



Replacement dehumidifier delivers more energy- efficient solution

Floranova, England



Floranova is a renowned specialist in the breeding and supply of ornamental F1 hybrid plants and open pollinated seeds. They have development programs to breed a wide variety of bedding plants. These parent seeds are sent abroad to countries such as India and China where crops will be grown in polytunnels and returned as finished product to the UK or where required.

Storing seeds

Temperature and humidity control are extremely important since seeds need to be stored before they are shipped and planted. If the seeds are exposed to high humidity, they will then start to germinate. Maintaining consistent and precise humidity levels, and the right temperature, means that the seeds remain in stasis. This preserves them and prevents any damage.

“The biggest issue is the humidity” says Stuart Walpole, Process Manager at Floranova. If stored unprotected in a fridge at low temperature, the humidity would still be very high. This would quickly damage product and reduce seed life.

When correctly stored, the seeds can last anywhere from between two to three years to up to 20 years, depending on the breed or seed type.

Case study

- Floranova get more energy-efficient dehumidification solution

Advantages:

- Precisely control relative humidity levels in critical seed storage area
- More energy-efficient
- Higher moisture removal capacity
- Reliable solution



The Munters MD300 was replaced with an ML270 desiccant dehumidifier to provide consistent humidity levels for critical seed store.



Replacing obsolete equipment

For over 30 years, a Munters MD300 desiccant dehumidifier had been providing the required humidity control to Floranova's critical seed storage area. However, this system has become obsolete, and Munters recommended an alternative from their latest product portfolio.

Munters ML270 desiccant dehumidifier was selected as a replacement since its airflow is like the MD300. It also delivers a higher moisture removal capacity than the previous system.

How it works

Since air surrounding the seed store is more humid than the air inside, it tries to enter through any possible gaps. This air increases humidity levels inside and the seeds start to germinate. Humidity levels are raised even further when the seed store doors are opened and unconditioned air gets in.

To fix this problem the dehumidifier draws the air inside the seed store and dries it using Munters desiccant rotor technology. This dry air is then fed back into the room next to the evaporator, which cools the dry air and keeps the room at a constant temperature.



Creating the optimal environment

The temperature in this storage is maintained around 12-15 degrees. The ML270 dehumidifier features a humidistat, which automatically turns on and off to maintain conditions between 27-33% relative humidity.

“Reliability is key” says Stuart. “We opted for a direct replacement and didn’t even consider using anyone else. This is our most critical storage area and we need a system we can trust. We know we can rely on Munters.”

The system was bought on supply only terms, with Floranova’s own electrician easily installing this replacement unit.

Stuart Walpole summarizes:

“Overall, I’m really impressed. The new system is far more energy-efficient. It easily does exactly what it’s required to do, and it is exceptionally reliable. It maintains consistent conditions. I’m very happy”.

For more information about Munters dehumidifiers, including replacing obsolete equipment, visit: www.munters.com

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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