

Storage – Whisky Distillery – Low humidity and loss of whisky volume –



Teerenpeli Whisky Distillery in Finland

A humidity solution from Airtec® reduced the evaporation and thereby loss of whisky volume during the maturing process.

Lack of humidity control resulted in whisky loss

At Teerenpeli Distillery raw whisky is matured in oak casks over the years to get its unique color and flavor. Wooden cask is an organic, breathing material, which allows water and alcohol to evaporate into the surrounding air.

The wooden cask equalizes with the surrounding air humidity, which means the liquid transforms outwards, when the air humidity is too low and inwards when the air humidity is too high. Too low humidity will over the years mean great volume loss of whisky and thereby loss of income.



Airtec® help control the humidity level

Master distiller, Jaakko Joki from the family owned Teerenpeli Distillery tells:

"After the installation of the Airtec® EasyLine humidification system together with reverse osmosis water, we have been able to stabilize the humidity in the storage area. We have tested another type of spray system, but it could not manage the high humidity level, we needed. The new system from Airtec® is reliable and creates the correct humidity circumstances"

The humidification system includes an EasyLine pumpstation with two control zones, two HydroOne's and two HydroFlex units. The water is purified with a reverse osmosis filter.



Now we can concentrate on making excellent whisky!

"In the maturing process evaporation of whisky, a phenomenon called 'angel share', cannot be completely avoided, but at least now we can control it.

We need to keep the minimum level of humidity above 63,5 % Rh, which the Airtec® system can easily do without any notice from our side.



The difference between the new and the old system is like night and day. We are so far satisfied with the full package" says Mr. Jaakko Joki.

The family owned Teerenpeli Distillery was established in 2002. They only use real and original raw materials without adjuncts to make their whisky.

www.teerenpelidistillery.com





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Plywood industry - Reducing heat and dust -



UPM Plywood Mill in Jyväskylä

A humidity solution from Airtec improved productivity and reduced production costs, improving the working environment and lowering the dust level at a plywood mill in Finland.

Reducing heat and dust lead to productive benefits

Extreme temperatures generated from the production of plywood was putting stress on the workers creating an uncomfortable working environment and reducing the productivity.

Additionally, the excess amount of dust from the production effected the visibility, health and efficiency of the workers.



One solution, multiple benefits

Airtec installed a solution with high pressure air humidification, carefully targeting nozzles at the identified problem areas.

The solution was to generate localized cooling with the right amount of easy adjustable nozzle atomizers — HydroOne[™] and HydroTrio[™] based on an EasyLine[™] control and pump unit supplying 88 l/h water in 3 zones.

The phenomenon is knowns as adiabatic cooling, where evaporated water mist sprayed into the ambient air creates a cooling effect by consuming the surrounding heat. In this case the evaporation process cooling effect is approx. 62 kWh.



The Biofore Company

Plywood products from birch and spruce for construction, formwork, parquet and furniture industries.



Expanding the system

One year after the installation production manager Antti Vainio is very satisfied with the system and the feedback from the workers is positive;

"We have clearly experienced, how the air humidification system from Airtec has improved the wellbeing of our employees and the productivity of the production facility. This also means that the system has practically already paid for itself."



Even now UPM is extending the system to other production areas and similar solutions from Airtec is already in use on all other UPM birch plywood mills around Finland.



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