

AIRWATERGREEN IN COLD STORAGE FACILITIES

Reference case - The Cold Storage

BACKGROUND

Low temperatures in cold storage buildings create a negative air pressure resulting in air being sucked in from the outside. When the warmer air with a higher level of humidity from the outside meet cold surfaces, condensation forms with a risk of moisture-related challenges and damage. Ice is continuously formed on the cooling units requiring repeated defrosting. Slipping accidents can also occur due to condensation on cold floors.

These challenges can be handled with the help of Airwatergreen's dehumidifier. Low electricity consumption, ease of installation and high capacity even at low temperatures make this possible!

WHAT PROBLEMS DID AIRWATERGREEN'S DEHUMIDIFIER SOLVE?

A NEXT240 was installed in the cold storage where it captures moisture from the air. The air mainly enters through gaps in cargo ports. Humid air flows into the building during periods when the doors are opened and then spreads quickly within the cold storage.

As part of the premises often is used as a freezer storage, in this installation we supply the dried air to the entrance tunnel that leads into the freezer from the cold storage part of the building (see image below). In this way, we create a dry zone inside the tunnel, which means that less moisture leaks into the freezer storage itself. The entrance from the tunnel has a quick-rolling door to the freezer warehouse and curtains at the other end leading to the cold warehouse. This enables dry air to flow out into the cold store area. Humid air is removed from the cold store and in this way the humidity level in the entire premises is lowered.

We constantly measure both humidity and temperature levels in the air at several places in the warehouse and thus can monitor the climate and optimize operation of the dehumidifier over time.



FAST FACTS

Product: 1 pc NEXT240

Installations year: May 2022

Reason: Improve the working climate, reduce condensation, and reduce the amount of ice formation on the cooling units in the freezer storage.

BENEFITS OF USING AWG'S PRODUCTS VS DOING NOTHING?

In the cold storage, we now avoid condensation on cold surfaces, which previously led to accidents and damage to goods and property. The general working conditions in the warehouse are improved. The challenges of ice formation in the freezer storage with costly and time-consuming defrosts have been reduced, which saves energy and reduces wear and tear on the cooling units.