### **COTES ADSORPTION DEHUMIDIFIERS**

# CONTROL HUMIDITY WITH THE RIGHT DRY-AIR SOLUTION





According to industry experts

25%

of equipment breakdowns are caused by moisture and corrosion.\*

**HUMIDITY MANAGEMENT** 

# WHAT IS HUMIDITY AND WHAT CAN YOU DO ABOUT IT?

Humidity is the amount of moisture in the air – if you have too much for too long, it will cause issues, which is why you need to get in control.

#### Control the issue before it's too late

No matter your industry or business, problems stemming from airborne moisture and undesirable humidity can have an adverse effect on your business and production output.

#### The Solution

Cotes dry-air solutions help you establish full control over humidity conditions in the essential structures, equipment and processes of your business.

Bacteria and mould



dripping ceilings



Electrical faults



Corrosion and rus



\*read more on www.cotes.com

At Polygon, we are highly impressed with Cotes' dehumidifying solution for the damage service industry."

- Thomas Bernth Poder, Polygon Copenhagen

**COTES DRY-AIR SOLUTIONS** 

# HOW DO YOU BENEFIT?

Effective humidity management gives a degree of control over the operating conditions that are often crucial for the profitability of your business.

Dehumidification technology is the most cost-effective and environmentally responsible way to tackle many of the common issues caused by unwanted humidity in your business processes. It's a relatively straightforward and inexpensive way to implement pro-active measures to combat the negative effects of humidity.

Dry air helps you maintain the value of key structures and other high-value assets, reduce energy consumption, and boost the efficiency of a wide range of industrial processes.

Better control over the moisture in the air gives you:

- Better control of key parameters that affect your raw materials, production processes, manufacturing installations and fixed assets
- A way to actively prevent detrimental conditions and events that include condensation, rust and corrosion, mould and rot, electrical faults and spoilt materials
- Longer service life and better return on investment for structures, buildings and equipment
- **Reduced expenditure** on service, maintenance and refurbishment
- · Lower energy costs and reduced environmental impact



#### DRY-AIR SOLUTIONS FOR

# YOUR BUSINESS AND INDUSTRY

If your business wants to maximise production output or simply needs a world-class dry-air solution, then Cotes provides adsorption dehumidifiers for a range of industries and commercial drying applications — better humidity control, more efficient processes and your peace-of-mind.

#### Food and beverage

If you are a food or beverage producer, quality and hygiene are top priorities, and you understand that unwanted humidity in your production is not a risk that you can take.

- · Breweries
- · Meat processing facilities
- · Fish industry
- · Dairy processing facilities
- · Wineries
- · Confectionery manufacturing

#### Infrastructure

If you work with infrastructure, durability and long-term performance are critical. You know that uncontrolled humidity can lead to corrosion, structural damage, and increased maintenance—risks that must be managed proactively.

- Waterworks
- · Power plants
- · Airports
- · Building drying
- · Sports facilities
- · Facility management

#### Storage

If you operate in storage, preserving the condition of goods and materials is your top priority. Excess humidity can cause mould, corrosion, and degradation—threats you can't afford in a controlled environment.

- · Cold storage
- · Warehouses
- · Product drying and storage
- $\cdot$  Car storage
- · Boat storage
- · Archives, museums and libraries

# DRY-AIR SOLUTIONS SUITED FOR YOUR NEEDS

# **COTES LIGHTWEIGHT**

Designed as a lightweight alternative to the mobile line, these dehumidifiers are extra light compared to the capacity they can deliver, making it the ideal solution for diverse application where transporting the unit and easy installations are needed.

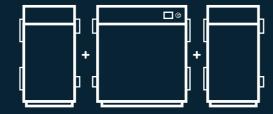


A selection of compact dehumidifiers built for mobility, with a handle for easy lifting and transportation.



# **COTES MODULAR**

A range of off-the-shelf dehumidifiers in different sizes and capacity, with add-on modules you can select to meet specific requirements.



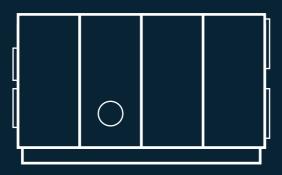
# **COTES HYBRID**

Adsorption dehumidifiers with moisture condensation technology that create a closed circuit that condenses moisture from the regeneration air without the need for ductwork. An efficient drainage system ensures flexible installation, adapting to a wide range of installation conditions.



# **COTES STANDARD FLEXIBLE**

A range of dehumidifiers engineered to handle large volumes of air. These units are built for manufacturing environments where strict humidity control is essential to ensure product quality, process efficiency, and consistent performance.



# **COTES LIGHTWEIGHT**

The CL26 is an innovative and game-changing adsorption dehumidifier developed to redefine building drying processes. This lightweight (only 10,8kg) yet powerful unit combines mobility, efficiency, and ease of installation in a way that has never been seen before in the industry.

What sets the CL26 apart is not just its lightweight and performance, but also its ease of use. With our patent-applied Cotes Window Kit, installation takes just 30 seconds.

The CL26 dehumidifier is applicable to drying of smaller spaces. Some industries include:

- Building drying
- · Drying after water damage
- Boat drying
- Garages
- Attics
- Basements
- · Equipment rental services

#### CL26

Moisture removal capacity:
High capacity mode 1.1 kg/h
Low energy mode 0.8 kg/h
Connected load: 1.01 - 1.57 kW

#### CL26



## **COTES MOBILE**

Lift it, push it, turn it or swing it around, this selection of compact, mobile dehumidifiers is built for easy handling.

With a handle for easy lifting and transportation, these are popular for:

- · Ad hoc/quick-fix dehumidification requirements
- · Aircraft, vehicles and boats
- · Building, construction and renovation
- Equipment rental services
- · Recovery and repair after flooding and water damage
- Small-scale dry storage
- · Waterworks and pumping stations

#### CR80R\*

CK80B,	
Moisture removal capacity:	0.44 kg/h
Connected load:	0.83 kW
CR240B	
Moisture removal capacity:	0.8 kg/h
Connected load:	1.05 kW
CR290B	
Moisture removal capacity:	1.1 kg/h
Connected load:	1.63 kW
CR400B	
Moisture removal capacity:	1.4 kg/h
Connected load:	1.97 kW



### **COTES MODULAR**

A range of standardised off-the-shelf dehumidifiers in different sizes and capacities, with option of add-on modules you can select to meet specific requirements. These modular dry-air solutions cover a large range of industrial applications like:

- · Food and Beverage Industry
- Storage
- Sports facilities
- Archives
- Buildings and bridges
- Utility operations

#### CR100

#### Standard specifications overview

Moisture removal capacity:	0.6 kg/h
Connected loads	N 95 KW

#### C30

#### Standard specifications overview

Moisture removal capacity: 0.9 - 1.9 kg/h Connected load: 1.4 - 2.9 kW Compatible modules: Air condensation and Heat recovery

#### C35

#### Standard specifications overview

Moisture removal capacity: 3.3 - 5.6 kg/h
Connected load: 5.1 - 8.8 kW
Compatible modules: Air condensation, heat recovery,

pre/post cooling and post heating

C30, C35 and C65 come in variations specifically adapted for controlling humidity at temperatures down to -25°C for cold storage/freezer facilities.

#### C65

#### Standard specifications overview

Moisture removal capacity: 7.8 - 19.1 kg/h
Connected load: 8 - 33.8 kW
Compatible modules: Heat recovery included, pre/post cooling and post heating

#### C105

#### Standard specifications overview

Moisture removal capacity: 25.1 - 50.5 kg/h
Connected load: 38 - 75 kW
Compatible modules: Heat recovery,
pre/post cooling and post heating

#### C105



### **COTES HYBRID**

With stainless-steel cabinets and a low-noise fan, these units offer versatile placement and quiet operation.

Without the need for ductwork, they create a closed circuit that condenses moisture from the regeneration air.

An efficient drainage system ensures flexible installation, adapting to a wide range of installation conditions, for example:

- · Cleaning and drying
- · Building drying
- Tunnels
- Basements
- · Old buildings, churches, castles

#### CH22

#### CH26





#### CH22

#### Standard specifications overview

Moisture removal capacity:	0.39 kg/h
Connected load:	0.75 kW

#### CH26

#### Standard specifications overview

Moisture removal capacity:	0.6 kg/h
Connected load:	1.6 kW

### **COTES STANDARD FLEXIBLE**

Cotes Standard Flexible dehumidifiers are designed for large-scale humidity management. These units are made for flexibility allowing for easy integration with a complete HVAC system due to the built-in Siemens controller. This ensures effectiveness, versatility and reliability.

This range of well-engineered, energy-efficient, reliable dehumidifiers are robustly built and designed for ease of use, maintenance and operation in industries like:

- Ice rinks
- Industrial air supply
- Powder packaging lines
- Sport facilities
- Food and Beverage Industry
- · Pharmaceuticals
- Warehouses



#### C125

#### Standard specifications overview

Moisture remova	l capacity:	65 kg/h
Connected load:		93 kW
Nominal air flow:		12.000 m³h

#### C150

#### Standard specifications overview

Moisture removal capacity:	103 kg/h
Connected load:	147 kW
Nominal air flow:	18.000 m³h

#### C180

#### Standard specifications overview

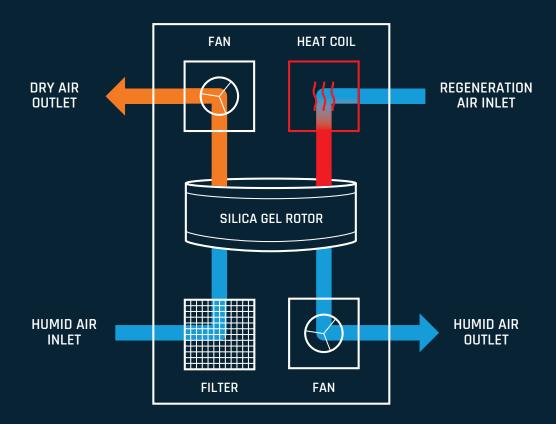
Moisture removal capacity:	138 kg/h
Connected load:	199 kW
Nominal air flow:	25.000 m³h

#### C194

#### Standard specifications overview

Moisture removal capacity:	173 kg/h
Connected load:	249 kW
Nominal air flow:	35,000 m <sup>3</sup> h

# **HOW IT WORKS**



#### **ADSORPTION DEHUMIDIFICATION**

The effect of Cotes adsorption dehumidifiers basically stems from the action of two flows of air. The process is self-sustaining and requires little maintenance.

The silica rotor removes moisture from the intake airflow and the second airflow removes moisture from the silica rotor which is transported out of the building or structure.

Depending on your choice of the Cotes dry-air solution rotor configuration, the regeneration inlet and fan setup will look different.

