



# CANNABIS-DRYING.COM DRIVEN BY INNOVATION

### **ABOUT US**

#### **Why Drying Matters**

Drying is the most critical step in cannabis production, where 3 months of hard work in cultivation can be compromised in just 7-10 days.

Proper drying preserves cannabinoids, terpenes, and overall product quality while eliminating mold and bacteria risks. Giving the end customer the ultimate experience!

Agratechniek (www.agratechniek.com) has 50 years of experience in drying agricultural produce. With drying driven by innovation, our systems are installed globally. Specializing in drying flower bulbs, seeds, garlic, and onions amongst many other crops.





Hemp-drying.com, offers energy-efficient, precise, and controlled drying and retting solutions for the sustainable industrial hemp crop. To transform your fresh harvest into premium quality hemp materials demanded by the market.

Hop-Drying.com is applying the knowledge and experience to improve the efficiency, sustainability and quality of the aromatic plant hops. By applying our advanced controlling and conditioning technology.





10 years ago Cannabis-drying.com was founded. Taking the innovations by Agratechniek, and elevating it to provide specialized drying equipment for medicinal and recreational cannabis (www.cannabis-drying.com).

**Our ABC Processor:** With 50 years of experience behind it and 2 decades of development, the ABC processor is the heart of our drying systems. It enables precise control over temperature, humidity, and airflow through five drying stages. This ensures consistency and high-quality results for every batch.

**Homogeneous drying result:** At the end of each drying cycle, all the product will be homogeneously dried to the desired moisture content.

#### Custom Solutions for Every Market We deliver:

- GMP Systems: Complete with necessary documentation for medicinal-grade cannabis.
- GACP Systems: Tailored for high-quality recreational or medical cannabis.
- Recreational Market Systems: Cost-effective solutions for general use.





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### **DRYING THEORY**

### HOW TO DRY EFFICIENTLY?

For air to hold water, the water molecules need to move, which requires energy. This energy comes from the air's temperature. So, warmer air can hold more moisture because it has more energy.

Absolute Humidity (AH) is the amount of water, in grams, in one kilogram of air. Relative Humidity (RH) is the percentage of how much water the air currently holds compared to the maximum it can hold.

The table shows that at 2 degrees Celsius, 4.36 grams of water per kilogram of air means the air is completely saturated with moisture (100% Relative Humidity). But at 12 degrees Celsius, the same amount of water only saturates the air halfway (50% Relative Humidity).

Relative Humidity % (RH)	100%	T° c/F
Absolute Humidity g water / kg air (AH)	4.36	2°   35.6°
	4.36	12°   53.6°
Relative Humidity % (RH)	50%	T° c/F

### **Drying in 5 stages**



**Stage 1:** Freshly harvested cannabis has ~80% moisture. In the first 24 hours, we remove half to prevent mold, using low humidity and strong airflow. The stage ends after a set time



**Stage 2:** After Stage 1, the outer shell is dry, but the inside isn't. To rebalance, humidity is increased. This stage ends when incoming and outgoing air have the same humidity, ensuring uniform drying.



**Stage 3 & 4:** To dry the product further to the desired moisture content, a lower humidity and airflow is set in stage 3 & 4. Both stages end once the ingoing and outgoing humidity is the same, indicating homogeneous drying.



**Stage 5:** After a certain amount in stage 5 a desired equilibrium is reached. Once this is reached all the product will be dried to the desired moisture content.

#### Stage setup in the ABC processor:

This is an example of how the settings of the 5 stages can be set.

A different humidity, airflow, temperature and duration can be set for each stage.



ABC-SOFTWARE PROPERTIES

- Remote acces with laptop, touch screen at the drying installation
- Sensors monitor air conditions.
- ABC software optimizes conditions for drying.
- Drying progresses through gradual, efficient stages.
- ABC software maximizes efficiency and quality.
- Each section of the installation can operate independently.

## ABC-SOFTWARE THE BRAINS OF YOUR DRYING INSTALLATION

Set, automate, and monitor your optimal drying process. Complete with log files, for analysis.



### **User Friendly**

- Example of a ABC-system with one drying room, 1 Air Handling Unit and 1 heatpump
- All current temperature and humidity values are shown
- On each of the buttons can be clicked the show more information or set variables
- ABC-Software also offers an alarm module, that's send alarms of the ABC via SMS and email



### **Tailored & Automated**

The ABC-software has been developed over the last 2 decades and is used in a wide variety of agricultural drying processes. The ABC-Software is always tailored to the specific project.

- ABC-Software offers insight into all variables via sensors
- Monitors the drying process continuously
- Example on the right of a 5 stage drying process:
   Time, Absolute Humidity, temperature and airflow can be set for each stage individually
- Multiple drying programs can be saved in the ABCprocessor



### **ABC Log Program**

- The ABC logs all data points on an SD card and on the connected PC
- All values (hundreds per drying system) can be added to the log program, to analyze the drying process
- Exporting data to Excel is possible

- Tailored to your drying operation
- Consistent outcomes with custom drying pre-sets
- Complete control and insight over all variables
- Manageable remotely with the ABC PC software
- ABC Log Program for analysis and storage of your drying process

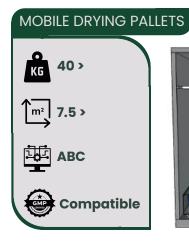
## **TRAY DRYING**

### OPTIMAL CONTROL WITH MINIMAL FOOTPRINT





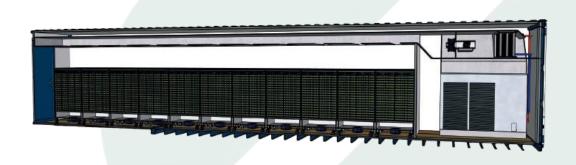




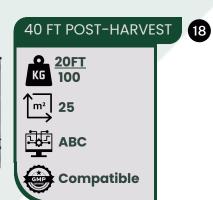






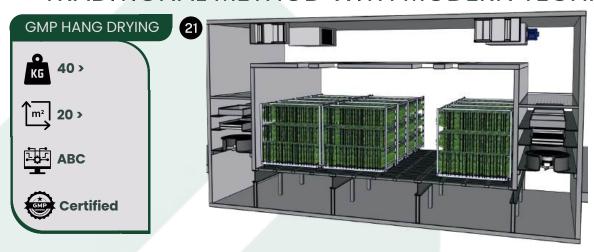






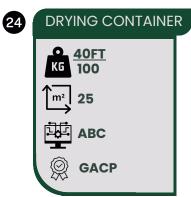
### **HANG DRYING**

### TRADITIONAL METHOD WITH MODERN TECHNOLOGY









### **EXTRA INFO**



**HEAT PUMPS** 

27

29 RESEARCH PARTNERS



26



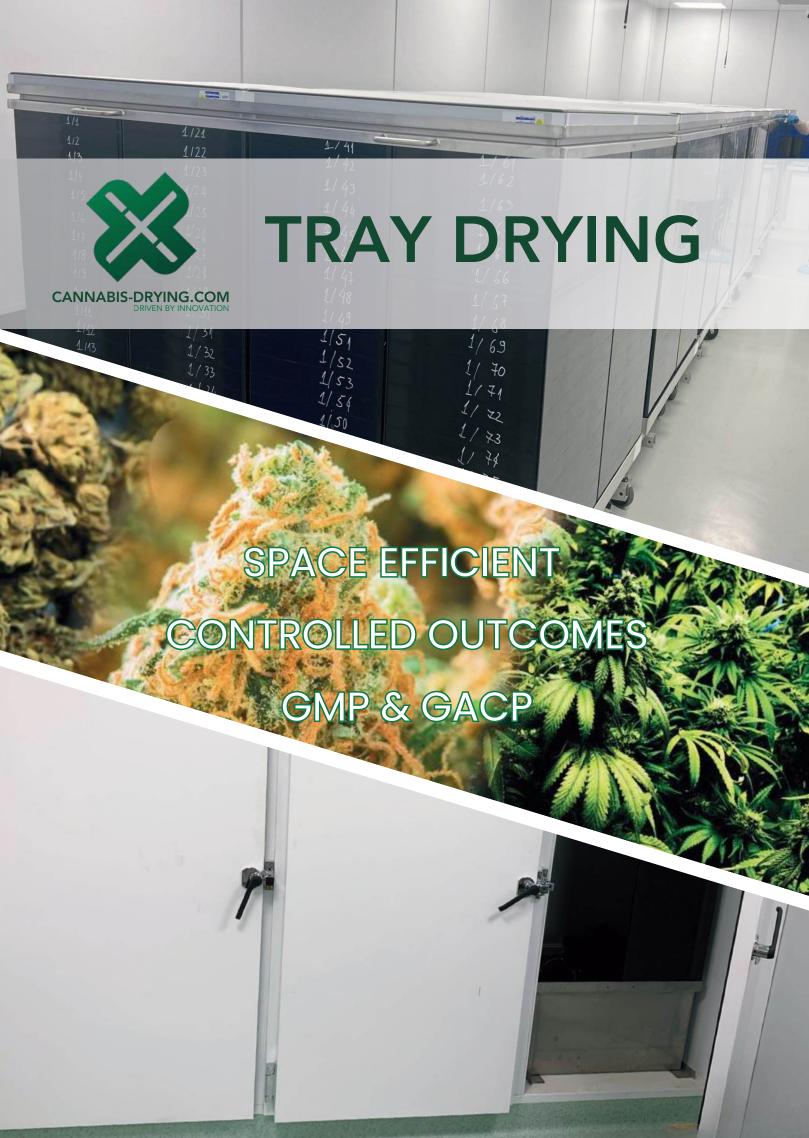
REBUILD, UPGRADE OR TAILOR

**MADE** 









## TRAY DRYING THE SANDWICH UNIT

To get the most homogeneous drying result we use a Top-Down drying principle with clean air.

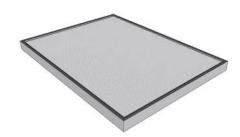
To ensure homogeneous airflow through the product, we have designed the 'sandwich unit'. It consists of two stacks of our Canna-trays and two types of filters on the bottom and on top. Altogether, this creates an airtight unit which is placed in our various tray drying systems.

### **Buildup of the Sandwich-Unit**





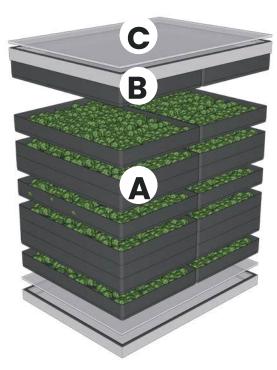
B: HEPA Filter



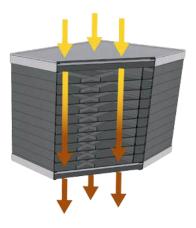
C: Filter Pad



SANDWICH BUILD UP



**TOP-DOWN VENTILATION** 



## TRAY DRYING THE SANDWICH UNIT

To get the most homogeneous drying result we use a Top-Down drying principle with clean air.

### Canna-Trays

- Can be filled with bucked or wet trimmed product
- 140-200 grams of dry product
- 600 x 400 x 60 mm
- Easily stackable
- Foodsafe ABS thermoplastic
- Antistatic



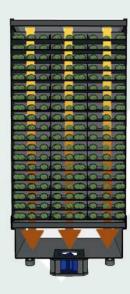


### **HEPA-Filters**

- 600x800x45 mm
- Filter class H13
- Filters 99.95% of all particles larger than 0.3 micron
- Ensures clean drying

### Sandwich-Unit

- HEPA-filter on top and bottom
- 2 stacks of Canna-Trays
- Max. 25 high per stack
- Product is safe in a 'cleanroom' environment
- Used in our various tray drying installations.





- Cleanroom environment
- Homogeneous airflow through product
- Minimal footprint
- 7-10 kg per sandwich unit
- Food grade materials

### **DRYING TABLES**

### MOBILE & SPACE EFFICIENT

To get the most homogeneous drying result we use a Top-Down drying principle with clean air.



### **Drying table**

- Our drying tables are a very space efficient way, that uses our top-down drying principle.
- Max. 10KG can be dried on a space of 0.5M2
- Stainless steel table on wheels, to make them easily maneuverable
- Tables can be used in an existing drying room, to improve the KG's per M2 and get a homogeneous drying result



### Ventilator

- Ventilator in the bottom, to ensure top-down airflow
- Fans are plug and play
- Adjustable fan speed, per table individually

### **Single Drying Table**



### Capacity

#### Single Drying Table

- Max. 50 trays on a single table
- Max 10 kg dry weight

#### **Double Drying Table**

- Max. 100 trays on a double table
- Max. 20 kg dry weight

### **Conditioning & ABC**

- Can be delivered with Air Handling Units
- Compatible with ABC-software (if we supply the Air Handling Unit)

- Upgrade your current drying room capacity
- Homogeneous drying results
- Compatible with ABC-Software when using our Air Handling Units
- Supplied in a GMP-, or non GMP version
- · Easy handling and internal logistics

## **DRYING CABINET**PLUG & PLAY CLEANROOM DRYING

#### COMPACT DRYING SOLUTION FOR SMALL BATCHES OF FLOWERS

The drying cabinets are our compact solution to dry small quantities of cannabis.

They are mainly used in R&D facilities or smaller producers.

A single, double and triple version of the cabinet is available.

- Each drying cabinet has it's own Air Handling Unit
- In case of GMP all documentation (IQ, OQ, PQ, SOP's for cleaning and using) is included
- ABC-Processor for a perfect drying result

#### SINGLE CABINET 7 - 10 KG



### DOUBLE CABINET 14 - 20 KG



### TRIPLE CABINET 21 - 30 KG



## **DRYING CABINET**PLUG & PLAY CLEANROOM DRYING

COMPACT DRYING SOLUTION FOR SMALL BATCHES OF FLOWERS

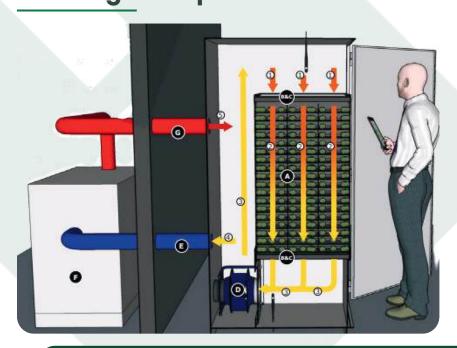
### **Air Handling Unit**

#### Including

- · Adsorption dryer
- Cooler
- Flow sensor
- Multiple valves
- Tube fan
- Exhaust channel with regeneration heat



## **Working Principle**



- The ventilator (D) pulls process air (1) through Canna-Trays (A) and filters (B&C).
- The air (2) absorbs moisture from the cannabis.
- Some air (3) recirculates, while the rest (4) moves to the conditioning unit (F).
- In the conditioning unit (F), moisture is removed, and temperature is adjusted.
- Controlled air (5) returns via tube (G), mixes with process air (3), and continues drying at the desired temperature.

- Automatic control with the ABC-software
- Dedicated conditioning unit
- Cleanroom environment, GMP ready
- Homogeneous airflow
- 7-10 kg dry in single cabinet up to 30 kg in triple

## MOBILE DRYING PALLET MODULAR MOBILE DRYING UNITS

THE STANDARD FOR SPACE EFFICIENT DRYING, BOTH ON GACP OR GMP LEVEL

### **Complete Installation**

Mainly used by larger GMP/GACP growers. In case of GMP all documentation (IQ, OQ, PQ, SOP's for cleaning and using) is included

One pallet dries up to 40kg and multiple pallets can be placed in one drying room.

If growers want to expand their cultivation site, but don't want to expand their Post-Harvest building, rebuilding to the Mobile Drying Pallet system is a good option.





### Up to 200kg Dry per 30m2

- Each pallet is placed against a ventilation plenum
- The airflow and conditions are automatically controlled by the ABC-Software
- · 4 sandwich unit stacked on one pallet
- 200 trays per pallet
- Up to 200kg of dry product on a surface of 30M2

### **Air Handling Unit**

Air handling unit consists of:

- · Heating & cooling coil
- Ventilators
- Switchboard
- Pumps
- Extra HEPA filtration
- Multiple sensors

Hot & Cold water is supplied to the Air Handling Unit by a heatpump/chiller, for more information about our heatpumps/chillers see page: 16

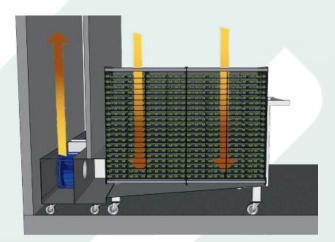


- Automatic control with the ABC-software
- Scaleable drying system
- Increase your current drying capacity & consistency
- Suitable for GMP including all documents
- · Easy internal logistics
- Tailored drying capacity

### **MOBILE DRYING PALLET**

### MODULAR MOBILE DRYING UNITS

THE STANDARD FOR SPACE EFFICIENT DRYING, BOTH ON GACP OR GMP LEVEL



### **Complete Installation**

Each Mobile Drying Pallet is placed against each own ventilation plenum.

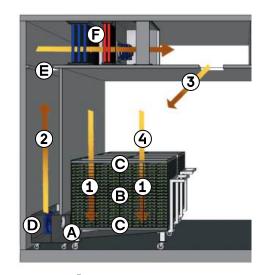
The plenums suck the air Top-Down through the Pallets with product.

Fan speed can be adjusted for each plenum individually.

### **How Does it Work**

- The Mobile Drying Pallet (A)with Canna-Trays (B) and HEPA-filters (C) is placed against the Plenum.
- The ventilator in the Plenum (E) is turned on and sucks the process air (1) through the trays.
- The air (2) goes through a partition wall via another set of filters (F) towards the Air Handling Unit (G).
- In the Air Handling Unit water is condensated out of the air, by cooling it down, later the air is reheated and goes back into the drying room (3) where it mixes with the other process air (4)





## **Heat Pump / Chiller**

To supply hot & cold water to the Air Handling Unit, a heat pump is necessary.

- Automatic control with the ABC-software
- Scaleable drying system
- Increase your current drying capacity & consistency
- Suitable for GMP including all documents
- Easy internal logistics
- Tailored drying capacity

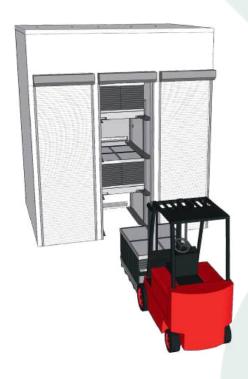
## **DRYING CELL**LARGE SCALE SPACE EFFICIENT DRYING

For large scale grow operation with a lot of production, this solution provides max. capacity at min. m2

### **Drying cells**

The drying cells are mainly used by large scale recreational growers or CBD producers.

A forklift is essential in this system, as the drying pallets are placed vertically above each other, making it a very space efficient system.



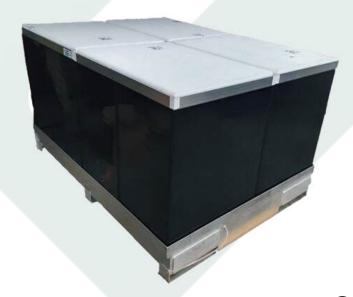


## **High Capacity**

- Multiple drying cells can be placed next to each other
- > 75-90kg of dry product per drying cell
- Cells with 2, 3 or 4 pallets above each other can be built
- Airflow is set for each pallet individually
- Standard size: 3560 (L) x 1730 (w) x 5240 (h)
- Sizes can be tailored to the demands of the customer
- Modular system expandable to desired capacity

### **Ventilation Pallet**

- Stainless steel pallet
- Max. 160 trays per pallet
- 25-32kg per pallet
- Max 4 pallets above each other in a cell

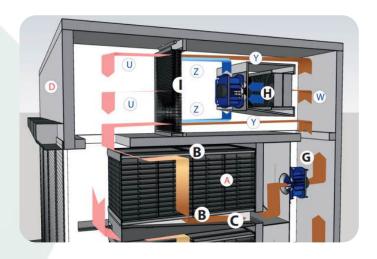


## **DRYING CELL**LARGE SCALE SPACE EFFICIENT DRYING

For large scale grow operation with a lot of production, this solution provides max. capacity at min. m2

### **Working Principle**

- The ventilator (G) pulls process air (U) through Canna-Trays (A), filters (B), and the ventilation pallet (C).
- The air dries the cannabis, increasing its absolute humidity.
- Some moist air (W) enters the condensation unit (H), where it cools and water condenses.
- The cooled air (Z) mixes with process air (Y).
- The blended air passes through the heater (1) to reach the desired temperature.





## Heat Pump / Chiller

To supply hot & cold water to the Air Handling Unit, a heat pump is necessary.

- Modular capacity
- GACP system
- Efficient drying and storage for large production
- Easy internal logistics with forklift
- Consistent product outcomes

### TRAY DRYING CONTAINER

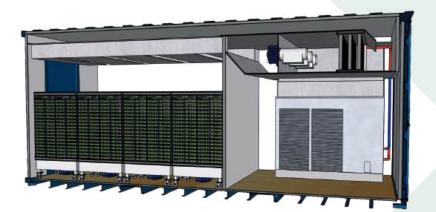
PLUG & PLAY, LARGE CAPACITY

40 FT or 20 FT container, as a stand alone drying unit. Outfit your cultivation with the drying it needs

### **Stand Alone Drying Unit**

For facilities that lack the space for drying rooms, drying in containers might be the right solution. All the hardware is built in a 20 or 40 foot container.

The containers can be used in recreational or medical farms.



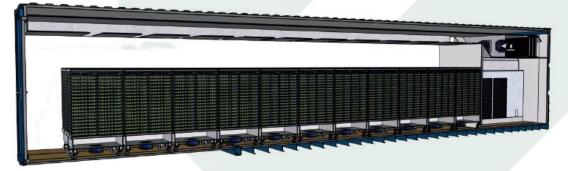


### **20 FT Container**

- 85-120kg dry product per container
- 12 drying tables per container
- Temperature, humidity & airflow control per container

### 40 FT container

- 230 330 kg dry product per container
- 33 drying tables per container

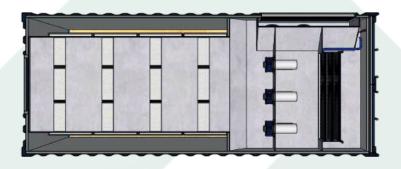


### **MULTIPLE CONTAINERS**

If multiple containers are installed, one will have the central heat pump that supplies hot and cold water to the other containers as well

## TRAY DRYING CONTAINER PLUG & PLAY, LARGE CAPACITY

20FT or 40 FT container, as a stand alone drying unit. Outfit your cultivation with the drying it needs



### 2 versions

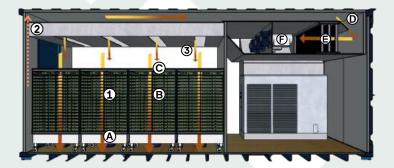
One with heat pump for hot and cold water One with a chiller for only cold water and electrical heater

Heat pump with hot and cold water is more energy efficient but a higher investment

### **Components:**

- Drying tables
- Filters
- Cooling coils
- Electrical heaters / heating coil
- Fans in Air Handling Unit
- Heat pump / chiller
- Control panel





### **How does it work**

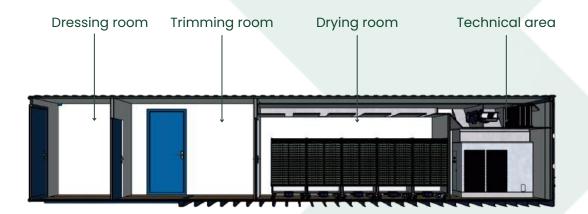
The ventilator of the drying table (A) sucks the air (1) top-down through the canna-trays (B) and filters (C). Part of this air (2) is sucked via an air channel towards the air handling unit (D). In the Air Handling Unit water condensates out of the air by the cooling coil (E). Later the air is reheated by electrical heaters (F) or a heating coil and brought back into the drying room (3)

- 20FT: 105 to 150 kg capacity
- 40FT: 230 to 330 kg capacity
- GACP or GMP certified
- Plug and play system
- Expand or improve your drying process

## 40FT POST HARVEST CONTAINER SPACE EFFICIENT DRYING AND TRIMMING

### **Explanation 40 foot Post-Harvest container:**

- All the interior will be plated with sandwich-panels, these panels have a special coating on them, to make it compatible with GMP standards.
- The floor will be equipped with special flooring, which is up with medical standards.
- C3 quality coating on the outside.
- All the rooms in the 40ft container meet EU-GMP standards, in regards of air circulation/filtration.
- The dressing room and the trimming room will have sockets to plug devices in.



At the entrance a dressing room can be found, from there the trimming can be entered. To prevent products from having to pass through the dressing room, the trimming room has another door to the outside.

A normal door is placed between the trimming and the drying room. The technical area on the right side can be entered via the standard container doors.

### **Drying tables**

The drying room will be filled with 12 of these drying tables. This can be expended to 15 drying tables if the capacity turns out to be insufficient. Each can hold 7-10kg of dry products.

The fan speed of the drying tables can be controlled individually with our ABC-software. The Drying tables will be constructed from SS304.



### **40FT POST HARVEST CONTAINER**

### SPACE EFFICIENT DRYING AND TRIMMING

### **Technical** area

The technical area is the heart of the installation. The area is easily accessible and contains the following components:

- Switchboard with all electrical connections and screen with ABC-software.
- Air Handling Unit
- Chiller

To make sure the complete drying process can be operated without having to enter the drying room the switchboard + control panel are placed inside the technical area. The switchboard should be connected to the internet. If this connection is made, the cannabis-drying.com team can always log in to the system to give assistance with setting the drying process and any trouble shooting if needed. The cannabis-drying.com team is always available to help a client during troubleshooting.

In the switchboard also an alarm module is built, this module can send SMS/email alarms to the user, in case of any problems.



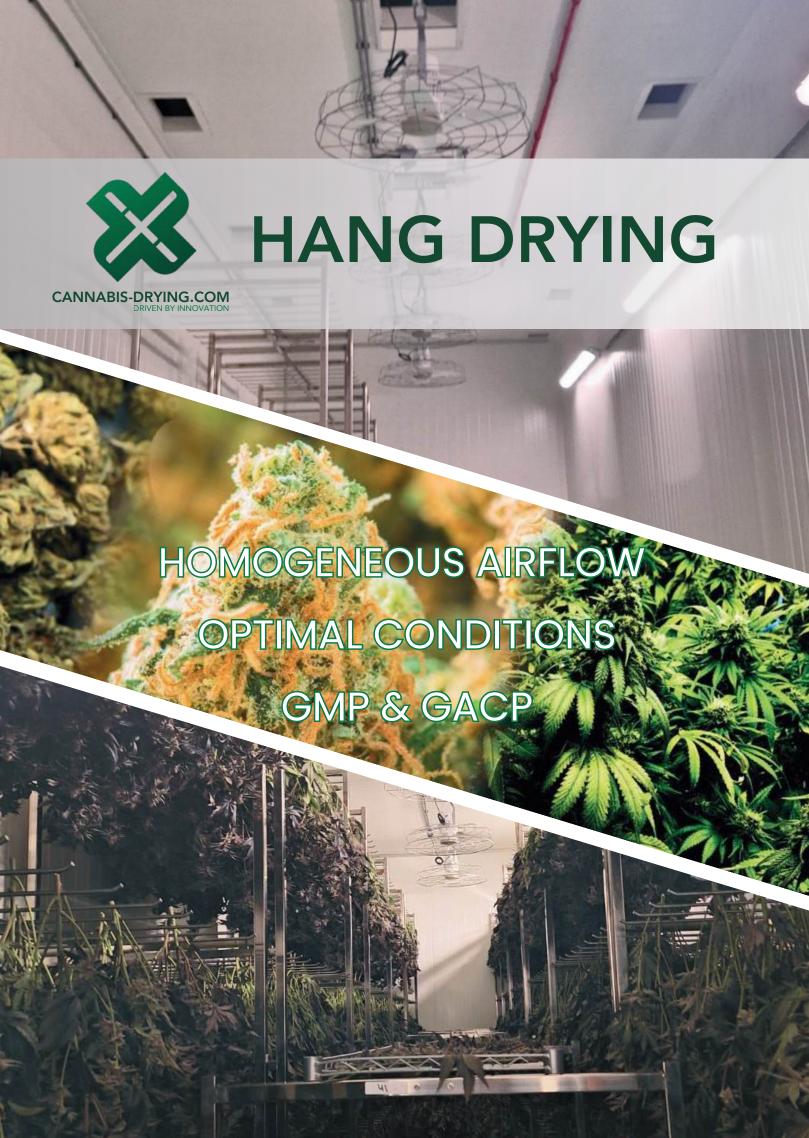


### Air handling unit

The air handling unit consists of multiple parts:

- Cooling coil. Cold water is supplied by the chiller to the cooling coil to make condensation possible.
- To reheat the cooled air, electrical heaters are placed.
- 2 high pressure fans are installed to make airflow through the AHU possible. Airflow is monitored by flow sensors
- Multiple T+RH sensors are placed to monitor/control the complete process.
- HEPA-filters are placed inside the AHU, to meet EU-GMP requirements.

In the ceiling (pictured above) a special design is implemented, this design ensures an even airflow, throughout the complete drying container.



## HANG DRYING AIRFLOW PRINCIPLES

GMP-certified hang drying cell, with optimal control over conditions and ideal airflow distribution

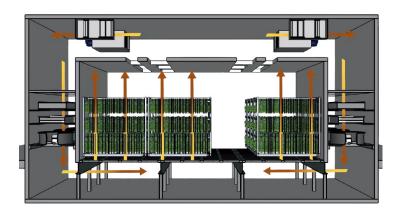
### **Marilyn Monroe Effect**

Our GMP hang drying rooms work with a bottom-up airflow.

Because the plant is conic, and we want to get under the 'skirt' of the plant, we call this the Marilyn Monroe effect.

Designing the airflow like this, will lead to a homogeneous drying result, with regards to moisture content





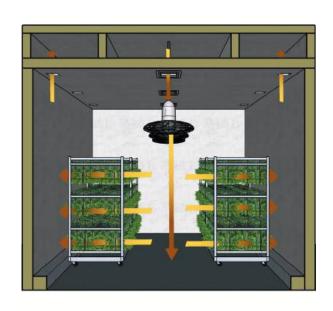
### **Benefits of Bottom-Up**

All air can be filtered
Completely homogeneous drying result
Lowest chance of mold
Curing can be skipped
Hardware outside of the drying room, making it
GMP-compatible

### **GACP Drying Airflow**

For our GACP / recreational systems, we use a different airflow. Large fans blow they are straight to the floor, whereafter it bends of to the sides, going horizontally through the product.

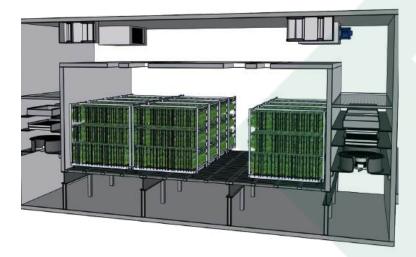
In GACP/recreational drying systems, it is possible to hang hardware inside of the drying room, making this set-up possible.



### **GMP HANG DRYING CELL**

### MEDICAL HANG DRYING WITH OPTIMAL AIRFLOW

GMP-certified hang drying cell, with optimal control over conditions and ideal airflow distribution

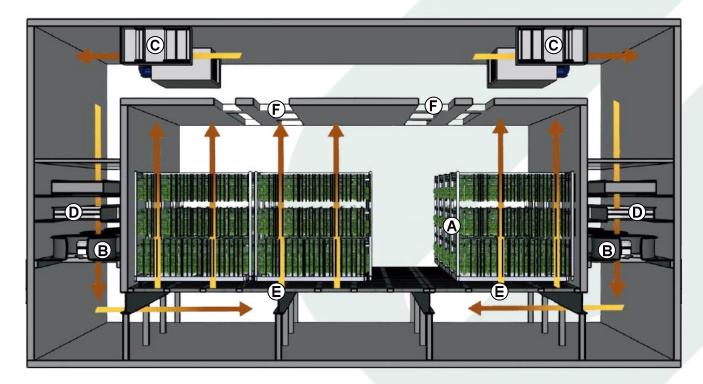


### **High Capacity**

- Drying cells are filled with hang drying racks
- Perforated cleanroom floor
- Large ventilator in the sidewalls
- Air channels on both side, top and bottom of the drying room
- E11 filtration in the sidewalls, to filter the air during each circulation
- 1 m/s airflow throughout the complete room
- Required height: 4000mm
- Modular system

### **Working Principle**

- Bars/drying racks are placed in the hang drying cell (A).
- Ventilator (B) pulls air bottom-up through the hanging plants.
- Conditioning unit (C) removes moisture via condensation and reheats the air.
- Filters (D) on both sides remove dust, pollen, mold, mildew.
- Perforated floor (E) and ceiling (F) ensure even air distribution.



- Modular capacity
- GMP system
- Optimized airflow
- Ideal conditions with full control
- · Consistent product outcomes

## **PLUG & PLAY HANG DRYING CELL**

PLUG & PLAY HANG DRYING GMP OR GACP

Standard capacity of 25 kg dry. Applicable for GMP, GACP or Recreational companies



### **Standard capacity**

The plug & play hang drying cell makes use of a bottom-up airflow and is a plug and play system.

The system can be used in GMP, GACP or recreational companies

## **25kg Capacity**

- 25 kg of dried product
- Perforated floor
- Perforated ceiling
- Exterior from sandwich panels
- ABC-controlled

Dimensions: 3850 (L) x 2400 (W) x 3700 (H) mm





## **Air Handling Unit**

Version available with heatpump for hot and cold water, and a version available with only a chiller + electrical heaters.

Filtration level of the system can be discussed, depending on the demands of the customer.

- 25 kg capacity
- GMP, GACP, or Rec certified
- Plug and play system
- Optimal conditions
- Automated drying process

### **REC HANG DRYING CELL**

### TRADITIONAL HANG DRYING WITH OPTIMAL CONDITIONS

Perfect straight forward drying installation for traditional hang drying with optimal conditions

### **Ideal Rec Drying**

For the recreational market we have developed a different kind of hang drying setup.

Large ventilators are hung inside the drying room, the fans blow the air straight towards the floor, and from there the air spreads horizontally through the plants.







## > 40kg Capacity

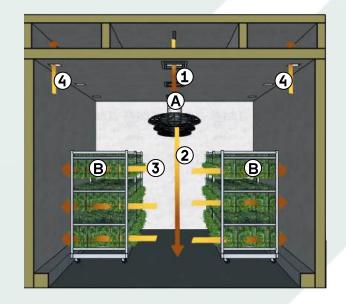
- Scalable system
- Design can be tailored to the clients whishes
- 1 m/s airflow at each part of the plant
- Airflow can be adjusted throughout the drying process.
- Drying racks can be stacked on top of each other, to make use of the height

### **Working principle**

The conditioned air (1) is being picked up by the large ventilators (A).

The ventilators blow the air straight down (2), afterwards it bends of horizontally (3) through the racks (B) with hanging plants.

Part of this air is goes via an air channel (4) back to the Air Handling Unit.



- Optimal drying conditions
- Designed based on your drying needs
- Scaleable to the capacity necessary
- Automated drying process

### **CONTAINER HANG DRYING**

### PLUG & PLAY SOLUTION FOR HANG DRYING

40 FT container, as a stand alone drying unit. Outfit your cultivation with the drying it needs



### **Stand Alone Drying Unit**

For facilities that do not have a drying room available and prefer hang drying, container drying can be the right solution.

All hardware is built in a container.

The containers can be used in GACP or recreational farms

### **Components:**

- Stainless steel drying racks
- Airducts
- Cooling coils or adsorption dryer
- Heating coils or electrical heaters
- Ventilators
- Filters
- Integrated heat pump or chiller



### 40 FT container

- 12 drying racks
- 50-60 kg of dry product

Airflows in both of the systems work the same as in the recreational hang drying systems.

### 20 FT container

- 6 drying racks
- 25-30 kg of dry product



### **MULTIPLE CONTAINERS**

If multiple containers are installed, one will have the central heat pump that supplies hot and cold water to the other containers as well

## TAILORMADE SYSTEMS FLEXIBILITY TO FULFILL YOUR DRYING NEEDS

We tailor your system to your requirements, available space and unique situation

### The Missing Piece of your Puzzle

Not every situation requires a standard solution. We design and build tailormade systems, fully adapted to your production capacity, GMP/GACP requirements, and logistical needs.

From concept to completion: everything is customized to your process. With over 50 years of experience in agricultural drying solutions, we transform this expertise into state-of-the-art cannabis drying technology.



**KEY POINTS** 

- Fully new design
- Integration with your process flow
- Scalable in capacity and technology

### **RE-BUILDS & UPGRADES**

IS YOUR DRYING ROOM NOT WORKING OPTIMALLY?

We will help you to get the best out of your installation with aid of the our installations and expertise

#### **Before**



### Investigate, Design, Improve

Do you have an existing drying room that is not performing optimally? With our Rebuilds & Upgrades, we transform your current facility into an efficient, high-standard drying installation.

We make use of as much of the existing structure and equipment as possible, keeping investments cost-effective while maximizing performance. With 50 years of drying expertise, we bring your facility up to GMP or GACP level and ensure results equal to a new build.

OUR APPROACH

- Problem asessment
- Site visit
- Rebuild strategy formulation
- Rebuilding of the drying room

### **HEAT PUMPS & CHILLERS**

### THE STANDARD FOR CONDITIONING YOUR AIRFLOW

Perfect straight forward drying installation for traditional hang drying with optimal conditions



### **Hot & Cold Water Supply**

To supply hot and cold water to the AHU's in our drying installation, we supply diverse heatpumps and chillers.

The systems always differ a bit, depending on the need KW's and location of the project.

### **Heat pumps**

- Supply hot and cold water
- Most energy sufficient solution
- Residual heath can be escorted out with a dry cooler
- Residual heath can also be used in other parts of your facility, for example to heath up a RO-vessel
- Our support team can log in to the pumps from distance, making troubleshooting very convenient
- Pumps and buffer vessels integrated
   Freon or Propane can be used as a refrigerant





### **Chillers**

- Supply only cold water
- Electrical heating in the AHU necessary
- For smaller projects, with a lower KW-demand, investment is lower with these chillers
- Residual heath can be escorted out with a dry cooler
- Pumps and buffer vessels integrated

- Perfectly aligned with your drying needs
- Energy efficient drying method
- Precise control over air conditions
- Low moisture content at low temperatures

### **OTHER PRODUCTS**

### AND THERE IS MORE IN STORE

We also supply a couple additional products, that have a good synergy with our drying systems.



### **Moisture Content Analyzers**

The halogenic dryers are very handy to quickly give an indication of the moisture content in the product. Especially during the first couple drying cycles, these devices are very handy to finetune the drying process.

Within a couple minutes the MCA will tell you at what moisture content the product is, with a precision up to 0.001 Grams.

### **Tray washers**

As cannabis is a sticky product, the canna-trays need to be cleaned after every drying cycle. Our smaller scale customers do cleaning by hand, but once the installations become larger, tray washers can be a good solution.

- Various capacities available: 150,350 and 550 trays per hour
- Work with an alkaline cleaner
- Efficient systems in regards to power & water consumption.



### Other Post-Harvest Equipment

We also have the expertise to recommend you other post-harvest equipment, via our network of suppliers. We can give you advice on trimming, bucking, HVAC, cleanroom and extraction equipment

## RESEARCH PROJECTS EXPANDING KNOWLEDGE AND RESEARCH

Scientific research to improve our drying systems and advance cannabis reseach

### **Additional products**

Cannabis-drying.com always seeks a way to improve their systems.

That's why we are collaborating in two cannabis research projects in the Netherlands



### **MCPIR**

MCPIR is a research project in Bleiswijk, formed by Delphy. It is an indoor growing practice with various members like: DLVGE, Brightlabs, Paradise-seeds, Mills nutrients, Koppert, CanFilters, Priva, Fluence, Cannavigia, SpexAI & Van Vliet Containers.

One of our drying cabinets is placed at the research center, where we try to perfectionate the drying process even more

## **Cultivation for Compounds (CFC)**

The CFC research project can be found in Honselersdijk at the location of Vertify, near The Hague. The project has a strong connection with the World Horti Center and is led by our trusted partners Cultivators.

Participants of the research are: Fluence, Groda, Fl Seed Tech, Cannavigia, Priva, DCM, Biobest, Twister, MJtech, Phormium, Brightlabs, Buffalo Extraction Systems, KG systems, van Dijk Heating & Perfect Plants



## PARTNERS PCS-NL

PCS-NL is our partner in EU GMP compliance for medicinal cannabis.



### What PCS-NL Does

Founded in 1990, PCS-NL has helped the international pharmaceutical industry with GMP certification and GMP training.

If you want to export medicinal cannabis products to the EU, you have to implement the EU GMP. PCS-NL knows the EU GMP inside out. Using their experience in the pharmaceutical- and medicinal cannabis industries, they implement the EU GMP in your organization, from A to Z. PCS-NL trains your people, writes your documents, and ensures that your process is under control. You will achieve consistent and medicinal quality. The core business of PCS-NL is to transfer their GMP knowledge and experience to your team. When PCS-NL is done, you will be EU GMP compliant and ready for inspection. The inspection is the last step before you can export your products to the European Union.

### PCS-NL & Cannabis-Drying.com

PCS-NL has helped Cannabis-Drying.com to get their products to a GMP-level. The products from Cannabis-Drying.com come with all the necessary IQ, OQ, PQ & SOP's for cleaning and operating the drying installations.

### Want to know more?

✓ info@PCS-NL-nl.com

+31(0)182 503 280

www.PCS-NL-nl.com

### **CANNABREF7E**

CannaBREEZE is your trusted partner for cannabis cultivation and processing.

CannaBREEZE

### What Does CannaBreeze Do

From plant to medicine, we provide expert guidance and solutions to help you succeed in the industry. Compliant with EU-GMP guidelines, our consulting, expertise, and equipment cover every aspect of cultivation, processing, and packaging. Whether you're starting or improving, we're here to meet your requirements and maximize your potential in the growing cannabis market.

#### Post-Harvest: Ensuring Quality and Compliance

We provide a variety of post-harvest solutions, including drying, curing, trimming, sorting, decontamination, milling, extraction, winterization and dewaxing, solvent recovery, distillation, centrifugal partition chromatography (CPC), analytical instruments, and packaging. Our goal is to ensure that your final products meet the highest standards of quality and safety.

## Cannabreeze & Cannabis-Drying.com

Cannabreeze is Cannabis-Drying.com's exclusive distributor in South-East Europe. Together we help the client to get the best drying system, according to their demands.

### Want to know more?

#### Nick Brousianos, CEO

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## **PARTNERS GREEN GROWS THAILAND**

Green Grows is our distributor in Thailand.



### **What Does Green Grows Do**

Green Grows is our distributor in Thailand. The company is founded in 2019, because they expected cannabis legalization to happen in Thailand.

They were right with their predictions and started helping hundreds of facilities with selecting top quality equipment.

They supply everything that is needed from irrigation systems to trimming machines and from fertilizers to drying equipment.

### Want to know more?



www.greengrows.com

### **BOSMAN VAN ZAAL SOUTH AFRICA**

Bosman Van Zaal South Africa is a leading provider of agricultural solutions



### What Does Bosman van Zaal Do

Bosman Van Zaal offers superior greenhouse systems and cutting-edge technologies customised to the different demands of South African farmers. As a member of Bosman Van Zaal International, we combine global experience with a strong local presence, guaranteeing that our clients receive unrivaled support and innovative solutions.

Bosman Van Zaal South Africa is the distributor of Cannabis-drying.com in South Africa.

#### **Our Services and Products**

Bosman Van Zaal South Africa specialises in a wide range of greenhouse systems and agricultural technology that promote efficiency, sustainability, and high yields.

#### **Greenhouse Climate Control**

We provide integrated solutions for creating and maintaining optimal growing environments such as:

- Heating systems that are efficient in regulating temperature.
- Cooling systems offering advanced cooling methods for climate control.
- Ventilation in providing adequate air circulation for healthy crops.
- Control systems offering smart technologies that enable real-time monitoring and automation.

#### **Growing Systems**

Our ingenious growing solutions are designed to maximise both space and production by offering:

- Gutters that are long-lasting structures for effective drainage and plant support.
- Table systems providing adaptable and customisable growing platforms.
- Vertical racking systems offering space-saving alternatives for high-density cultivation.

### Want to know more?

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