



The right conditions for frozen foods

Confremar, Spain



Confremar SA in Madrid manufacture and distribute frozen products, which includes frozen fish, shellfish, pre-cooked products and vegetables. The key to its success was to convert a craftsmanship activity into an industrial process without losing the care and quality. Confremar also lease cold storage to other frozen product companies so it is essential for them to provide cold storage with the very best conditions.

The relationship between Confremar and Munters began in 2005 when the business decided to invest in new climate solutions. The first part of the project was the installation of three Munters units for three new cold stores: one ML17 blows air in two doors and two ML1350's were supplied for the other two. Since installation, Confremar has kept the cold stores free of ice and frost, avoided fog formation and slippery floors, and increased the refrigeration efficiency and reduced energy consumption.

Thanks to these excellent results, Confremar turned to Munters once again and installed four more units for a new cold storage area with chambers of different sizes. After two years, Munters installed two MX5000's blowing dry air into twelve cold store chambers, an MX5000 for six chambers and one MX6200 blowing air into seven old chambers to eliminate the ice formed on the walls and ceilings, ensuring good conditions for workers. All of these Munters units have been equipped with Munters MX energy recovery kits to reduce energy consumption, and the results have been excellent for Confremar.

Case study

Confremar invest in Munters dehumidification to control cold rooms

Advantages:

- Prevent condensation and stop frost formation
- Increase workers visibility and improve hygiene
- Reduce defrosts and energy efficient



Internal energy recovery

The MX range of dehumidifiers feature an effective sealing system and a desiccant rotor, which together make it the most effective desiccant dehumidifier on the market. Munters has also developed an upgrade kit which makes this unit even more effective with energy reductions of up to 25%, and this is achieved without the unit losing any capacity.

Use of traditional external heat recovery systems has always been an option for these types of dehumidifiers. Normally this would require considerable investment and a lot of extra space around the dehumidifier, but now Munters has an internal energy recovery upgrade kit which can easily be retrofitted to the existing installation. The extra space required is minimal. This upgrade kit reuses the residual heat in the desiccant rotor, so that the required regeneration heat is less.

This results in a lower energy consumption at the same dry air output. Alternatively this residual heat can also be used to make the air drier (lower dew point) without changing the energy cost. Because the heat is reused in the system, the dry air leaves the unit at a lower temperature. Contrary to some other external heat recovery systems, the Munters MX Energy recovery system does not require any frost protection when outside air is used.

The investment of the retrofit usually pays back within one year. The retrofit doesn't require any change in the existing ducting and can be installed within a day, including an efficiency check of the system. After the retrofit no extra periodical maintenance is needed. The standard scheduled maintenance activity will suffice.

Confremar is very happy with the solution and trust Munters fully, as Munters has offered the right solution in every case. For that reason, Confremar was testing the new IceDry30 in a cold store with ice problems. The performance of the units and the results are excellent!

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