



# CHC Controlled Humidity Cabinets

- fastest recovery time on the market



## New materials, new standards

It is quite obvious that new materials require new class of quality and reliability standards. Therefore, every company dealing with Surface Mount Devices and PCB:s needs humidity cabinets.

In order not to lose money, it is important to choose a cabinet that easily can expand when your business does. With our cabinets that fulfil IPC/JEDEC standard J-STD-033B-1, you will not only get the best effect per litre, but also the best value for your money.

### *No more popcorning*

If moisture is absorbed from the environment in surface mounted components and they are exposed to high temperatures, the moisture will expand rapidly, causing internal device stress. This stress can cause internal or external cracking, delamination and corrosion - also called popcorning.

### *CHC Controlled Humidity Cabinets - Best in test*

Our cabinets are made in Sweden, using parts sourced within the EU and are CE certified. They have been rated Best in test by several companies.

“ It is very important that companies involved in the assembly and soldering process of PCB's are aware of the reliability of incoming materials, such as components and bare boards. Especially when they work according to the international standard. Nowadays when a majority of the electronic producers have introduced a lead free process, where the reflow temperature has been raised 30-50°C, the presence of moisture in both components and bare boards is a more critical factor compared to a leaded process. To avoid costly repairs for electronic producing companies, IPC have developed three standards. To ensure that the moisture level can be at an acceptable level, the three IPC standards\* can be a security tool for every electronic manufacturer in order to save both time and costs plus that they can deliver PCBA's with an increased reliability.

Lars Wallin

IPC European Representative



# Expand the cabinets when your business does

You can get our cabinets in sizes that suits your business – from 1 000 litres up to 4 000 litres – using the same dehumidifier, which is placed in the first cabinet, i.e. CHC1000 Small. If you need more capacity, you just get another cabinet and expand it easily up to CHC4000 Extra Large.

The dehumidifying process uses the rotor method, based on a Swedish patent since 1955. The rotor rotates in two separate streams of air. One air stream contains moisture vapour from the cabinet, and the other is heated to remove moisture from the desiccant. This way you do not need any moisture barrier bags, thus speeding up the handling and process.

## *How to save money on our humidity cabinets*

When using CHC Controlled Humidity Cabinets you will save money in more than one way.

First of all our price/litre is far more competitive than others, as you only buy as many litres that you actually need. The bigger size of the cabinet – up to 4 000 litres – the lower your price will be.

Secondly, you don't risk losing your customers because of unforeseen popcorning effects.

Thirdly, our cabinets have the fastest recovery time at the market – from 98 to 5 % humidity in 6,5 minutes!



## *Cabinet packages*

CHC1000 Small	Consists of 1 cabinet 1 000 litres incl dehumidifier
CHC2000 Medium	Consists of 2 cabinets total 2 000 litres incl dehumidifier
CHC3000 Large	Consists of 3 cabinets total 3 000 litres incl dehumidifier
CHC4000 Extra Large	Consists of 4 cabinets total 4 000 litres incl dehumidifier

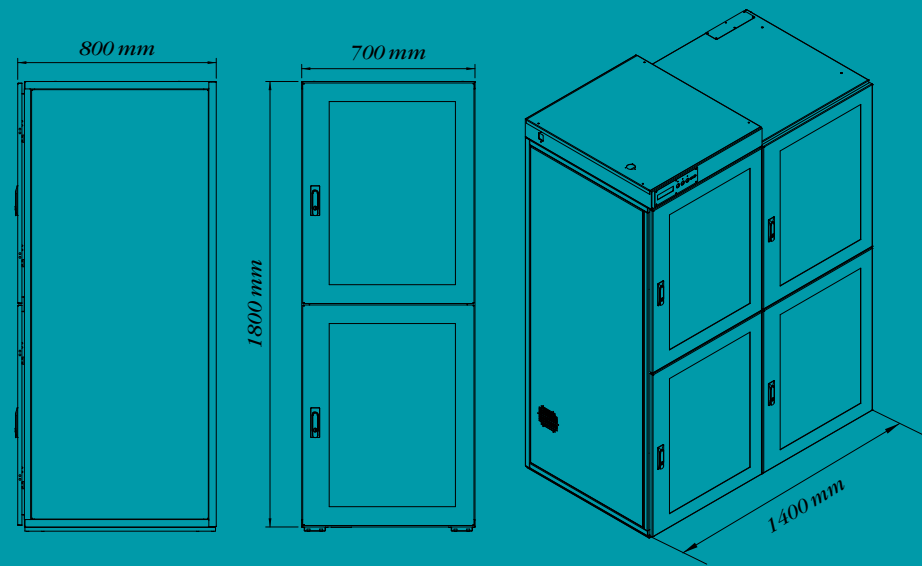
# Unique benefits

Our Controlled Humidity Cabinets can be obtained in modules to cover your present need of moisture free storage. They also have lots of unique benefits:

- Fast recovery time - it takes only 6,5 minutes to reduce the moisture from 98 to 5%.
- The cabinets can be opened as many times as needed during a working day without losing the effect.
- When opening the door the overpressure makes it difficult for humid air to get into the cabinet.
- The cabinets can be supplied with an ionizer in order to avoid static electricity.
- Low energy consumption - only 28 W per hour.
- According to ISO standard the probe has to be calibrated once a year. To make it possible our probe is exchangeable.
- RH meter and digital thermometer are included in the cabinets and can be viewed from outside.
- Sliding and removable shelves made in Al-Zn.
- Fixtures for tape reels and tape feeder cassettes.
- Integrated door handles that can be locked.
- The cabinets are supplied in gloss grey powder coated steel, but can be obtained in any colour of your choice.







### Modular system

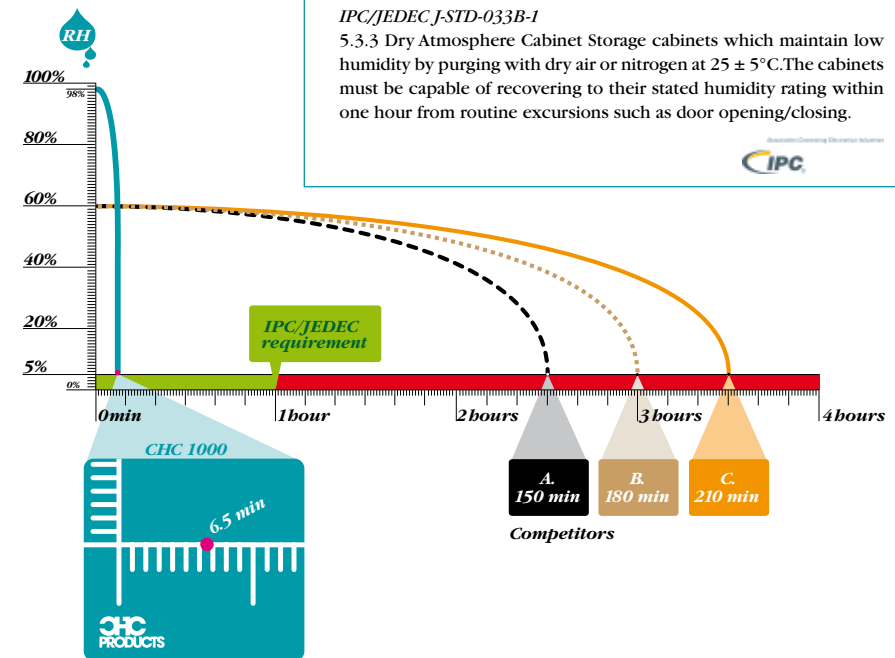
The modules are attached to each other with six screws – two at the top, two in the middle, and two at the bottom. From the first cabinet, containing the rotor that dehumidifies the devices, there is a tube at the bottom leading the dry air through up to three cabinets – four cabinets in total.

### Low energy consumption

In spite of the quick recovery time, the energy consumption is very low. You can open and close the doors up to six times per hour and still consume only 28 W per hour.

### Swedish patent

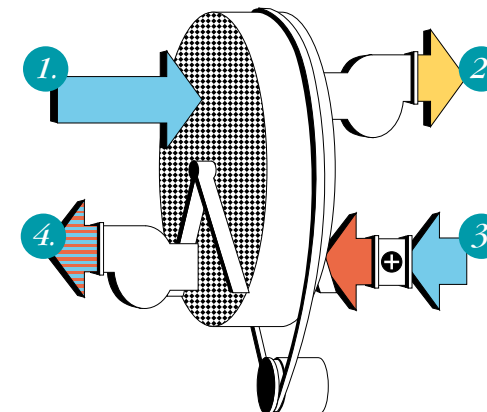
The dehumidifying process uses the rotor method, based on an origin Swedish patent since 1955.



### Quick recovery time

IPC/JEDEC standard requires humidity below 5% in less than one hour in the storage cabinet. The quicker recovery time, the better process window you will get. Our competitors need up to 3,5 hours for the process. With a cabinet from CHC Products it takes only 6,5 minutes to get the humidity from 98 down to 5%\*!

\*s.nr CHC1000 Small 0851060

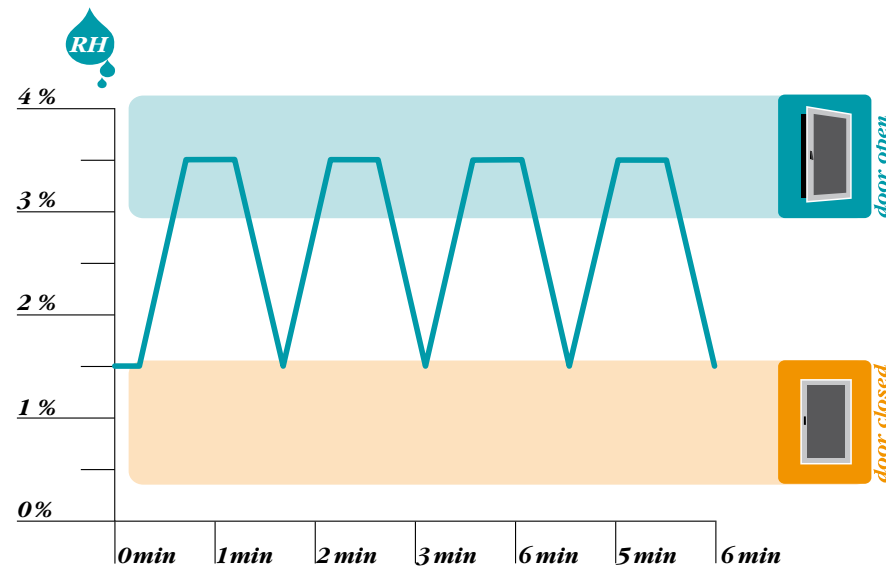


### Rotor

1. Process air "on"
2. Process air "off" dry air
3. Regeneration air "on"
4. Regeneration process air "off" wet air

### *Air barrier*

The air barrier prevents the moist from coming into the cabinet when opening the door. Here you can see the effect when the door is open in 30 seconds and then closed for 30 seconds.



### *Colour of your choice*

The standard colour is grey, but you can get the cabinets in any colour of your choice to fit into your business' environment.

## Technical specifications

	<b>CHC1000* Small</b>
Size	1900 x 700 x 800 mm
Weight	approx 150 kilo
Energy consumption	ave 28 W/h
Recovery time	from 98 to 5% in 6,5 minutes
Standard shelves	2 sliding shelves/cabinet
Standard colour	grey

\* The other cabinets are 100 mm lower and weigh 30 kilos less

### Options

#### *Ionizer*

With a built-in ionizer you will avoid static electricity.

#### *Heat unit*

With a heat unit you can bake the devices at 40°C below 5 % RH, thus saving both time and money.

#### *Hepa filter*

The Hepa filter prevents dust and dirt to come into the cabinets.

#### *ESD colour*

This is a special ingredient in the colour that prevents static electricity to be formed.

#### *Shelves*

Each cabinet is delivered with two shelves but can be obtained with up to 30 sliding and removable shelves made in Al-Zn.

#### *Recycable probe*

According to ISO standard the probe needs to be calibrated every year to reach the requirement. With our unique system you change the probe in less than 5 minutes.

#### *Flexible reel stands*

For reels from 7" to 15".



Matronic i Sverige AB  
Månskärsvägen 10B  
SE-141 75 Kungens Kurva  
Sweden

+46(0)8 556 29 100

[www.chcproducts.com](http://www.chcproducts.com)