



INDUSTRIAL

General Manufacturing



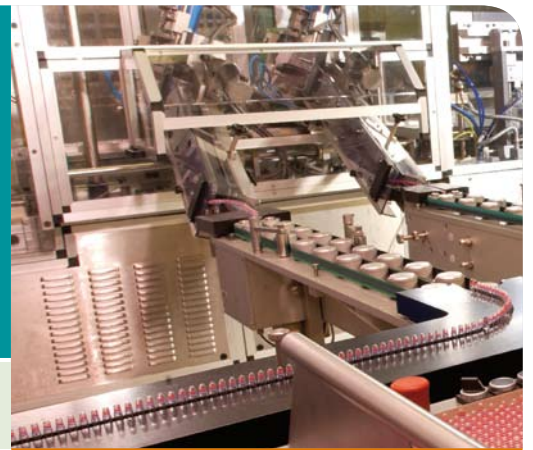
Property Damage Restoration



Temporary Humidity Control



Property Damage Prevention



APPLICATION

Overview

Munters' Temporary Humidity Control Service provides a solution for manufacturing companies who experience problems such as corrosion, condensation, mould/fungus and moisture regain. Utilising experience in controlling humidity, all Munters' technicians have a vast knowledge of what is required to achieve the optimum climate for manufacturing.

Temporary humidity control is necessary during periods of the year when moisture content is at its highest. The most effective way to protect products and maintain various manufacturing processes is to control the surrounding environment. This is achieved by using Munters' dry air system, which is the simplest, most precise way of achieving and controlling humidity conditions.

All materials corrode, they change from one form to another through chemical reactions, and these reactions are accelerated with the presence of moisture. Corrosion is most common with metals such as iron and steel, therefore any processes or storage systems using these materials would benefit from temporary humidity control.

Some manufacturing processes are subject to condensation for example, refrigerated display cases in supermarkets, refrigerated warehouse floors, typewriter ribbon film coating and rock cave storage. In these cases, dehumidifiers can be installed to surround the cold surface with dry air to eliminate condensation problems.

Mould and fungus are present in almost all materials. They can survive without moisture and can remain dormant for long periods of time, only thriving when moisture is present. The most effective method to prevent mould growth is to restrict the amount of moisture in the air through dehumidification. Since mould can affect such a huge number of materials, there is a risk of it at all stages of manufacturing and storage procedures, so humidity control is crucial.



Production line.



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APPLICATION (CONTINUED)

In addition to mould, virtually every substance has some affinity for moisture. Even plastic resins such as nylon can collect six to ten percent of their dry weight in water vapour. Moisture regain can affect critical dimensions just like thermal expansion, or make products that would otherwise flow freely stick together. In packaging machinery, sticky products have major economic consequences that can only be avoided with a controlled environment.

During manufacture, it is necessary to dry certain products, such as photographic film, cork, yeast and high voltage transformers. Most products are dried using hot air to vapourise moisture and carry it away. However, the hot air process can be too slow or result in damage to the product. Dehumidifiers can be used to dry products removing the potentially damaging method of vapourisation that is caused by heat.

Using their own manufactured dehumidifiers, Munters provide custom-designed air dehumidification solutions for all manufacturing situations. Based on vast experience and knowledge, Munters has developed a range of dehumidifiers tailored to various manufacturing environments to enable them to run reliably and efficiently, no matter what the clients' conditions.



Food production line.

PROCEDURE

In order to ensure that the equipment is tailored specifically to each case, a Munters technician will visit the site to analyse the area and recommend suitable equipment. Munters have specific units for specific industries to avoid contamination, so a unit used in industrial manufacturing will not then be used in a cold storage environment.

Munters pre-service and check all equipment, including ducting and ancillary items before delivery. The equipment is then situated in an agreed area.

Munters provides a turnkey solution with well engineered equipment offering a round the clock service that is unmatched in the industry.

RESULTS

Munters specifically design and develop dehumidification systems with an automatic defrosting function which starts to reduce ice and snow formation as soon as the unit is connected to a power supply.

Munters' technology eliminates problems such as corrosion, condensation, mould/fungus and moisture regain and is ideal for environments in which products are dried.

Manufacturing processes and storage options become more efficient and hygiene is improved. In storage Munters' dehumidifiers increase shelf-life and protect goods from moisture damage.



Ducting in a production facility.

BENEFITS

The Munters' dry air system is the simplest, most precise way of achieving and controlling accurate humidity conditions. Other benefits include:

- Considerable energy cost savings, incorporating environmentally-friendly technology
- Controlled humidity providing improved production capacity and hygiene conditions
- Increased product quality and shelf-life
- Cost effective so capital and operating costs are low
- Less mechanical failures – reduced maintenance costs
- Excellent and varied product range ensuring a solution for all individual cases
- A strong After Sales Organisation to support our customers to get the best out of our equipment.