



DANTHERMGROUP

INTRODUCTORY GUIDE
DRYING SOLUTIONS
FOR WATER DAMAGE RESTORATION

DANTHERMGROUP





WATER DAMAGE RESTORATION GUIDE

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1 UNDERSTANDING WATER DAMAGE

Whether it's the result of a broken pipe, a faulty washing machine or seasonal flooding, water damage can potentially be devastating to the structural integrity of a building and the health of its occupants.

Speed is of the essence when it comes to dealing with the aftermath of a water damage event, and in the case of a flood event it is even more critical. Even in the best-case scenarios, water damage that is left untreated in a property can quickly spiral out of control, making it more difficult to treat and sending the costs involved skywards.

That's why the first steps in removing water damage should be taken within the next 24-48 hours to minimise and avoid severe short and long-term effects on the building structure.



COMMON CAUSES OF WATER DAMAGE

Water damage caused by pipe breakage

Water damage through pipe breakage is one of the most frequent causes of damage in households. Possible causes include:

- Age-related corrosion or limescale in pipes
- External mechanical impact
- Defective household equipment
- Frost
- Human errors like forgetting to turn off a tap



Water damage through weather events

If you live far away from rivers, you may think you are safe from flooding. But you may be wrong. In addition to hail, storms and flooding, sudden rains can cause significant water damage. In addition to flooding, strong downpours, defective or missing backflow traps and groundwater which penetrates through cellar walls are the most frequent causes of this type of water damage.



Water damage caused by extinguishing water

Water damage can also be caused using extinguishing water to fight fire in residential and business properties. You may be left with not just cleaning-up operations, but also massive damage caused by damp.



2 THE STAGES OF PROPER WATER DAMAGE HANDLING

For homes and commercial buildings, water damage can be devastating. But with a trained technician and the right dehumidification set-up, it's amazing how well a building can be restored to its original pre-loss condition. While the tools and specific drying methods used should be bespoke to the severity of damage and the type of building affected, successful water damage restoration typically follows three initial stages.

THE STAGES

1. Identify the cause

Before water damage can be repaired, it is imperative that the cause of the damage is known and eliminated at the start of the work in order to avoid consequential damage. If this is not the case, a leak detection is usually carried out first. Using modern moisture measurement equipment can help identify more than 90% of all leaks very quickly.



2. Damage prevention

Once an area has been affected by an escape of water or flooding, it is critical that it is stabilised as quickly as possible. The initial stabilisation phase can start with simple tasks such as safely removing any standing water from the room, removing wet carpets, ensuring that the heating remains turned on and providing good ventilation, such as the opening of windows.

Cables and pipes should be well stowed and wet floors secured to avoid potential hazards such as electric shocks. Furthermore, the water supply should be stopped and the spread of hazardous substances prevented. The room's inventory should be salvaged or elevated if possible.

3. Use the right drying equipment

Particularly in circumstances such as flooding or significant water leaks, a domestic or residential building dehumidifier will typically not be capable of dealing with these volumes of moisture. Furthermore, most household dehumidifiers having a limited internal tank capacity, these would need to be emptied many times over for consistent drying, which is both time-consuming and impractical.

Consequently, it is important that a commercial or professional water damage drying dehumidifier is employed for these tasks. With greater capacity for continuous drying, high-performance for maximum efficiency, and adjustable relative humidity control, these can suitably maintain optimal dehumidification conditions of around 20-30°C and 30-40% RH.

To support the work of your building dehumidifiers in drying out a water-laden location, high-volume fans and heaters as well as air-purification solutions can also be a powerful ally.

3 DRYING TECHNOLOGIES AND METHODS

Condensation drying and air movement – also known as refrigerant drying, this is the most widely-used method for addressing water damage to buildings with plasterboard walls and ceilings, lightweight concrete blocks and wooden framing. A condense unit draws moisture-laden air (humid air) into a dehumidifier and across a refrigerated coil. The air is rapidly cooled below its dew point, condensing the water vapour and recovering its latent heat energy for re-use. The cooled air is then passed across the condenser where it is reheated and returned to the room as warm air at the required lower humidity. It works best in temperatures between 10 and 32°C and delivers excellent energy efficiency down to 40% RH. For colder temperatures, solutions with built-in 1kW heaters and high pressure fans can be used to warm up the damaged areas and speed up the drying process.

Adsorption drying – for especially cold climates and more difficult to dry building materials like hardwoods, dense concrete and insulation, adsorption drying is a top contender. Often referred to as desiccant dehumidification, an adsorption drying unit brings the air to be dehumidified (process air) through a slowly rotating silica gel rotor. The desiccant material attracts the moisture to its surface, removing it from the air stream (dry air). Behind the rotor, the air flow is split: a part of it is discharged as dry air, the other part is used to regenerate the rotor. This (wet) air must then be exhausted to the atmosphere using a duct. Slowly rotating the rotor through both air-streams creates a continuous dehumidification process. This method can achieve relative humidity (RH) levels of 5% and works well in low temperatures from -10 to +10°C, i.e. much lower than refrigerant-based drying systems.



Vacuum/overpressure drying – as building constructions have evolved to become eco-friendlier and more sustainable, the way in which the buildings can be dried following an escape of water has become far more complex. To overcome the challenges presented by multi-layered building constructions that include non-permeable membranes, open/closed cell insulation, and vapour-retardant special coatings, manufacturers have developed positive and negative pressure drying solutions to help guide the process air from a dehumidifier to the hidden wet areas. The Aerial AERCUBE® system provides innovation in the area of positive and negative pressure drying systems, giving technicians a modular system that can be configured in a number of ways to deliver the solution they require for each individual claim.

Heat drying – heat drying is a relatively new concept within the world of water damage restoration despite the common acceptance that heat energy is one of the key driving factors behind an effective drying program. Targeted heat drying plays a crucial role in the process when air temperatures and surface temperatures of materials are low, and contractors do not have access to the properties normal central heating systems to rectify this issue. Additionally, they provide a way of focusing high amounts of energy and air flow directly onto, or within, a construction that is severely affected by water ingress. The ability to deploy controlled levels of heat in a targeted way is a valuable tool for any restorer.



4 | AERCUBE®: COMPLEX DRYING MADE SIMPLE

The innovative and modular AERCUBE® system is designed for fast and efficient drying of insulation layers. The individual components can be combined to match any application.

A SIMPLE SOLUTION FOR COMPLEX DRYING JOBS

The AERCUBE® System is a milestone that responds to the complex and increasing demands of the water damage restoration market. This is reflected in all the details that make using this system easy and efficient.

The units are equipped with calibrated energy meters as standard, providing complete transparency regarding the power consumption of the drying equipment. All units in the new AERCUBE® series can be combined with and stacked on top of each other. The optional adapter plate also allows to stack and combine all the units already in your inventory with the AERCUBE® system. The unit dimensions have been optimised to match pallet dimensions and an optionally available lashing system makes it possible to save storage space and to transport the units safely.

Combined, the various handling options and low weight make it possible for one person to handle transportation. Safety locks provide rapid access to the inside of the units while guaranteeing maximum safety at the same time. The hygienic design means that the units can be easily cleaned and sanitised inside as well as outside.



ADVANTAGES

- Flexible in application
- Easy to use
- Reduced drying time
- Calibrated energy meter
- Extremely robust

FEATURES

- **INTENTIONALLY SEPARATED:** Clear separation of the electronic and mechanical systems to ensure maximum operational reliability.
- **ERGONOMIC HANDLING:** Many different handling options for maximum comfort when lifting and carrying the units.
- **NO SHARP EDGES, SHOCK-RESISTANT HOUSING:** Rounded corners and edges to protect people and the environment the equipment is placed in.
- **STACKABLE AND STABLE:** All units feature accurately fitting designs to allow them to be stacked, stored and transported without the risk of tipping – and they have been optimised for transportation on pallets.
- **GREAT FOR THE ENVIRONMENT:** All housing components may be completely recycled.

AERCUBE®: VACUUM OR OVERPRESSURE

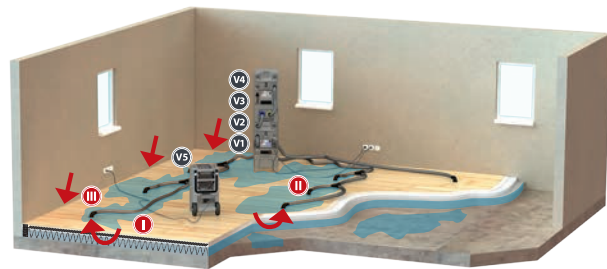
AERCUBE® VACUUM DRYING METHOD

Vacuum drying method using AERCUBE® and dehumidifiers

The room air is dried by the AD 740 dehumidifier. The AERCUBE® system sucks the dried air over the expansion gap into the insulation layer. Moisture and free water is sucked into the VT 2 water separator via the hose system. Free water will be separated in the VT 2. Dirt and bacteria will be filtrated in the HEPA filter unit HF 2. The vacuum pressure is generated by the VP 6 turbine or side channel blower VP 3. In order to reduce the noise pollution, the sound silencer SD 2 is installed. The remaining humidity in the filtrated air will be removed by a dehumidifier (for example AD 740).

Advantage

- Free water is not pressed into wall constructions.
- Dust and biomass can be filtered so it does not pollute the room.



APPLICATIONS

V1  Water separator VT 2	I  Superflexextract hose 50mm
V2  HEPA filter HF 2	II  Hose distributor Y-fitting
V3  High performance Turbine VP 6	III  Floor connecting piece
V4  Sound silencer SD 2	
V5  Condensation dryer AD 740	 See also suction drying method video

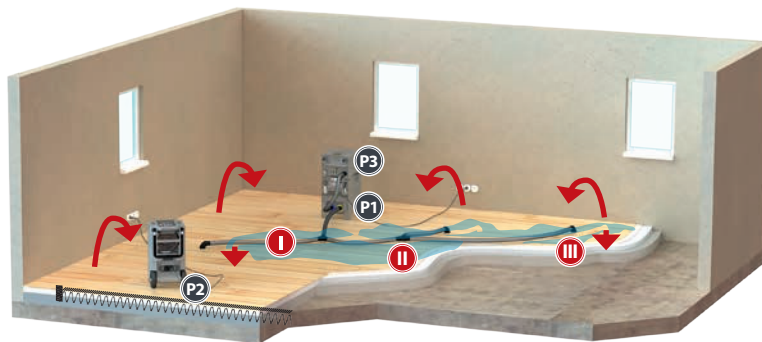
AERCUBE® OVERPRESSURE DRYING METHOD

Overpressure drying method using AERCUBE® and dehumidifiers

The room air is dried out by a dehumidifier (for example AD 740) and pressed via the drilled floor holes into the insulation layer by side channel blower VP 3 or turbine VP 6. The moisture in the insulation layer will be pushed out via the expansion gaps at the edge of the room.

Advantages

- Very effective and cost-saving way of drying
- Easy to use and less units needed
- Due to the overpressure, the pavement will be lifted which leads to a better air flow and therefore more effective drying



APPLICATIONS

APPLICATIONS		ACCESSORIES	
P1	 4-stage turbine Turbine VP 6	I	 Superflexextract hose 50mm
P2	 Condensation dryer AD 740	II	 Hose distributor Y-fitting
P3	 Sound silencer SD 2	III	 Floor connecting piece

AERCUBE® – THE DRYING SYSTEM FOR PROFESSIONALS

MODULES OF THE AERCUBE® SYSTEM

SIDE CHANNEL BLOWER – VP 3

The VP 3 side-channel blower offers reliability and energy-saving operation. The unit is air-cooled and operated in robust AERCUBE® housing. Its various gripping and carrying options make it easy to handle. A lashing system provides additional stability during transport and storage.

Cavity drying: up to 40-50m²
Very quiet: 57dB(A)



TURBINE – VP 6

The noise box VP 6 is light, versatile and powerful. The use of a brushless, variable turbine reduces the weight of the VP 6 by up to 50% compared with conventional noise boxes with lateral channel blowers. The multi-stage control of this unit provides precise power adjustment. The VP 6 reduces the amount of equipment needed as it replaces up to four different individual units.

Cavity drying up to: 70m²
Light weight: 15kg

WATER SEPARATOR – VT 2

The VT 2 water separator is equipped with a high-quality dirty water pump, also used in industrial applications. With this special pump the VT 2 can be operated solely as a 'wet vacuum cleaner'. The enclosed design of the housing allows the unit to operate even when standing in 30cm of water. Thanks to its hygienically flawless structure, thorough cleaning is especially easy. Two safety quick-release catches provide easy access to the inside. A drainage screw in the unit's foot allows the residual water to be emptied fully.

Conveyor volume: 7m³/h
Tank volume: 20l



AERCUBE® – THE DRYING SYSTEM FOR PROFESSIONALS

MODULES OF THE AERCUBE® SYSTEM

HEPA FILTER – HF 2

The HEPA filter system HF 2 for efficient air cleaning in ready to connect AERCUBE® housing is operated in conjunction with a noise box. The integrated pollution monitoring signals when the filters need to be replaced. The unit can be opened quickly and the filters easily changed thanks to two safety quick-release catches.

Air flow: 270m³/h

Filter: Prefilter G4, HEPA filter H13



SOUND SILENCER – SD 2

The SD 2 is both a sound absorber and an odour filter. Integrated into the connection-ready AERCUBE® housing, it minimises the noise level of the noise boxes by up to 19dB(A). An important benefit particularly in residential buildings.

The unit may optionally be equipped with an active carbon filter to reduce the spread of unpleasant odours (e.g. standing water) – perfect for water damage restoration.

Air flow: 220m³/h

Noise reduction: up to 19dB(A)



CALIBRATED ENERGY METER – CC4 MID

The calibrated energy meter CC 4-MID BOX delivers secure evidence of power consumption. It records the energy consumption of up to four units.

Flexible: Compatible with any drying solution

Secure: Calibrated energy counter (MID)



5 SIMPLIFY – CLOUD-CONNECTED ASSET MANAGEMENT

Remote monitoring of a drying process is proven to remove and reduce costs associated with the management of a water damage claim. Here's how it works.

REMOTE MONITORING REMOVES & REDUCES COSTS

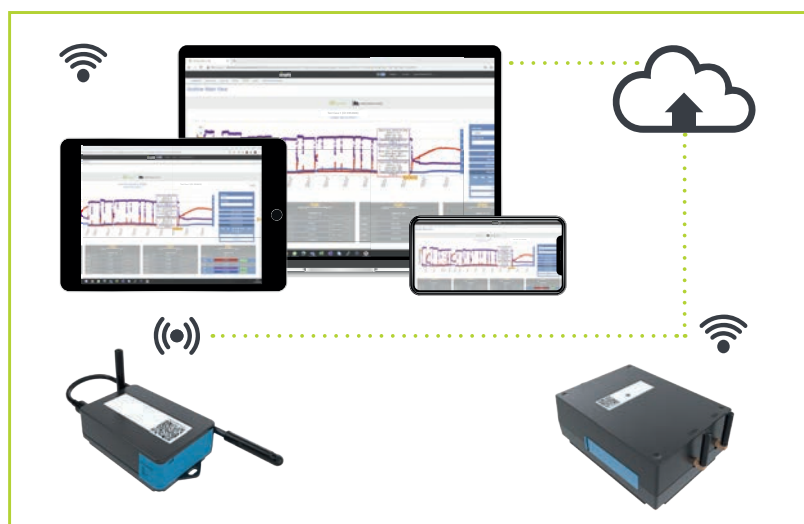
Simplify lets you check the drying status in realtime from almost any device anywhere. In addition, you can remotely monitor and control parameters such as power on/off, alarms, temperature and power consumption. In other words, remote monitoring in a drying process removes and reduces costs associated with the management of a water damage claim and your assets.

Instant response to avoid downtime

The ability to remotely monitor the drying process gives technicians the capability to respond quickly to unpredicted events, such as equipment being switched off or simply not performing as expected. This speed of response reduces downtime and subsequently reduces the negative impact on the claim life cycle.

Be notified right when the job is done

The ability to remotely track progress of a claim also means that time isn't wasted, with equipment being decommissioned as soon as possible so that it can be redeployed elsewhere, rather than sitting in a job for an extra week unnecessarily. Add to that the cost savings associated with reduced on-site visits made by technicians, their time (labour cost), their travel (travel costs), and the lost productivity of them being unavailable to attend other cases. Fewer on-site visits also minimises COVID-19 risks for staff and clients alike.



WHAT IT MEANS TO A DAMAGE RESTORATION COMPANY

Working scenario	
Annual damage claims:	10,000
Dehumidifiers per claim:	2 CDT 60
Energy consumption:	1.12kWh per unit
kWh price:	EUR 0.2126 (EU average)
Hourly wage of technician:	EUR 27.7 (EU average)
Driving distance per on-site visit:	40km (equal to 30 minutes of work)
Transportation cost (fuel + maintenance):	EUR 0.35 per km (EU average)

Without Simplify

				
On-site visit	x	x	x	x
Day	1	7	14	21

Drying days per claim:	24
Driving distance per claim:	200km
Driving distance per year:	2,000,000km
Dehumidifiers needed per year:	1,333
Total running hours per year:	11,667,080 (1,333 units running 24/7/365)
Total cost of driving (wage/transportation):	EUR 1,392,500
Total energy costs per year:	EUR 2,780,453
Total:	EUR 4,172,953

With Simplify

	
On-site visit	x
Day	1

Drying days per claim:	21
Driving distance per claim:	80km
Driving distance per year:	800,000km
Dehumidifiers needed per year:	1,176
Total running hours per year:	10,301,760 (1,176 units running 24/7/365)
Total cost of driving (wage/transportation):	EUR 557,000
Total energy costs per year:	EUR 2,452,972
Total:	EUR 3,009,972





Green
Saves 100,000 litres of fuel.



Cost-efficient
28% reduction of driving and electricity cost.

MODULES OF THE SIMPLIFY SOLUTION

SIMPLIFY APP

The Simplify App is used to program the Simplify solution on-site within only two minutes. Available for iOS and Android.

Available for iOS and Android



SIMPLIFY DASHBOARD

The dashboard presents all of the Simplify data collected from the job site to the user. Data is presented in both a chart and tabular format showing temperature, relative humidity, vapour pressure, dewpoint, water content and power – and energy consumption from the Simplify Sensor Probes.

All data can be exported to Excel or Word

SIMPLIFY CONTROL UNIT

The Simplify Control Unit is the basic part of the Simplify solution connecting to GSM whenever available and communicating and controlling the network of sensors and equipment on-site programmed to it. It transmits data e.g. power consumption and alarms from sensors to the Simplify Dashboard in the reporting intervals set.

Automatically finds the strongest GSM network available



MODULES OF THE SIMPLIFY SOLUTION

SIMPLIFY SENSOR BOX – SIMPLIFY SENSOR PROBE

The Simplify Sensor Box, powered by a regular 9V lithium battery, is used to transmit data from the connected Simplify Sensor Probe, back to the Simplify Control Unit. It can be controlled from the Simplify Dashboard, adjusting the data frequency to desired levels

The Simplify Sensor Probe is a humidity and temperature sensor with a unique precision of $\pm 2.0\%$ in the range from 0-100% RH and $\pm 0.2^{\circ}\text{C}$ deviation on the temperature measurements. The Simplify Sensor Probe comes with different lengths of cable – 24cm, 300cm, and 2000cm.



Uses 868 MHz radio frequency
Sensors IP67 protected

SIMPLIFY RELAY BOX

The Simplify Relay Box with three independently switchable 230V AC outlets and on-board MID approved kWh meter measures the total power consumption (kW and kWh) of all connected devices. The 230V AC outlets can be individually on/off controlled from the Simplify Dashboard thereby turning equipment on or off remotely.



On/Off controls up to three
devices

SIMPLIFY CC4 BOX

The Simplify CC 4 Box has four independently switchable 230V outlets and on-board MID approved kWh meter measures the total power consumption (kW and kWh) of all connected devices. It can be locked to fulfil MID requirements. The 230V AC outlets can be individually on/off controlled from the Simplify Dashboard thereby turning equipment on or off remotely.

On/Off controls up to four
devices



DEHUMIDIFIERS – CONDENSATION

Our broad range of efficient condensation and desiccant dehumidifiers enables us to offer impartial advice on finding the right drying solution for a variety of commercial and industrial applications. Offering complete humidity control, our solutions are either portable, wall-mounted or floor-standing.

AD 20

These high-quality processed units are used for drying structures and water damage as well as in industrial, trade, protection of investment and water-management applications. They may be used for multiple dehumidification functions. The robust, rotation-moulded plastic housing in AERCUBE® design is absolutely shock- and breakage-proof and can boast a high-quality appearance. The unit comes with an automatic pump out as standard.

Capacity max.: 18l/24h
Air flow: 200/270m³/h (speed I/II)



AD 40

Light and compact that the AD 40 can be easily carried just like a suitcase. The AD 40 dehumidifier comes with a handle that folds up and lashing straps can be attached to the sides. The water-collection tank is located inside the dehumidifier. A float measures water levels in the water-collection tank and will switch off the dehumidifier when the tank is full. The unit starts up automatically when the bucket is reinserted and after a power cut. Additionally it can be fitted with an automatic pump-out and stacks with AERCUBE components.

Capacity max.: 33.5l/24h
Air flow: 300/400m³/h (speed I/II)

AD 740

These high-quality processed units are used for drying structures and water damage as well as in industrial, trade, protection of investment and water-management applications. They may be used for multiple dehumidification functions. The robust, rotation-moulded plastic housing in AERCUBE® design is absolutely shock- and breakage-proof and can boast a high-quality appearance. Additionally it can be fitted with an automatic pump-out.

Capacity max.: 34l/24h
Air flow: 450/550m³/h (speed I/II)



DEHUMIDIFIERS – CONDENSATION

AD 750 – AD 750P – AD 780P

These high-quality processed units are used for drying structures and water damage as well as in industrial, trade, protection of investment and water-management applications. They may be used for multiple dehumidification functions. The robust, rotation-moulded plastic housing is absolutely shock- and breakage-proof and can boast a high-quality appearance and unique design. The AD 750P and AD 780P are equipped with a built-in condensate pump.

AD 750 – AD 750P

Capacity max.: 50l/24h
Air flow: 710m³/h

AD 780P

Capacity max.: 76l/24h
Air flow: 760m³/h



AD 520 – AD 540

Universal, reliable and energy-saving condensation air dehumidifiers. Flexible options for accessories allow for tailor-made applications even in harsh conditions such as drying of structures in offshore wind farms or very hot countries. The AD 520 and AD 540 are light, compact, practical and portable units. They are equally popular for water damage restoration as for air dehumidification in commercial and private properties.

AD 520

Capacity max.: 19l/24h
Air flow: 250/340m³/h (speed I/II)

AD 540

Capacity max.: 34l/24h
Airflow: 500/620m³/h (speed I/II)

AD 560 – AD 580

Universal, reliable and energy-saving condensation air dehumidifiers. Flexible options for accessories allow for tailor-made applications even in harsh conditions such as drying of structures in offshore wind farms or very hot countries. Characterised by particularly energy-efficient technology, high user-friendliness and extremely robust housing, these units are ideal for drying of structures and water management facilities. They are the first choice for keeping warehouses, archives and investments dry and protected.

AD 560

Capacity max.: 52l/24h
Air flow: 425/700m³/h (speed I/II)

AD 580

Capacity max.: 76.5l/24h
Air flow: 750m³/h



DEHUMIDIFIERS – CONDENSATION

AD 660 – AD 680

Universal, reliable and energy-saving condensation air dehumidifiers. Flexible options for accessories allow for tailor-made applications even in harsh conditions such as drying of structures in offshore wind farms or very hot countries. The AD 660 and AD 680 are both equipped with two large rolls and a surrounding frame to facilitate pushing and carrying. These units are equally popular with construction drying companies and construction machinery rental companies as for dehumidification in commercial and privately used properties.

AD 660

Capacity max.: 52l/24h
Air flow: 425/700m³/h (speed I/II)

AD 680

Capacity max.: 76.5l/24h
Air flow: 750m³/h



PORTA-DRY 400

This condensation dehumidifier has been specifically designed for water damage restoration, building drying and permanent drying of large rooms. While the very sturdy and compact unit weighs out at just 45kg, it has been fitted with leading heat pump technology with energy recovery. Not only does this optimise energy efficiency, it also enables the unit to handle heated rooms of up to 680m³ and unheated rooms of up to 450m³.

The PORTA-DRY 400 dehumidifier has been fitted with rubber wheels and a handle, making it ideal for rental companies and others who cherish flexibility and ease of use. After use, the unit is also easy to clean using water and high-pressure air.

Capacity max.: 71l/24h
Air flow: 700m³/h

DH 732

Sturdy and cost-effective range of portable dehumidifiers ideally suited for projects in the construction industry, restoration jobs, water damage control and more. Highly efficient and designated to operate in harsh work conditions.

Capacity max.: 30l/24h
Air flow: 200m³/h



DEHUMIDIFIERS – CONDENSATION

DH 752

Sturdy and cost-effective range of portable dehumidifiers ideally suited for projects in the construction industry, restoration jobs, water damage control and more. Highly efficient and designated to operate in harsh work conditions

Capacity max.: 45.6l/24h
Air flow: 350m³/h



DH 792

Sturdy and cost-effective, the DH 792 are robust portable dehumidifiers ideally suited for projects in the construction industry, restoration jobs, water damage control and rental jobs. They come with the option of connecting a water pump and draining the condensate via a hose and have a built-in hour meter as well as hygostat.

Capacity max.: 100l/24h
Air flow: 1,000m³/h

DHP 55

Mobile machines with a built-in water pump that are used in all types of rooms. The use of this type of condensation dehumidifier will speed up finishing and redecoration works. Their robust design makes them perfect for difficult working conditions. Available in dual voltage and perfect for 110V construction sites.

Capacity max.: 45.9l/24h
Air flow: 340m³/h



DEHUMIDIFIERS – CONDENSATION

DHP 65

Mobile machines that are used in all types of rooms. The use of this type of condensation dehumidifier will speed up finishing and redecoration works. Highly efficient dehumidifiers designed to for professional use in difficult working conditions. Available in dual voltage and perfect for 110V construction sites.

Capacity max.: 56l/24h

Air flow: 500m³/h



KT 20

The lightweight and compact KT 20 condensation dryer with sturdy synthetic cover dries rooms in new buildings, cellars and following water damage, and reduces the air humidity in enclosed rooms/areas.

Small areas, lack of space, dirt and continually changing locations are no problem for the compact drying wonder. To use for renovation after water damage, drying of new buildings, renovation/refurbishment, housing societies and caretaker/building services. The unit is equipped with an automatic pump out, a high pressure fan and offers a ducting option.

Capacity max.: 24l/24h

Air flow: 375m³/h

KT 45

The construction dryer KT 45 is compact, robust and handy with its stable plastic housing. The practical telescopic handle and its large wheels make it mobile and flexible to use.

It is ideally suited for drying rooms in new buildings, basements or after water damage and reducing the humidity in closed rooms. Fast and efficient drying. For use in water damage restoration, building and new building drying, renovation, refurbishment, for housing associations and janitorial services. The unit is equipped with an automatic pump out, a high pressure fan and offers a ducting option.

Capacity max.: 45l/24h

Air flow: 375m³/h



DEHUMIDIFIERS – ADSORPTION

ASE 200-300-400

Ideally suited for dehumidification of large spaces with low temperatures, the portable ASE dehumidifiers are extremely compact, sturdy and light-weight adsorption dryers. Due to its high-performance at low temperatures, the easily installed ASE's will deliver fast results in drying out all kinds of construction and emergency situations, thereby minimising the risk of long-term damage caused by for instance flooding. Application examples include cellars, garages, warehouses, storage rooms, archives, production facilities, waterworks and more.



ASE 200

Capacity: 18.75l/24h (20°C/60% RH)
Air volume dry air: 210m³/h
Air volume regeneration air: 110m³/h

ASE 300

Capacity: 25.7l/24h (20°C/60% RH)
Air volume dry air: 300m³/h
Air volume regeneration air: 110m³/h

ASE 400

Capacity: 36l/24h (20°C/60% RH)
Air volume dry air: 480m³/h
Air volume regeneration air: 185m³/h

VENTILATION

Our broad range of fans and blowers help accelerate drying projects by improving ventilation and air circulation, so dehumidifiers can dry out the affected rooms and buildings quicker and better.

AB 200

The AB 200 is a ready to use side-channel blower with integrated vibration suppression and sound insulation, ideally suited for water damage restoration.

Air flow: 80m³/h



DF 20 – DF 30 – DF 36

These professional, metal fans provide extra ventilation for indoor and outdoor events and also support drying, heating and cooling equipment. They can be used in homes, offices and work places that need improved ventilation and air circulation, as well as help in drying moist areas.



DF 20

Fan speed: 3
Air flow: 3,600/4,800/6,600m³/h

DF 30

Fan speed: 2
Air flow: 9,180/10,200m³/h

DF 36

Fan speed: 2
Air flow: 11,800/13,200m³/h

DFB 16

This quiet running, battery powered fan is light and compact and can be used in public places like restaurants, bars, at events, workshops, as well as offices and homes.

Air flow: 1,200m³/h



VENTILATION

CDX 20

The CDX 20 can work in three different positions. Robust and highly efficient with flat diffusers it is ideal for the home, office or renovation work.

Fan speed: 2

Air flow: 1,270/1,610m³/h



DFX 20

These professional, rotomoulded fans support drying, heating and cooling equipment. They can be used in rooms that need improved ventilation and air circulation, as well as help in drying moist areas.

Fan speed: 2

Air flow: 5,430/6,450m³/h

FD 4000

Axial blower for ventilation and rapid drying of rooms and wall surfaces after water damage. Drying times are shortened. The ideal working tool in industry as well as for the modern craftsman and service provider. With the handy and easy to transport fan you have six devices in one: carpet dryer, wall dryer, ceiling dryer, floor dryer, power fan for cooling or ventilating rooms and a combination fan to support the drying process with condensation dryer.

Air flow: 3,687m³/h



VENTILATION

POWERVERT 1500

The PowerVent 1500 is the ideal working instrument for modern craftsmen and service providers – for ventilation when working in shafts, for drying of hollow spaces after water damage or for extraction during welding work in tanks.

The complete ventilator is set up quickly; the hose is connected to the outlet or inlet quickly; and after the work, everything is safely packed away again.

The hose canister CPC ensures fast fitting and removing as well as safe transport and storage of the hose – and thus ensures high savings of working time and material. It contains 7.6m of hose and is quickly connected – no matter whether it is to inlet or outlet side of PowerVent 1500.



Air flow: 1,162m³/h



POWERVERT 3000

The PowerVent 3000 axial ventilator moves air powerfully whereby the venting and drying process is accelerated into the most hidden corners.

Weighing in at only 17.5kg the unit can be transported without any problems. The hoses of up to 45m in length can be connected to the PowerVent 3000, letting fresh air to be transported into the most remote rooms and stale air being drawn off. The air can be passed on even more purposefully by means of a practical triple distributor.

Can also be combined in many ways for air cleaning and as a dust protection system.

Air flow: 3,102m³/h

TD 300

The Turbo Dryer TD 300 is especially suitable for drying hollow spaces, carpets and in case of restoring water damage.

With very compact dimensions and a weight of only 3.2kg the ventilators can be transported without any problems.

Air flow: 437m³/h



VENTILATION

TD 2400

Targeted drying by connecting up to three hoses of 10m each (hose adapter included in the scope of delivery) and by variable installation positions. The TD 2400 radial fan is particularly suitable for use in cavity drying, carpet drying and water damage restoration.

Due to its compact dimensions, the fan is easy to transport, lightweight and stackable

Air flow: 1,860m³/h



AIR CLEANING & DISINFECTION

Our range of air cleaning and disinfection units keeps work sites safe for workers by minimising or removing unpleasant odours, dust, allergens away airborne bacteria, virus particles and more.

AMH 100

The AMH 100 air purifier is a high-performance blower with a circulating performance of 1,600m³/h. The unit offers a variety of filtration solutions. It quickly and efficiently purifies the air in contaminated spaces and is ideally suited for construction and industry.

Filters available: Pre-filter G4, Fine dust filter F9, HEPA filter H13, HEPA filter H14, Active carbon filter



MAS 13

MAS 13 air scrubbers create an environment free from both dust and airborne particles such as mould spores and viruses, thereby improving the air quality and reducing bad odours. The portable MAS 13 air scrubber removes particles and gases from your working area with a max. air flow of 1,300m³/h.

Air flow: 1,300m³/h

POWERFILTER 1000

The air cleaner is flexibly equipped with different filters (H-Class, M-Class). For odour remediation, an activated carbon filter can also be used. The structure of the metal housing is very easy to service and the air filter can be cleaned and maintained quickly and easily.

In combination with the Heylo dust protection door DCD 3.0 you get the dust protection system DCS-PF 1000.

Air flow max.: 917m³/h



AIR CLEANING & DISINFECTION

POWERFILTER 1400

Due to its small dimensions and very light weight, this air cleaner is particularly suitable for refurbishment in small rooms. With the ergonomic carrying handle, the air purifier can be transported effortlessly from room to room.

For odour elimination, an activated carbon filter can be fitted as well. The structure of the metal housing is very easy to maintain, and the air filter can thus be cleaned and maintained quickly and easily. In combination with the Heylo dust protection door DCD 3.0 you get the dust protection system DCS-PF 1400.



Air flow: 1,010m³/h



DCD-DCS

Dust protection door consisting of: Basic door element (for door widths of 680-830mm) , PVC film with Velcro tape (2 x 68cm), 4-piece adapter set and transport bag.

Clean partitioning of doors during renovation work. The core piece is the dust protection door DCD-3.0 – for quick and safe partitioning between the working or dirty area and the white area.

Door width: 680-1430mm

Dust extraction, negative pressure

HEYWALL

The HEYWALL dust control wall is a modular system consisting of aluminium poles up to 5m high which, together with a foil and a practical entrance or exit by means of self-adhesive zip, creates a dust-tight barrier. It can be set up as a room divider, in an L or U shape or as a polygon. All angles are possible.

Ceiling height: up to 5m

Tool-free use and easy to set up



AIR CLEANING & DISINFECTION

VENUS

The Venus pump spray bottle is a hand-operated sprayer with an integrated air pump for the even application of an active substance. It has a built-in safety valve, an in-line filter and an adjustable spray nozzle. The viton rubber seal is resistant to chemicals.

**Safety valve, in-line filter,
adjustable spray nozzle**



CYCLONE ULTRA FLEX

When it comes to applying small quantities of active ingredient to large areas, ULV sprayers are the first choice. ULV stands for 'ultra low volume'. Compared to conventional sprayers, they produce very small droplets that are still about 10 times larger than the particles of a fogger. Flexible hose for targeted spraying.

**Flexible device hose simplifies
targeted application**

BASE CLASSIC 2

The Thermofogger Base Classic 2 is a vaporiser or fog machine. It produces a fine, floating mist of active ingredient whose particles also penetrate the surface of porous materials. In this way, not only the odour but also the cause is neutralised. From a small cloud of mist to a dense, room-filling mist, any desired effect can be achieved. The fine adjustment of the pump allows fog output settings between 1% and 99%.

**Fog output settings between
1% and 99%**



AIR CLEANING & DISINFECTION

PATRIOT

Foggers produce a fine, floating mist of active ingredient whose particles also penetrate the surface of porous materials. In this way, not only the odour but also the cause is neutralised. The Patriot is a pulse jet fogger that nebulises many chemical and biological agents extremely quickly and effectively. Due to the high throughput speed in the jet pipe, it is possible to distribute even chemically very sensitive substances without loss of effect.



Petrol engine (0.8l)



ALRON CITROX – ODOX-DF – PENETROX – MAXOX-DF

Oxidising/cleaning/disinfecting agents against mould, fungi, mildew, bacteria and odour.

ODOX-DF

Oxidants and disinfectant with longterm effect, removes bacteria, fungi and mould

ALRON CITROX

Dissolves lime, soap residues, rust stains, black mould spots; kills mould fungus

PENETROX

Removes bacteria, fungi and mould in porous materials

MAXOX-DF

Oxidation and disinfectant for combating odours, mould/ mould odours

INFRARED HEATING

Infrared heat panels quickly and gently eliminate water and moisture damage through infrared heating. The moisture from the masonry is dried by the heating panel with pinpoint accuracy.

IRW 200/ 200 PRO – IRW 500/ 500 PRO

The infrared heat panel IRW 500 removes water and humidity damage quickly and gently by infrared heat. The moisture in the wall is dried point-precisely. Ideal for use in new buildings, for restoration of old buildings, after fire and water damage and for drying building materials – also suitable for heating on site trailers, for example.

No drilling: Wall mounting with telescopic bars and fastening clips. Perfect wall drying with stable stands. Connection of several IRW with practical perforated rail.

The heat panel IRW 500 PRO and IRW 200 PRO are equipped with a kWh meter.

**No drilling: Wall mounting with
telescopic bars and fastening clips**



MEASURING EQUIPMENT

Our measuring devices help detect and document hidden problems and their cause at an early stage. Fields of application include leakage locating, measuring building moisture, indoor climate and air quality because of water damage and drying out new buildings.

HFM 200

Moisture meter with ball probe. The capacitive high-frequency technology permits moisture measurement in a measuring depth of 20 to 40mm. The user is warned optically and acoustically when two adjustable limit values are exceeded. The moisture measuring device is used for quick non-destructive moisture measurement of tiles, organic building materials and wood. Included in delivery: 3AA batteries, bag.

LCD triple display with background lighting



PROTIMETER MMS 2

The 4-in-1 moisture meter MMS 2 combines the latest protimeter technology in an intuitive, robust and completely functional design. Whether in building works diagnosis, in water damage restoration or in the documentation of room climate processes, the MMS 2 offers perfect solutions for many fields of use. The material moisture values in addition with a three-colour bar are displayed easy to understand on the large LCD.

Included in delivery: soft case, depth gauge 140mm, large measuring pin head, humidity sensor hygrostick, humidity sensor short quikstick, extension cable for quik or hygrostick, software and data cable, test resistance.

Complete humidity diagnosis with one device

DRAIN DYE

The dyes are suitable for leak detection in drains and sewage systems. They are also excellent for finding leaks in flat roofs, terrace drains and underground garages. The leak detection dyes red, green, blue and yellow can be detected visually without any aids. They are dissolved in water in the area to be tested and the water course to be examined is thus made visible. The leak detection dye fluorescein/uranine is most clearly visible under infrared and ultraviolet light.

Leak detection dyes make leaks visible



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