Munters Dehumidification

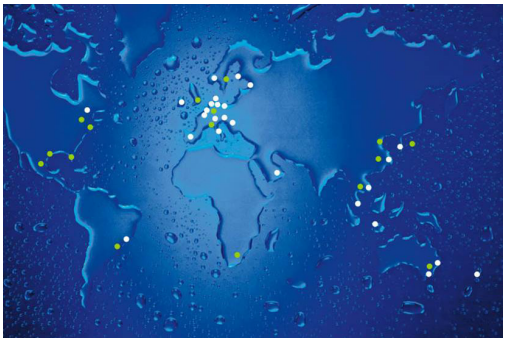
Our technology, experience and people make the difference

Munters

The Humidity Expert

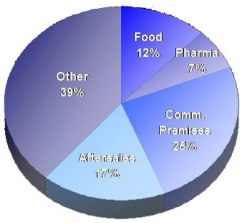
In control of your climate with Munters

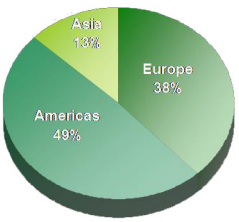
Munters - your sustainable worldwide partner



Since Carl Munters invented the desiccant rotor more than 50 years ago, Munters AB has developed into the global market leader in desiccant dehumidification. Today - listed on Stockholm Stock Exchange - with offices in 30 countries, 4,000 employees and more than 300 branches, we guarantee you a first class partnership wherever you are situated.
We provide energy efficient climate control for comfort, process and environmental protection. Our international network ensures a competent and fast-reacting organization across borders, with skilled employees having happy customers as their number one target.

Big or small - all customers are important to us





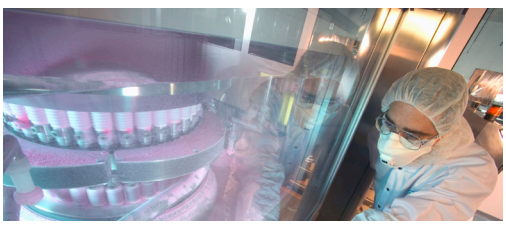
Daily we serve all types of customers around the world - from one-man entrepreneurs to the worlds largest industrial players. To us all customers deserve the utmost attention - no matter their size, branch or position. Holding a strong position as supplier to customers in the food- and pharmaceutical industries, we are constantly enlarging our scope of customers, developing products and solutions for new and interesting applications and industries.

Our strategy and vision

Munters AB has set the strategy for the future.
To continue the healthy growth of the company we are constantly developing new energy-efficient products to serve our customers in the best way possible all over the globe, with Asia as a region with an enourmous potential. Together with scope expansions Munters expect to see a significant growth for the benefit of customers, share holders and employees.

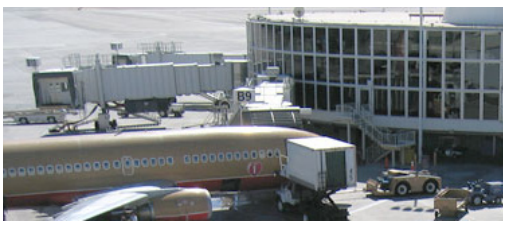
Three Business Areas to serve you

DH Industrial



This is our largest business area, offering air treatment and control for industrial processes. Key market segments are the food and pharmaceutical industries, where humidity can have a very adverse effect on product quality in the production-, handling- and storage phases. The Munters dehumidification system enables producers to control humidity at the desired levels, with the most energy-efficient solutions in the market.

DH Commercial

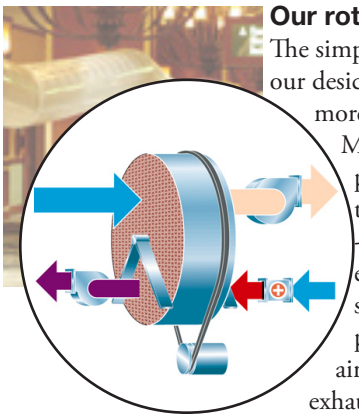


This business area specializes in humidity and temperature controls for commercial spaces such as supermarkets, schools, restaurants, airports and hospitals.
As in Industrial's operations, customers in this segment focus increasingly on energy consumption and life cycle costs. Our systems for combined dehumidification and airconditioning allows for separate controls of temperature and humidity, with market-leading energy efficiency.

DH Zeol

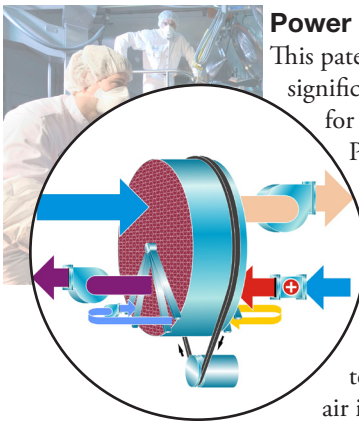
The Zeol Division is the world leader in supplying zeolite rotor concentrators for VOC abatement. Environmental regulators are increasing manufacturers' requirements to install control technology to remove volatile organic compounds from process exhaust streams. Zeol systems are the cost-effective answer for treating large process flows containing low concentrations of solvent exhaust.
Zeol customers include many of the leading semiconductor and paint finishing companies, who are most affected by these strict environmental standards.

The technologies saving costly energy



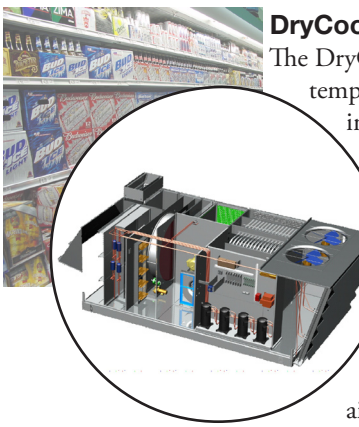
Our rotor principle

The simple yet genious principle of our desiccant wheel was invented more than 50 years ago by Carl Munters. Two air streams pass simultaneously through the slowly rotating rotor - impregnated with a highly effective desiccant. One air stream is dehumidified to provide the necessary dry air, the other dries the rotor, exhausting the accumulated moisture externally.



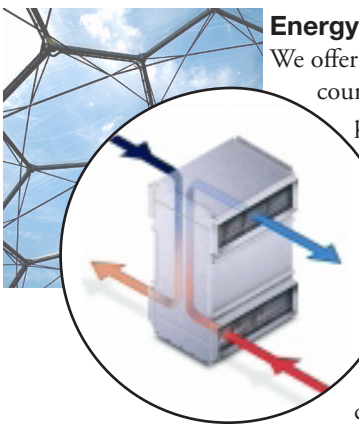
Power Purge

This patented technology reduces significantly the energy needed for the rotor reactivation. The Power Purge system collects waste heat from the hottest section of the rotor and utilizes this heat for reactivation - just like an energy recovery system. Furthermore the discharge temperature of the process air is reduced which results in lower energy cost for post cooling.



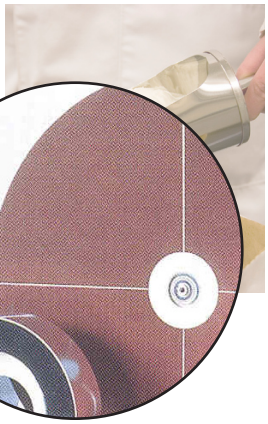
DryCool/HCU Systems

The DryCool/HCU systems control temperature and humidity independently. Utilizes direct expansion condenser heat to reactivate the desiccant wheel while the evaporator provides cooling prior to the desiccant process.It is designed to cost-effectively treat 100% makeup air and work in conjunction with existing A/C systems.



Energy Recovery Products

We offer designs utilizing plate counterflow heat exchaners, heat pipe, and energy recovery wheels. Exhaust recovery ventilation utilizes energy from the exhaust air stream to precondition the outside air being introduced into the building. Provides free heating in winter and free cooling in summer. Available only in Munters Americas.

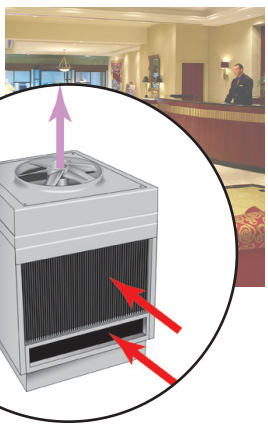


GTR-rotors

Continuous studies and developments are being made to improve the efficiency of the rotors, ensuring our customers of the optimal performance of their dehumidifiers. For industries requiring climate conditions with very low dewpoints the special GTR rotor has been invented, ensuring extremely low dewpoints at much lower energy cost compared to traditional techniques.

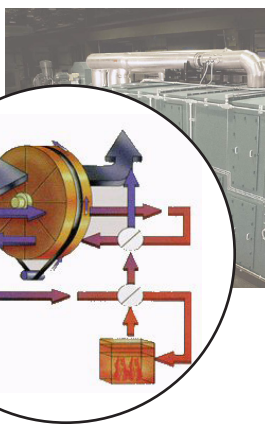
DesiCool/PopCool

Based on Carl Munters inventions on evaporative cooling our air conditioning units are todays answer to modern, environmentally friendly and economic air-condition system for bigger premises. Providing both cooling and air conditioning in only one unit, using exess heat - e.g. from production facilities, the running costs are very low and further more no refrigerant is needed.



Oasis

Direct evaporative cooling, indirect evaporative cooling or the combination of both is available in the Oasis product. In dry climates this allows for part or all of the cooling requirements of the building to be met without refrigeration based cooling. Units are available with virtually any option and configuration.



VOC Abatement

Burning low concentration solvent exhaust streams is costly because of the need for large amounts of supplemental fuel to sustain the oxidation reaction. The Zeol Rotor Concentrator System significantly reduces oxidation fuel costs. VOCs in the process exhaust are concentrated up to 30 times, then sent to a very small, efficient oxidizer for destruction.

Industries we serve

Archives and Museums

Museums, libraries and archives can be climate controlled with Munters systems. The valuable artifacts are effectively protected against humidity related damage like corrosion and mould - with low energy costs.

Automotive

For testing of complete cars, engines and parts Munters enables automotive manufacturers to simulate any environmental condition. Dry air also secures proper climate for production, storage and transportation of air-bags, tyres and glass.

Chemical and Pharma

Munters create the proper environment for manufacturing, packaging, transporting and storing of humidity sensitive products. Preventing sticking or caking in conveying lines and storage silos. Increasing throughput by reducing drying times in spray towers, fluid-beds and coaters.

Consulting Engineers

Munters provides a comprehensive range of services, and our experienced multi-disciplined project managers and engineers provide design, product and installation services in climate control. Always offering energy saving and environmentallly friendly solutions.

Defence, Electronics & Semi-conductors

A dry environment stops corrosion, reduces electronic failures, prevents mould and maintains the right mechanical properties of stored materials. Secures high readiness and availability of aircraft, vehicles etc. VOC abatement for the worlds leading Semi-conductor manufacturers.

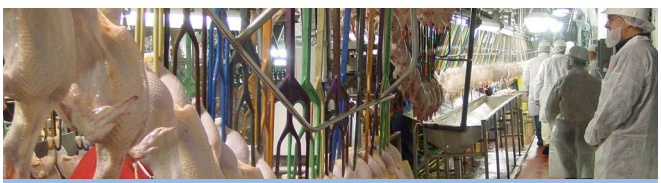
Food and Pharma

We create energy efficient climate conditions for food- and pharmaceutical products during transportation, production and storage, securing consistent quality, cost savings and higher throughput. Preventing ice build-ups at coldstores with our award-winning IceDry-system.

Offices/Commercial buildings

Munters systems create a more comfortable environment, reduce energy consumption and increase productivity and the quality of life in commercial buildings. Our systems provide a more efficient, high performance HVAC system that creates a better experience for customers and employees.

How problems are solved



Claxton Poultry solves Condensation Problems

Munters solved condensation problems at Claxton Poultry US .
Large amounts of water were used to maintain a sanitary work environment. This water evaporates and condenses on ceilings, walls and equipment in the processing areas.
The problem had been addressed by using plastic sheeting hung from the ceiling and personnel wiping away condensation as it formed. A costly solution that did not control condensation to meet with USDA compliance.
"The Munters equipment has allowed Claxton Poultry to operate without condensation-related Non-Compliance-Records," said John Seibel, Claxton.

Energy payback of one year

At Controlled Therapeutics in Glasgow, Scotland, energy costs is an important issue. The company is a leading developer and manufacturer of pharmaceutical products.
By installing our Energy Purge system to their existing dehumidifiers, the energy consumption for regeneration of the units was cut dramatically, resulting in a payback time of only one year.
As the EnergyPurge is an integral fitting, the system only had to be shut down for 12 hours for installation and no additional duct work or other costly alterations or maintenance costs are necessary.

Industries we serve

Paint finishing

Munters provides complete abatement systems to control VOC emissions from paint booths including particulate prefilters and turnkey installation. Cost effective solutions can be designed for systems ranging from an auto booth to an aircraft paint hangar.

Power generation, Water & Waste Water

Dehumidification of water works eliminates condensation on cold surfaces and secures better hygiene and safety. Saves energy by replacing heating while protecting electronic by controlled humidity. Boilers on power plants are effectively protected agains corrosion during stand-by.

Recreation & Leisure

Ice rinks, swimming pools and indoor sports halls are protected with Munters dehumidification remedying condensation and deteoriation of building structures whilst saving energy. Better and more healthy indoor climate for athletes, audience and employees.

Shipbuilding & Marine

Dehumidifiers are used for protection against corrosion during sandblasting and painting.
On cargo ships, goods are protected from moisture absorption and tanks are dried after cleaning, speeding up the loading of new cargo.

Water Damage Restoration

Munters has a full range of reliable, robust, high performance dehumidifiers to meet a wide range of property drying requirements.
The units are portable, easy-to-use and in a variety of capacities.

Schools, Universities, Theatres

Good indoor air quality (IAQ) is essential for a productive learning environment. Our humidity controlled buildings ensure comfortable conditions in classrooms, auditoriums, theatre lobbies etc. even at peak occupancies. Cuts energy and operating costs while ensuring healthy and clean air.

Supermarkets & Restaurants

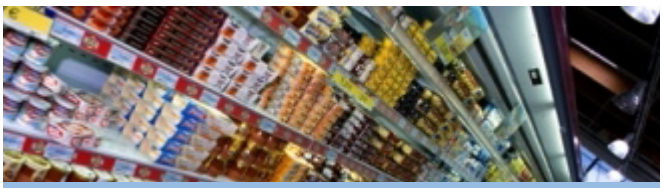
Munters supply air conditioning of supermarkets and restaurants for a comfortable, healthy environment to work, shop or eat in. Utilizing energy recovery and humidity control to help cut energy costs, ensure food and customer safety and staff comfort, and provide the proper amount of fresh, healthy outdoor air.

How problems are solved

DesiCool at Sandvik

Cooling air using nature's own method through evaporation of water - that's DesiCool - using waste heat to create cooling.
Sandvik Wernshausen, Germany - a world-leading manufacturer of tools and machines - found Munters' DesiCool system to be the most reliable, economic and environmentally friendly solution for air conditioning.

6 DesiCool systems were installed - each providing airconditioning for 10,000m², with an energy saving on 45% compared to competing systems !



HCU in Supermarkets

Munters DryCool/HCU (Humidity Control Unit), allows for separate control of temperature and humidity, with market-leading energy efficiency. Perfectly designed for use in eg. supermarkets, of which Wal-Mart is the largest customer.

DryCool/HCU is superior to traditional air-conditioning systems as it not only controls the temperature but also reduces the relative humidity of the supplied air. These systems create an indoor climate with a comfortable humidity, with no risk of mould and bacteria growth.

Our standard- and system solutions

Munters standard product range

Problems related to the relative humidity are seen in almost all industries. Products and materials stored are affected by the humidity and corrosion and mould occurs. Production processes can be interrupted by sticking products, clumping together, leading to expensive productions stops and waste.
Our range of standard products are designed to solve these problems, creating the perfect climate for archives, storages and many kinds of production processes. By creating a constant climate around the year the production process is optimized, the product quality is kept high, waste is reduced and money is saved.
Based on our decades of experience we offer a global range of standard units, easy to install, easy to maintain, with a number of control options and product finishes to suit your operating or hygiene requirements.

Munters System Solutions

To meet with the requirements from customers in need of more sophisticated solutions, our range of System Products has been developed.
The possibility of adding modules for pre- /postcooling and heating, filterboxes, heat exchangers etc. enables us to fullfil all wishes from our customers, building exactly the system that meets specific demands. The tailor-made systems are delivered in hygienic design and high quality, they are easy to assemble on site by our skilled service engineers who perform expert commissioning of the system.

Stand-alone or integrated units

Standard dehumidification

Our stand-alone dehumidification units used purely for humidity control purposes, are easy to install and take up minimal floor space. Duct connections distribute the dry air within premises, or lead the dry air into the building/room.

Air Conditioning

Dehumidification is an integrated part of our air conditioning systems, where Carl Munters pioneering inventions on the desiccant wheel and the evaporative cooler are operating perfectly together.
Without the need of any refrigerants our DesiCool Air Conditioning systems make an environmentally friendly and energy efficient solution and as waste heat is used, the DesiCool is a huge energy saver compared to traditional air conditioning solutions.

Comfort Cooling

Our DryCool/HCU (Humidity Control Unit) system is the answer to air conditioning.
As in DesiCool the sorption rotor and evaporative cooler are the basic components, and as waste heat from the condenser is used to regenerate the rotor you will have dehumidification of the air at no extra cost. These systems are very cost-effective unit for supermarkets, warehouses, hotels, schools etc.

VOC Abatement Equipment

Munters Concentrators provide air pollution control using hydrophobic zeolite rotors to control industrial emissions of Volatile Organic Compounds (VOCs) from contaminated airstreams. As the only facility in the world that controls all aspects of rotor-concentrator system manufacturing including the HoneyCombe® rotor structure and assembly of complete VOC Abatement systems, Munters guarantees quality and consistency. Systems are pre-wired, factory tested to temperature, and can be packaged to fit into standard freight containers for delivery worldwide.

Our manufacturing and after sales excellence

Munters through life care

After installation and commissioning of the delivered system we recommend our customers take advantage of our maintenance agreement. The agreement can be a standard or a customised agreement, ensuring that regular inspection and maintenance of the unit is being made by our experienced service engineers. Your Munters system will be kept up to date, always performing at its maximum with a minimum of energy consumption. Our engineers will keep you informed on energy optimizing options, always looking for ways to improve capacity and minimize running costs.

After Sales at Wrigley

An internal global quality programme at Wrigley has been implemented to ensure consistent products quality worldwide.
At Wrigley, UK, the drying times in the Driam coaters during summer were not satisfactory. Munters worked closely with Wrigley UK to implement a 10 week refurbishment programme, upgrading 8 existing dehumidifiers, all now capable of achieving a -12°C dewpoint year round.
The upgrade of the systems enabled Wrigley to shorten the drying cycles, fullfilling internal quality requirements.

Optimising manufaturing procedures and existing products

Our production facilites all over the world are ISO9001 and ISO14001 certified and optimizing the manufacturing procedures and environmental considerations is a constant ongoing process, involving all employees.
To improve the performance of already installed units, our global team of technical engineers are constantly developing techniques and systems, both to improve the capacity itself, but also improving energy efficiency, enabling our units to perform at their best no matter its age.

Our most important resource - our employees

Munters internal education programmme

Around 4,000 people are employed in the Munters Group. People with very different backgrounds, knowledge and experience - all contributing in their own ways to the worldwide success of Munters.
Training programmes are scheduled to provide everybody with the newest knowledge within air treatment, service and application techniques, giving our employees a common global knowledge base which they can use for the benefit of local customers.

Working with Munters

Karin Sjöström, Global Technical Product Manager:
"I feel that I have really been able to develop in the direction I want to go. I have been given the opportunity to broaden my horizons - today being responsible for development of one of our global DH product platforms.
A continuing diaglogue with both customers and my superiors together with training and applications sharing with colleagues, has paved the way forward.
My job is exciting and provides a great deal of opportunity for contact with customers and colleagues in other cultures."

Munters exchanging global experiences

The management in Munters Group is working in business areas rather than in regions to optimize the effect of synergy. To benefit from the global status of our company, regional meetings for key personnel within applications and service support are held.
Ensuring that experience is being shared without boundaries we are able to develop our business effectively - at the same time being able to offer the very best service to our global customers.

Learn more about dehumidification and Munters

On our extensive homepage www.munters.com you will find all the information you might need.
The homepage provides you with updated information on our dehumidification systems and here you can download datasheets on our complete products range for your personal use. By registering you can gain access to technical manuals and data programmes for sizing our equipment, and you will find drawings of our units - ready to paste into your own technical sketches.

Munters is the world leader in humidity control with services and products for water and fire damage restoration, dehumidification, humidification and air cooling. Manufacturing and sales are carried out via the Group's own companies in 30 countries. The Group has more than 4,000 employees and net sales of € 565 million. Munters is listed on Stockholmsbörsen, the Stockholm Stock Exchange. For more information see www.munters.com

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