

A photograph showing a Munters boot drying system. Four blue, flexible, corrugated hoses are suspended from a metal bar at the top of the frame. The hoses are inserted into the tops of four different types of footwear: two black leather boots with laces, a pair of black sneakers, and a pair of brown work boots. The footwear is placed on a wooden shelf. The background is a plain, light-colored wall.

Munters secure dry
outerwear and footwear

Kerteminde, Denmark



With the installation of a Munters drying room, the staff at the municipality maintenance facility in Kerteminde, Denmark are guaranteed dry clothes and shoes. Dry clothing might sound like a given, but traditional drying methods such as drying cabinets and boiler rooms make it difficult to dry outerwear properly.

When the Kerteminde Parks & Roads staff return to the facility after a full day of work outdoor, it is often with wet outerwear and footwear. For many years, the staff in Kerteminde had to make do with two drying cabinets and a hanging space in the property's boiler room.

With 15 to 20 employees returning with wet clothes, there wasn't enough space to fully dry everything in time for the next day. This was not only uncomfortable, but also unhealthy.

Solid winter jackets and overalls got squeezed into the drying cabinets where it got heated but not sufficiently dried, resulting in smelly and damp clothing. The Parks & Roads facility has now removed the drying cabinets and instead arranged an approximately 10 m² large drying room.

Case study

- Drying Room, Parks & Roads, the Municipality of Kerteminde, Denmark

Advantages:

By installing Munters dehumidification Parks & Roads achieved:

- Efficient clothing and footwear drying
- Easy to handle clothes drying and energy-efficient solution
- Gentle drying method compared to high temperature drying in drying cabinets or tumble dryer



Munters imitates nature

The Munters drying room mimics conditions outdoors during dry and breezy summer days, when laundry dries outdoors very quickly. A Munters MH270 desiccant dehumidifier and two circulation fans were installed in the drying room. Circulating fans mounted in the ceiling move air very quickly over the clothes and thus water from the clothes is released into the ambient air.

The dehumidifier efficiently removes that water by absorbing it onto the desiccant rotor's highly hygroscopic material, and then it is sent outdoors as warm and humid air. Furthermore, a rack system for effective shoe and boot drying was installed in the room. A duct fan ensures that the dry air from the room is sucked into the duct fitted with 20 outlets with short flexible hoses that are placed into the shoes and boots.

Easy operation

When the workday ends, employees now place their clothes on hangers in the drying room and their footwear is placed on a shelf. Using hangers and shoe racks is uncomplicated and fast compared to arranging the clothing in a narrow drying cabinet.

Circulating fans are activated manually with a toggle switch. When the water from the clothes starts to be released into the air the dehumidifier will automatically start (humidistat controlled) and only operates until the clothes are dry. When staff return the next morning their clothes are thoroughly dry and comfortable to wear. Shoes and boots are also effectively dried and ready for use.

Besides being a highly efficient drying method, the drying room is also gentle on clothes and boots compared to drying cabinets or tumble dryers since clothes are not exposed to high temperatures. To make the outfit more weather-resistant it is typically both lined and built with membranes. These membranes cannot withstand the high temperature in a drying cabinet or tumble dryer. Over time repeated and incomplete drying in the cabinets will cause bacterial growth, tenderization and unpleasant odors.

The drying room is easy to use and can hold 15-20 sets of employees clothing and footwear. An effective and cost-effective solution footwear drying.



Energy-saving solution

An essential and important advantage of arranging a drying room to replace drying cabinets is the energy savings. Munters drying requires no heating since Munters desiccant dehumidification works efficiently even in cold conditions. The supply power of a Munters 10 m² drying room (dehumidifier + fans) is only 1-2 kW. A room this size can replace eight drying cabinets with a total supply power of between 5-12 kW.

The Danish Defense Construction Service (FBE) has conducted experiments proving that Munters drying concept has an efficiency of about 1 kWh per liter of water removed, where the traditional drying method with heating and ventilation utilizes 3-4 kWh per liter of water removed. Compared to electric drying cabinets, the energy saving is even greater.

For many years the Munters drying room concept has been used with much success at military barracks. The solution is also used by Special Forces and the Diving Corps, with great appreciation, as well as for the efficient drying of rescue helicopter equipment.

Today, many private companies benefit from the concept in employee changing rooms. Many day-cares and nurseries are replacing energy-intensive drying cabinet solutions with the Munters drying room concept. One example is Laerke School in Egedal that replaced eight drying cabinets with a drying room and achieved approximately 75% energy savings. Additionally, they benefit from now having a much more effective drying solution that kids can also operate themselves and that is suitable for all types of children's clothes and boots.

Would you like to find out if Munters has a solution for your company too? If so, please visit our website, www.munters.com

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