

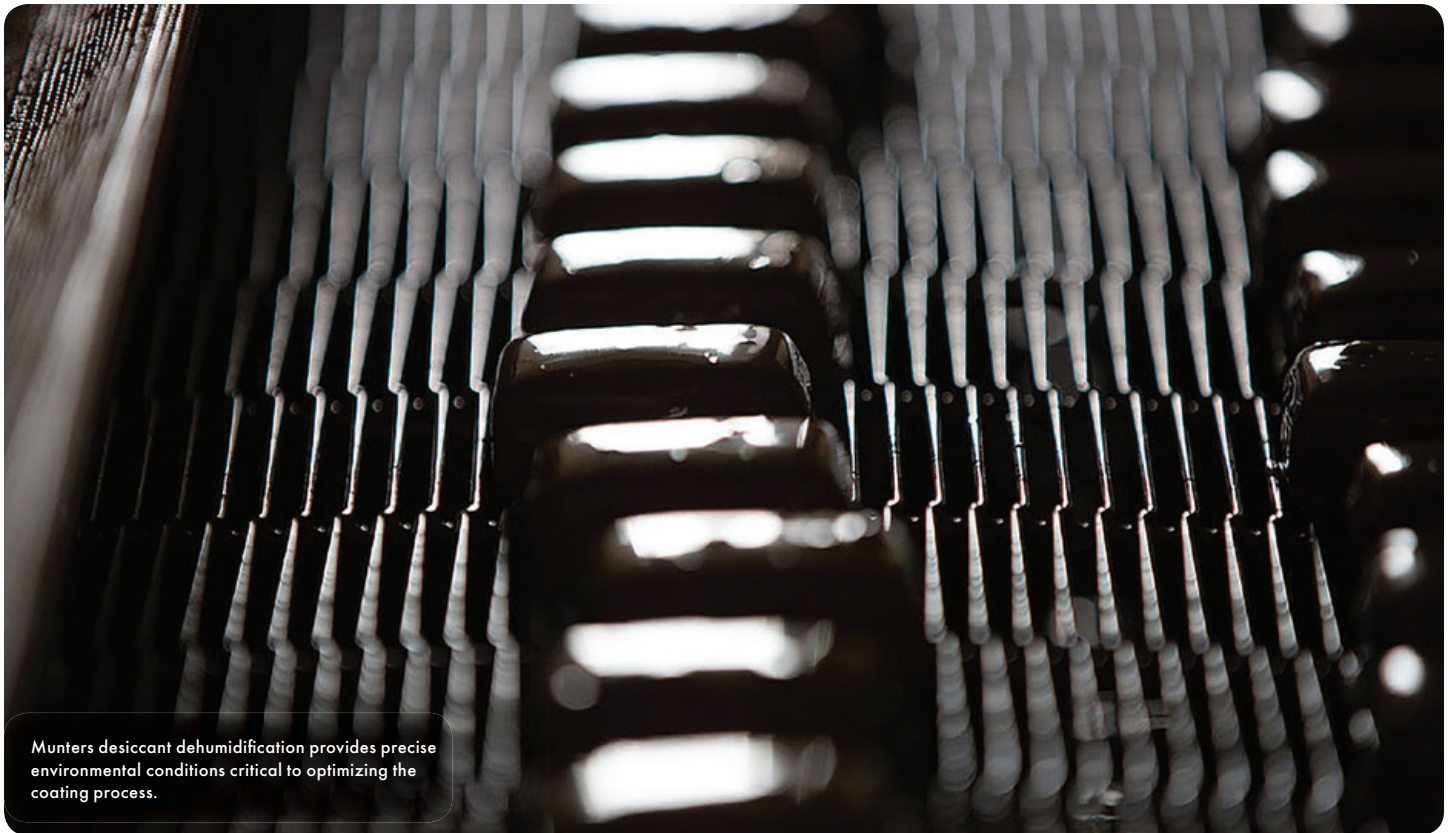
CONFECTIONERY



Better, faster, longer lasting

Improve quality, consistency and productivity of confectionery products.





Munters desiccant dehumidification provides precise environmental conditions critical to optimizing the coating process.

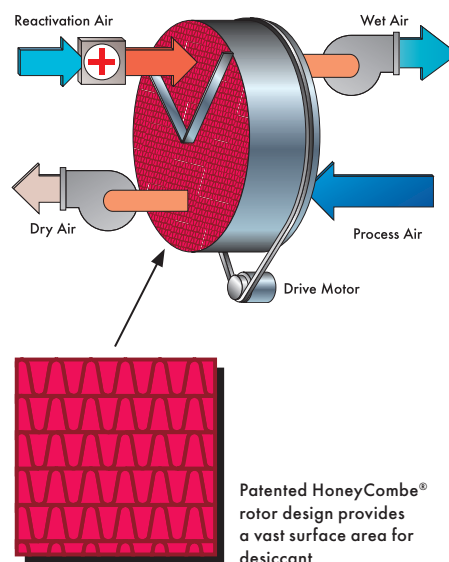
Climate Control

Munters is the world leader in humidity 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 which are manufactured with hygroscopic materials sensitive to high moisture levels. Munters offers air treatment solutions to reduce effects of moisture in the transport of raw materials, throughout the production process, and in the packaging and storing of confectionery products.

Munters Dehumidification Solution

All Munters dehumidifiers provide efficient and consistent humidity control regardless of the ambient or outdoor conditions, ensuring 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.

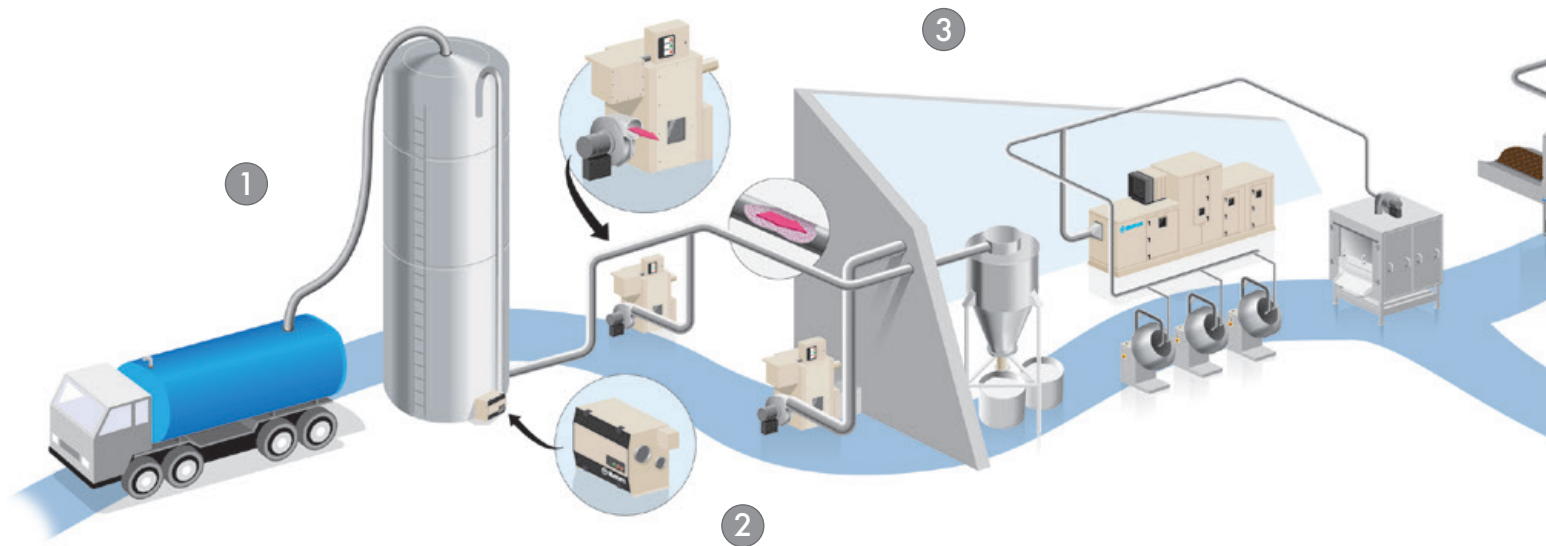
We deliver cost effective solutions at the highest quality level, manufactured under strict control regulations in our ISO 9001: 2015 and 14001 certified facilities. In addition, our systems can be custom designed according to your requirements.



Benefits

- Production processes are optimized and remain constant year round.
- Ingredient quality is maintained to insure consistent final product quality.
- 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 insured, 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 Dehumidification Reduces Moisture Throughout the Production Process



1. Transport, Unloading & Silo Storage

Regularly cleaning out clumped and moldy silos? 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 in your silo and transport piping year round to maintain ingredient quality, ingredient consistency and end clumping and sticking of ingredients in the silo and piping.

2. Pneumatic Transport

Is your pneumatic transport system slowing down your process by plugging with set product and limiting flow? Do you have product quality issues because of moisture and mold in ingredients that are transported by pneumatic conveying? Does your pneumatic transport system cause problems when the ambient humidity levels rise or when exposed lines come in contact with cold ambient temperatures? Munters can provide a solution to maintain humidity levels at optimum conditions for pneumatic transport to eliminate clogging, mold, material degradation and process downtime with an energy efficient and effective desiccant dehumidification system. This contributes to higher productivity, better quality, less waste and reduced operating costs.

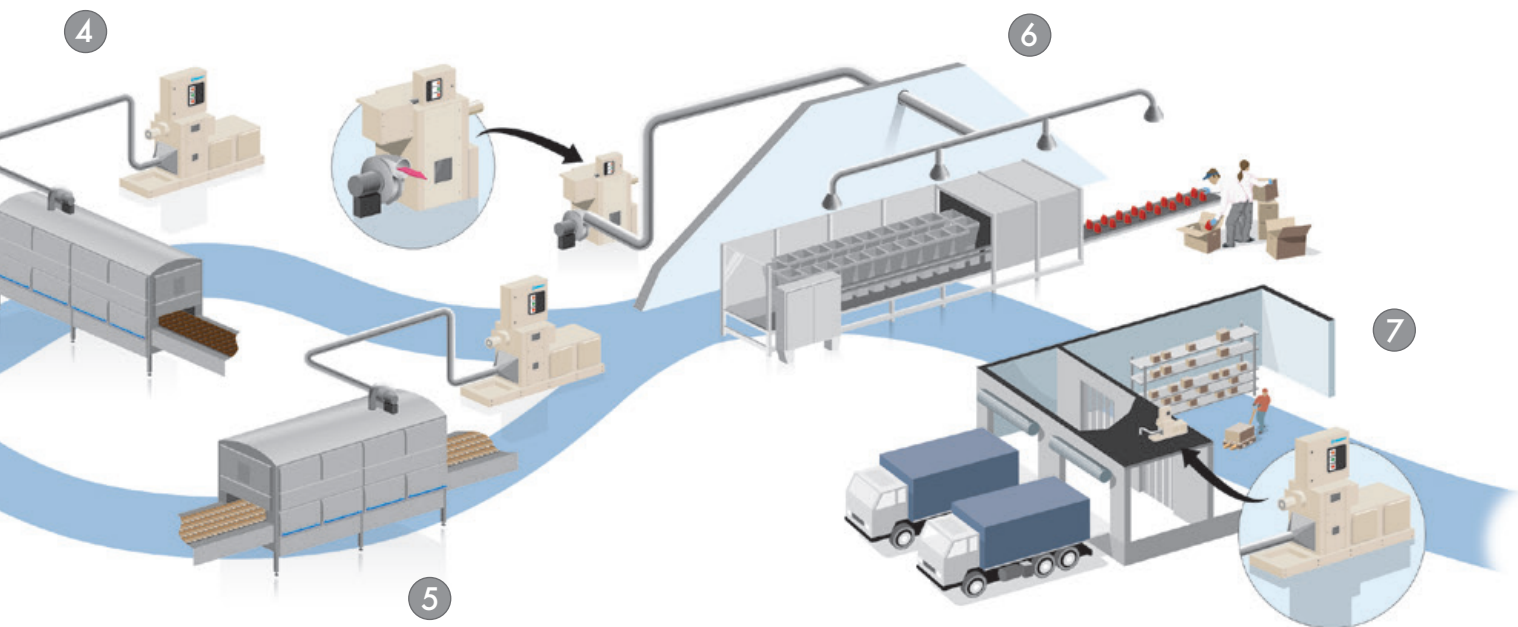
3. Coating Machine

Most coating processes perform best in a very narrow and specific set of environmental conditions. Usually those conditions include a moisture level low enough for maximum moisture absorption from the coating. A Munters desiccant dehumidification system can provide very precise environmental conditions any time of year with the ability to easily adjust those conditions to account for changes in product and coatings. This yields consistently high product quality year round, reduced drying times, less energy usage and reduced product waste. Humidity control during product drying processes for products such as gum and jellied items eliminate uneven drying, karyolymph, and quality defects.

4. Drying Tunnel

Is drying tunnel performance inconsistent, resulting in product quality issues like soft finish, water spots and inconsistent finish quality? Do you have to adjust the flow through your drying tunnel seasonally, or even daily, to get consistent results? If so, Munters can solve these problems by blanketing your drying tunnel with dry air from a desiccant dehumidification system. This gives your drying process consistent humidity levels which in turn yields consistent results and product quality.

Another benefit of blanketing your drying tunnel with dehumidified air is that it allows the option of lowering the drying air temperature which can improve product quality, reduce energy expenditure, and the product will leave the drying tunnel at a lower temperature which can reduce post cooling.



5. Cooling Tunnel

To operate your cooling tunnel at its highest efficiency, and for the best product quality, it is essential to have the ability to adjust the cooling coil leaving air temperatures to the optimum set points. This is sometimes limited by the formation of condensation or frost on the coils, or in the tunnel itself. A Munters dehumidification system can maintain the dew point in your tunnel low enough to avoid condensation or frost issues for a wide range of coil temperature settings. This provides you flexibility with product, through-put and menus.

An additional benefit to incorporating a Munters dehumidification system with your cooling tunnel is the ability to raise the refrigerant suction temperature, or the chilled water temperature of your cooling coils. In doing so, there will be less frost on the coils and a significantly reduced latent load on the coils. This increases the efficiency of the cooling system.

6. Packaging

To insure the freshest, highest quality product with the greatest shelf life it is critical to maintain optimum environmental conditions during the packaging process. This usually requires low temperatures and humidity levels which a Munters dehumidification unit can provide on a consistent basis, regardless of ambient air conditions. Maintaining these conditions consistently insures the greatest product quality, appearance, shelf life and increases the speed of the packaging process.

7. Storage

For storage of products with minimal cooling it is important to keep humidity levels low to avoid product moisture regain and packaging moisture absorption, both of which can lead to reduced or unacceptable product quality and packaging. A Munters dehumidification system can deliver these low moisture conditions consistently, at any ambient condition, and with precise control to reduce energy consumption.

BELOW FREEZING

For storage of products at or below freezing temperatures, frost build up on coils, freezer doors, walls and product can become serious issues effecting product quality, worker safety, and efficient operation of the refrigeration equipment. A Munters dehumidification system can eliminate all these issues by lowering the moisture levels in the freezer and eliminating frost build up.

Your Partner in Production Process Improvements

Meeting Your Needs

From transport and unloading into silos, 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 specifications 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.

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 through the life of Munters equipment, not just the sales process.



The low humidity and temperatures required for successful packaging can be provided by Munters year round, despite ambient or seasonal fluctuations.



A Munters environmental solution provides optimum process conditions and product quality year round for critical processes such as coating.



Service



Why Munters Service?

Munters Service is dedicated to helping our customers optimize the value of their equipment through planned maintenance programs. Drawing from over 60 years as the leading manufacturer of air treatment technology, Munters has developed service programs that extend the life of our equipment, optimize its performance and assure continuous operation.

ServiceCaire Maintenance Programs

Field experience has repeatedly shown that customers who employ planned maintenance can substantially extend their equipment life. By eliminating failures before they can occur, customers maximize both the utilization of Munters equipment and also lower the overall

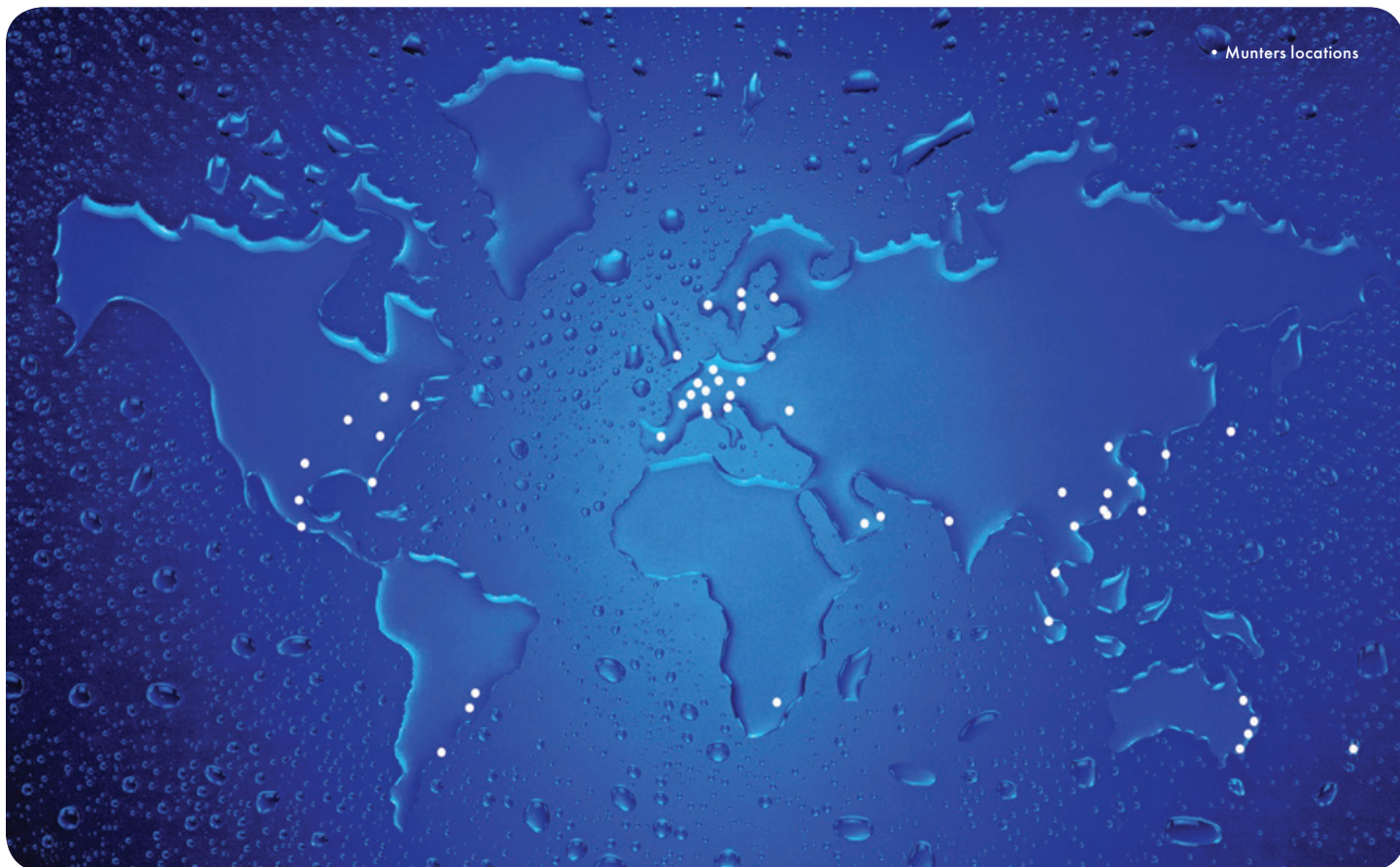
cost of ownership. The program includes a pre-determined number of visits and defined scope of work for specified equipment, or custom programs can be tailored to specific needs.

Parts

In most cases, parts will ship out together the same day you call. Convenient spare part kits provide exact parts & intervals for guided self-service or service contracts to provide all PMs.

Engineered Retrofits

Munters can retrofit your existing system to increase capacity, improve performance, extend unit life and greatly reduce energy consumption.



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, the largest being food, pharmaceutical and data center sectors. Munters has been defining the future of air treatment since 1955. Today, around 3,500 employees carry out manufacturing and sales in more than 30 countries. Munters reports annual net sales in the region of SEK 6 billion and is listed on Nasdaq Stockholm.

For more information, please visit www.munters.com.

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