Using dehumidification to achieve quality storage for wine

Protos Wine, Spain
Protos is one of the most important and well-known Spanish wineries, with a current production of around three million bottles of wine per year. Its wineries are equipped with the most advanced technology, and the business boasts several wineries in different geographic areas that are different but with the same aim: the search for quality above all.

In its constant search of quality, Protos contacted Munters to create the right climate conditions in its new wineries designed by the well-known architect Robert Rogers. During the construction phase of the new wineries (20,000m²), they decided to trust Munters to control the relative humidity levels of a room of about 1000m² which is used for storing the bottled wine.

The idea was to have a total control of the relative humidity, in this room, no matter what the season, and to guarantee the preservation and quality of the wine.

**Case study:**
- Protos create quality storage of wine using dehumidification

**Advantages:**
- Prevents bacterial growth
- Prevents condensation
- Labels remain intact on surfaces
- More comfortable environment for employees
Protos has two wineries in Peñafiel (Valladolid) and Anguix (Burgos) where the famous Crianza and aged wines are produced. Storing fluids like beer and wine in cellars can lead to condensation on the outside of the tanks and bottles. Constantly wet surfaces form the perfect environment for bacterial growth and compromise HACCP regulations.

By dehumidifying the tank room or cellar, the dewpoint of the air will be decreased so condensation no longer occurs. Building structures benefit from the drier climate, the need for maintenance work will be reduced and labels remain intact on bottle surfaces. In addition, the climate for employees will become more comfortable and healthier.

Protos asked Munters to install a Munters FA6 evaporative humidifier to increase the levels of humidity when needed, and a Munters MX²60 dehumidifier when the humidity needs to be reduced.
More efficient technology

The basic idea of the Munters desiccant rotor is very simple. Air is blown through the rotor (drying wheel) structure and the humidity in the air is absorbed by the hygroscopic desiccant silica gel. The air leaves the rotor as dry air and is pumped into the cellar.

In a separate sector, reactivation air is blown through the rotor to remove the accumulated moisture. The resulting wet air (which contains the removed moisture) is blown away outside.

The system works without freon, without compressors – just environmentally friendly, simple solution. Munters’ unique Energy Recovery Purge and Energy Efficiency Purge also offer the option of energy savings.

By installing the Munters solutions, Protos Wine has been able to prevent the build-up of bacterial growth, mould and condensation while ensuring labels remain intact on packaging. The combination of efficient dehumidification and evaporative humidification ensures the optimal climate at all times.

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

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