

Dynamic Controlled Atmosphere Storage

Integrated Climate Control System for Fruits and Vegetables

The Nijssen DCA Storage Control Module guarantees accurate (D)CA-/ULO-conditions in your cold stores. A comprehensive set of parameters ensures detailed control, safeguarding optimal storage and the best quality of your fruits and vegetables.

INTEGRATED CA-/ULO-COMPONENTS

Nijssen's control system regulates both cooling conditions (i.e. temperature, humidity) and CA-/ULO components (i.e. gas measurements, aeration, CO₂ scrubbers, nitrogen generator).

MAXIMUM DETAIL AND FLEXIBILITY

The Nijssen DCA Storage module includes more than 350 parameters and measured values. End-users select a specific set of control variables, relevant to their requirements. Flexible reporting options ensure that data can be combined and presented as desired in overviews and graphs.

QUICK SET UP BASED ON RECIPES

Basic conditions can be captured in a separate recipe for each variety and for the different storage phases. All parameters can be customized via user friendly menus. Unlimited recipes can be defined.

SUITABLE FOR LARGE SCALE STORAGE

The software can be easily expanded to control an unlimited number of CA-cells and components. For user convenience, settings for cold stores can be changed individually or as part of a group.



Dynamic Controlled Atmosphere: a critical storage process

Optimal conditions need to be established for each fruit variety, even for each batch - depending on factors such as the fruit size, the (micro) climate in the orchard and the degree of ripeness during harvest. Constant monitoring, measuring and adjustments are required to keep conditions consistent and fruit quality at an optimum condition for each room. Gas measurements are carried out and the set up to control the aeration, CO₂ scrubbers and the nitrogen generator.

"The performance of the DCA control software exceeds expectations. An excellent achievement!"

(Harry Beelen, cold store manager at Fruitmasters)

EXTENSIVE DATA REGISTRATION

All actions, alarms and log data are registered by the system. A full report of each batch is available anytime, including detailed overviews and graphs.

FREQUENT GAS ANALYSIS

The control system provides individual settings in each room, for any gas and temperature storage regime. All settings are tightly controlled. Any deviations from the set value points are notified to the user.

- Integrated control of cooling conditions and Controlled Atmosphere-components
- Full control of CA-components (e.g. gas measurements, CO₂ scrubbers, nitrogen generator and aeration)
- Unlimited number of cold stores to be controlled
- Around 350 settings and measured values per cold store
- User-friendly control with easy menus and submenus
- Every cold store individually controllable and as part of a group
- Storage conditions automatically adjustable based on user-defined decision rules
- Queue management module guarantees steady and energy efficient process
- Universal recipe wizard
- Detailed reports and charts with powerful custom reporting capabilities
- Extensive set of customisable alarms
- Full reporting of storage process for each batch
- Fast and efficient data processing
- Available for Codesys/Hitachi and Siemens PLCs



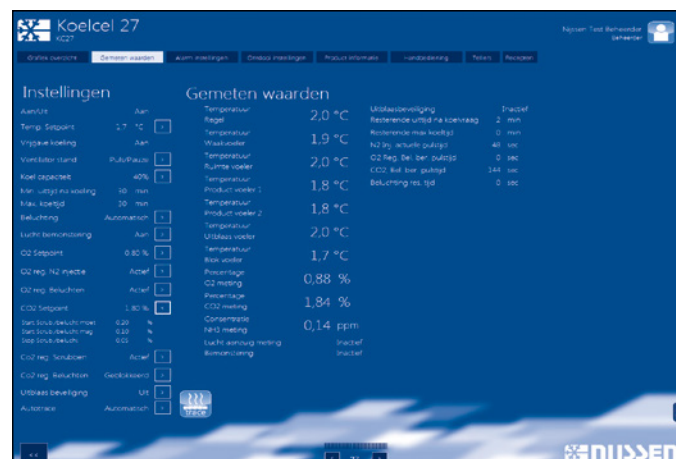
Dashboards with a range of comprehensive overviews and graphs

AUTOMATIC CONTROL

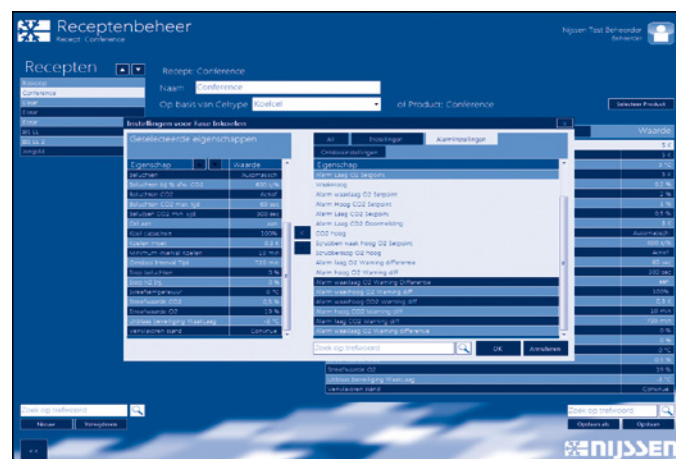
Sensors measure the respiration of the fruit. At specific user-defined measured values (temperature, oxygen, CO₂ and humidity) the control system automatically switches to a predetermined action. Automation is tailored, according to your requirements.

ANYTIME ANYWHERE IN CONTROL

Our web based control app allows you to be in control of your cold stores anywhere anytime. With all essential control functionalities available on your smartphone or tablet.



Detailed information for each cold store



Customisable storage recipes for each variety



www.nijssen.com