foam filling**.

High stability is achieved by use of corrugated panels. For this large panel system there are **nearly no constructional limitations**.

If desired our large-size units can be delivered completely disassembled and can be assembled on site through **UNITECH**.





Standard-Airhandling-Units

UNITECH standard-units have an aluminium frame construction. On demand, this frame can be also thermically decoupled. We use **doubleskin panels** (25 mm or 50 mm) with **mineral wool insulation** (fireclass A1). On customer request the panels can be made of **stainless steel**, **galvanized**, **powder coated** or **painted**.

The high density of our used mineral wool insulation provides UNITECH air handling-units with outstanding sound and heat insulation.

Even our standard units are **individually designed solutions**. The configuration as well as all measurements will be constructed **to suit individual customer demands** and to ensure highest performance.





Reinforced-Fibreglass-Units

The UNITECH reinforced fibreglass air-handling unit system is particularly interesting for use with extremely aggressive air (e.g. concentrated acid).

The non-metallic material **reinforced fibreglass (FRP)** is resistant against nearly all **acids** and **bases**.

Our units can be designed for inside or outside assembly with a **single-** or **sandwich (insulated) panel**.

Due to its characteristics UNITECH reinforced fibreglass air handling units are often used in the **chemical** or **pharmaceutical industry** as **laboratory** and **chemical** ventilation systems.

Depending on circumstances they provide a **reasonable alternative to a stainless steel unit**.





Dehumidifier-system
with all air technical
components and controls

Location: Germany
Food industry

Air-quantity: 120.000 m³/h





Dehumidifier-System

For production processes that require a clean room environment in which humidity and heat are not desired, the **UNITECH** dehumidifier / dryer system provides the ideal solution.

The air will be dehumidified and cooled through contact with the absorber solution (liquid lithium chlorid lotion) in the spray chamber of the **CONDITIONER**.

The **UNITECH** air drying system works

without the use of **mechanical chillers**

and requires

no fillpacks.

The air unit construction uses **spray nozzles**, therefore you have free access to all parts for cleaning and maintenance.

The solution is re-circulated in the **REGENERATOR** part of the system, where heat drives the absorbed water out of the solution. The secondary airstream transports the water outside.

Lithium-Chlorid (LiCl) solution used for re-circulation is non-toxic and does not vaporize. The solution is stable and acts as a desinfectant by removing bacteria out of the airstream.

We offer **complete systems** with regenerator, energy recovery and controls. We also exchange parts of existing systems.

UNITECH dehumidifiers / dryers are **individual designed solutions** according to your requirements and space conditions.

Contact

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UNITECH®

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