



Make irresistible  
confectionery

# Climate control

Munters is a world leader in climate control with an extensive range of products and services that help our customers achieve their confectionery products production goals.

Humidity control is critical in the processing of confectionery products that are manufactured with hygroscopic materials sensitive to high moisture levels. Munters offers air treatment solutions to reduce the effects of moisture in the transport of raw materials, throughout the production process, and in the packaging and storing of confectionery products.

## Munters dehumidification solutions

All Munters dehumidifiers provide efficient and consistent humidity control, regardless of the ambient or outdoor conditions. They ensure consistent conditions for manufacturing all year round with

our patented Honeycombe® rotor technology: two air streams pass simultaneously through two sectors of the desiccant rotor. One air stream is dehumidified to the required humidity level. The other air stream dries the rotor so it can absorb moisture again and this accumulated moisture is then exhausted away externally.

We deliver cost effective solutions at the highest quality level, manufactured under strict control regulations in our ISO 9001: 2015 and 14001 certified facilities. In addition, our systems can be custom designed according to your requirements.



Munters climate control expertise



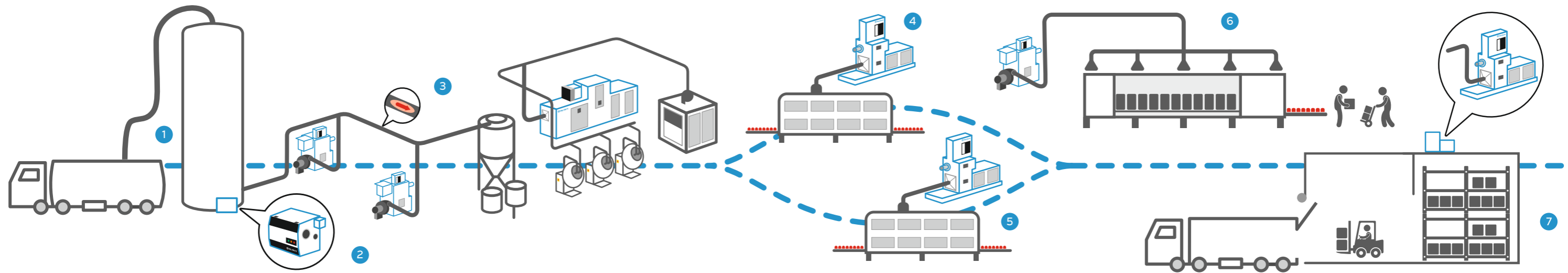
Proven production process solutions



Reduced OPEX

## Benefits

- Production processes are optimized and remain constant all year round.
- Ingredient quality is maintained to ensure consistent final product quality.
- Up to 30% lower energy consumption
- Clumping and sticking of ingredients is eliminated during transport and storage resulting in improved production.
- Precise control of humidity and temperature during production process is secured, yielding the highest quality finished product.
- Moisture levels during packaging and final storage are reduced to maintain product quality and significantly improve shelf life.



# Munters production process solutions

## 1. Transport, unloading & silo storage

Too much lost time and scrapped ingredients due to mold and product clumping in your silos? A Munters dehumidification system can maintain low humidity levels all year round to maintain ingredient quality and consistency, and stop ingredient clumping and sticking in the silo and piping.

## 2. Pneumatic transport

Does your pneumatic transport system slow down due to clogging and limit flow, causing product quality issues from moisture and mold in ingredients? Munters desiccant dehumidification systems can maintain optimum humidity levels and prevent material degradation, process downtime, and waste. You'll experience improved productivity & quality, and reduced operating costs.

## 3. Coating machine

Coating processes need precise conditions for optimal results, including low moisture levels. Munters dehumidification systems offer year-round precision and easy adjustments for consistent high-quality confectionery, reduced drying times, and less waste. Humidity control during drying also prevents uneven drying and quality issues.

## 4. Drying tunnel

Is drying tunnel performance inconsistent, resulting in quality issues like soft finish, water spots, and uneven quality? Munters can help. Our desiccant dehumidification systems will blanket your drying tunnel with dry air, improving humidity levels for consistent results and improved product quality. Lowering the drying air temperature is also possible, which improves product quality, reduces energy usage, and lowers post-cooling temperatures.

## 5. Cooling tunnel

To optimize your cooling tunnel's efficiency and product quality, it's important to adjust the cooling coil leaving air temperatures. However, this can be limited by condensation or frost on the coils. Munters dehumidification system can maintain low dew points to prevent these issues, providing flexibility with products and menus.

## 6. Packaging

Maintaining optimal environmental conditions during the packaging process is critical for fresh, high-quality products with longer shelf life. Munters dehumidification units provide consistent low temperatures and humidity levels, ensuring top product quality, appearance, and packaging efficiency regardless of ambient air conditions.

## 7. Storage

To prevent reduced product quality and packaging, it's crucial to keep humidity levels low when storing products with minimal cooling. A Munters dehumidification system can consistently deliver low moisture conditions at any ambient condition, reducing energy consumption while maintaining precise control.

## Below freezing

A Munters dehumidification system eliminates frost build-up and ensures product quality, worker safety, and efficient operation of refrigeration equipment in freezing storage.

# Your partner in production process improvements

## Meeting your needs

From transport and unloading, to coating, to packaging and storage, humidity control is critical to confectionery process and quality. Munters dehumidification solutions can deliver consistent and precise environmental control to meet the varying specification required throughout all areas of your plant. Each facility may demand different specifications due to location, climate, equipment and ingredients. In order to fully understand your specific needs, a complimentary site review with the customer, contractor or engineer and Munters sales engineer is a good first step. required humidity level. The other air stream dries the rotor so it can absorb moisture again and this accumulated moisture is then exhausted away externally.

## Site review

During a walk-through of the areas requiring humidity control, our sales engineer and support team will review process air treatment issues, gathering information that will help define a solution. Our proposed solution can include Munters equipment, drawings, utility data and energy analysis that, working closely with the customers' team, can become a plan to improve process productivity, quality and consistency. By exchanging information and working closely together, customers benefit from Munters extensive application experience – and this relationship continues throughout the lifetime of Munters equipment, not just the sales process.



# Working together to meet your sustainability goals

Sustainability is a complex concept, but two key elements that many companies are focusing on are improving operational efficiency and reducing their carbon footprint. At Munters, we believe in creating sustainable solutions that help our customers meet, and exceed, their sustainability goals. Our dehumidification solutions for confectionary processing are designed with sustainability in mind.

## How do desiccant dehumidifiers impact sustainability?

Desiccant dehumidifiers are large consumers of high-grade heat, with steam or natural gas being the most common sources of reactivation heat. For larger size dehumidifiers, which are common in confectionery plants, reactivation heat is generated by burning fossil fuels either directly or indirectly. This has a negative impact on sustainability and operating costs of the confectionery plant.

## Using waste heat to your advantage

To help candy makers further reduce operating costs and limit or eliminate fossil fuels in their production facilities, Munters has designed a solution that enables our desiccant dehumidifiers to operate using low-temperature reactivation heat at typically 71-82°C (160-180°F) instead of high-grade reactivation heat of 120-150°C (250-300°F) as the primary source of heat for the dehumidification system. By using low-grade heat for reactivation, we are able to reduce the need for high-grade heat sources and provide you with a more cost-effective, fossil-free solution. Our new heat source option can be implemented in the design for new projects or added at existing plants in a retrofit of existing Munters dehumidification systems.

## Optimized energy efficiency

When it comes to energy efficiency, Munters is the clear winner. Our state-of-the-art dehumidifiers are the most energy-efficient on the market. With our patented Green PowerPurge™ technology, we can boost performance while reducing energy consumption during reactivation and process air post-cooling. This can result in significant savings of up to 30% in energy consumption.

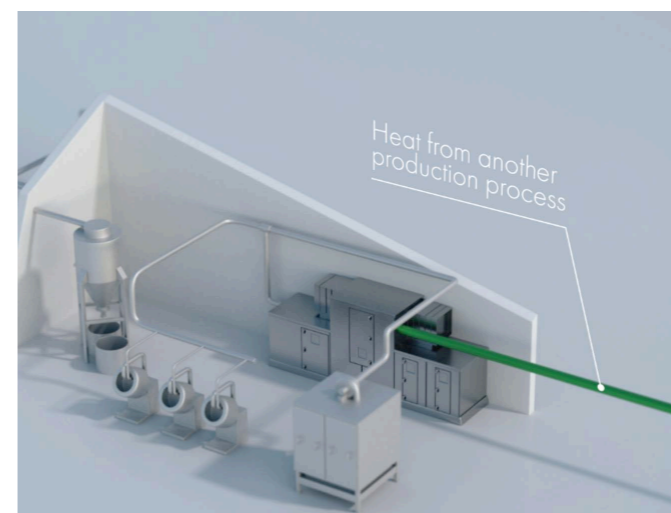
Our cutting-edge technology allows us to offer dehumidifiers that are so efficient, you can use a smaller unit and still get the same performance. This means you'll save money on capital expenses (CAPEX) while enjoying the same level of performance. Additionally, our low-grade waste heat technology uses cost-effective and eco-friendly energy sources, allowing you to reduce your operating expenses (OPEX) even further.

By partnering with Munters, you can rest assured that your confectionery business is utilizing the most energy-efficient and cost-effective solutions available. Take advantage of Munters technology and expertise to optimize your energy usage and save on costs.



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# Climate solutions for the future

And for your mission-critical processes

Founded in Sweden in 1955, Munters today has 20 manufacturing facilities across the globe and sales offices in more than 30 countries. With approximately 4,000 employees worldwide, we have net sales approaching \$1 billion USD.

Munters is a global leader in climate solutions for mission-critical processes. We offer innovative, efficient, sustainable solutions for controlling humidity and temperature, recovering energy, treating emissions, and using evaporative cooling for comfort, manufacturing, and environmental protection.

Sustainability is an important aspect of our business strategy and value creation. Our solutions help customers use resources efficiently, reducing their climate and environmental impact, ultimately contributing to a better climate and reduced carbon emissions.



## Munters Service portfolio

At Munters, we are committed to offering a complete portfolio of service offerings to support you throughout the entire lifecycle of your Munters equipment.

### Commissioning support

Our trained service technicians make sure your equipment is operating as designed so your investment gets the best possible start. We offer everything from basic unit start-up to extensive turnkey installations.

### Maintenance

Keep your equipment running like new with on-site visits by factory-trained technicians and regular rotor performance checks.

### Retrofit and upgrade

Boost energy efficiency and capacity with our retrofit solutions for equipment already in operation.

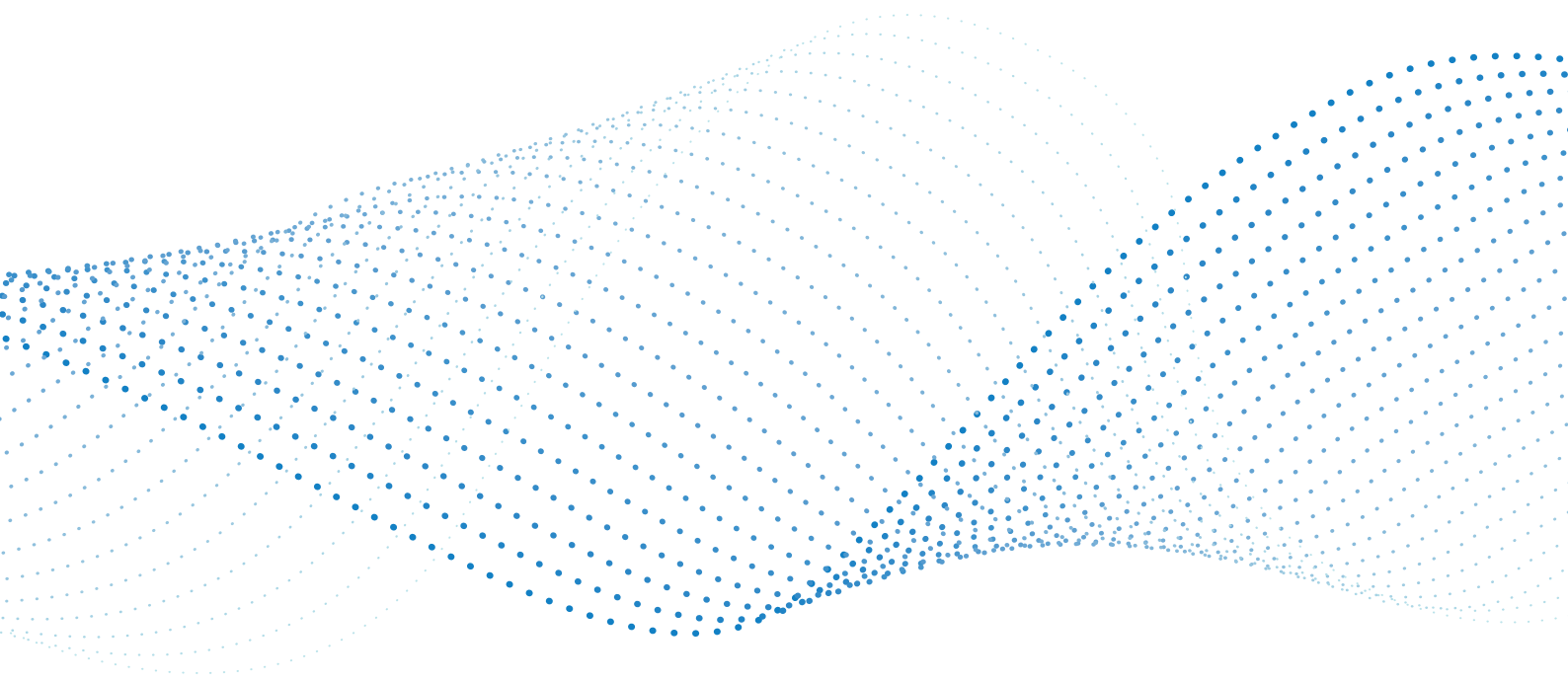
Upgrade controls, replace your rotor or upgrade your fan to maximize performance, save money and energy. Munters also custom fabricates zeolite blocks for replacement of all zeolite and carbon rotor systems.

### Munters Service Agreements

Ensure that your Munters equipment always performs according to specifications. Munters Service Agreements, tailored to your needs, offer industry-leading lifecycle care for your equipment – and peace of mind for yourself.

### Munters Genuine Parts

We use only Munters Genuine Parts, which are designed, tested, and verified to ensure that each part meets or exceeds specifications. Convenient service kits are made to make maintenance simple.



Munters is a global leader in energy-efficient air treatment and climate solutions. Using innovative technologies, Munters creates the perfect climate for customers in a wide range of industries.

Munters has been defining the future of air treatment since 1955. Today, around 4,000 employees carry out manufacturing and sales in more than 30 countries.

For more information, please visit [www.munters.com](http://www.munters.com)