

Our new developments





Welcome to Gaugele

For more than 60 years, we have enjoyed a reputation as specialists for professional agricultural air-conditioning systems. Our innovative solutions for the storage and processing of potatoes, onions, carrots and fruits are used all around the world. Thanks to a network of regional offices, we can handle your requests quickly and competently.

Everything from a single source

Our activities focus on the optimisation of the storage conditions for your products and we offer well-designed concepts for each kind of warehouse: from the ideal storage box to the tailored ventilation, cooling and control system, not to forget efficient grading and conveying facilities; no matter whether new construction on a turnkey basis, modification or modernisation is concerned.

Our innovative new developments

Thanks to our close cooperation with renowned research institutes and the tireless efforts of our research department, we can present six trendsetting innovations this year:





The new Gaugele modular controller TMC.10

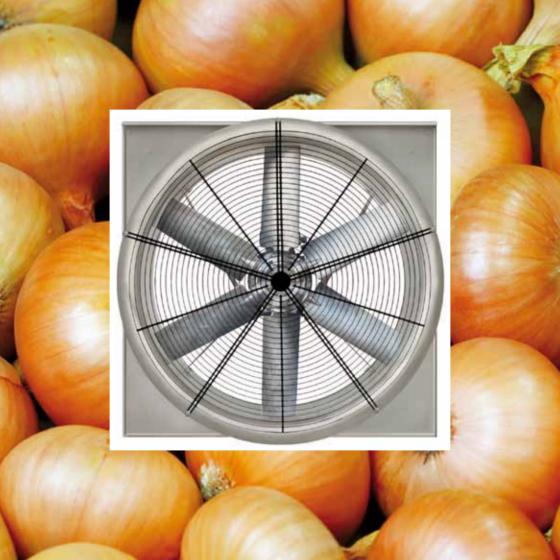
In addition to the well-known comprehensive control options of the previous controller model, the tried and tested MC32, the new Gaugele TMC.10 offers an intuitive graphical user interface with a touch screen for the first time. The memory was considerably enhanced and now allows recording data of the entire storage season reliably and having them at hand anytime. This makes evaluations, which are the indispensable benchmarks in warehousing, even more comfortable.

The energy management functions are entirely innovative. The output of the fans and the speed of the impellers are adjusted to the current energy cost situation in line with the storage requirements of your product. You can use your own energy sources such as photovoltaic systems reasonably and keep your energy costs under control.

Especially for remote warehouses, where internet access is not available, we have integrated a USB interface for local data transfer on request of our customers.

Another particularity of the TCM.10 controller is the energy-saving control of cooling facilities. It allows you to further optimise your warehouse control with mechanical cooling.





Future-oriented fan technology

We succeeded in further improving our reliable and energy-efficient high-performance fans in cooperation with renowned research institutes.

Potatoes and onions from different plots of land may considerably vary in size, shape and surface texture. These characteristics may also differ from year to year. Consequently, the flow resistance and the pressure drop in the air flowing through your stored harvest vary as well. Moreover, the resistance may vary over the storage season due to drying for instance. Gaugele has consequently searched for the best solution to this problem in order to optimise your warehousing by improving the performance and reducing the costs. In addition to extensive efforts in improving the aerodynamic design of the impeller and the diffusor, we have placed special emphasis on energy efficiency, i. e. the lowest possible energy consumption to obtain the required ventilation efficiency.

In close cooperation with research institutes, we are currently transforming the latest state of findings into practice while checking thoroughly and comprehensively the cost efficiency of each new development in the long run. The parameters obtained by our high-performance fans comply even today with the requirements of coming years in regard to eco design (ErP 2015).

Mobile app for the storage control

Your selection of the appropriate ventilation parameters is supported by the newly presented mobile app. Just enter the measurement parameters such as the tuber and exterior temperatures in the easy-to-use interface of your app, which is suitable for iOS and Android, and the appropriate parameter setting for your TMC.10 controller is displayed.

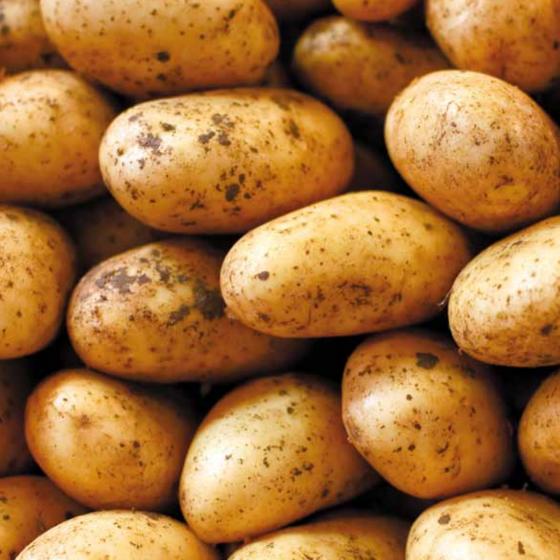
As the TMC.10 is compatible with the tried and tested MC32, you can use the mobile app also to adjust the latter.













New combi-coolers

We succeeded in further improving our compact coolers, which are suitable for many applications: all devices of the new generation have electronically controllable expansion valves for the coolant.

The main benefit is improved energy efficiency; i. e. the cooling power was increased while energy consumption remained at the same level.

Moreover, you can control the cooling power far more accurately and adjust the supply air temperature smoothly to the required storage conditions. In this process, the airflow is now directed and the output matched to the actual requirements (EC fans).



The new Process and Warehouse Management System (WMS)

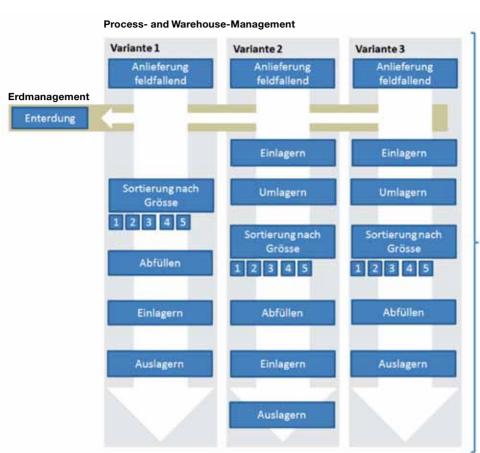
This new system maps all movements of goods in the warehouse, from the entry and storage of the potatoes, their movement inside the warehouse up to their retrieval including the disinfection of the boxes and the sorting facility outlets as well as accounting. All information about the individual potato batches is always available due to the recording of data during all processes. This ensures transparency and traceability of the entire process chain. At the same time, the requirements of quality management systems such as GLOBALG.A.P or QS are satisfied.

Gaugele offers highly efficient overall solutions encompassing storage, treatment and air-conditioning equipment as well as fully integrated process and warehouse management systems.











Airflow and heat analysis

Welcome to the virtual world of Gaugele ventilation systems! With the help of PC software, Gaugele will simulate the airflow and heat effects of the ventilation equipment in your planned warehouse in a three-dimensional environment. Coloured screens and printouts show in a comprehensive manner the ventilation effect of different model variants already in the design phase. All effects of the ventilation from starting the equipment up the state after several hours of operation are shown clearly and comprehensively. The benefits and drawback of the different equipment models can easily be understood and evaluated. It helps you to decide for the appropriate design variant and provides assurance in the construction phase in a new dimension. Another evidence of our design and planning competence.

