

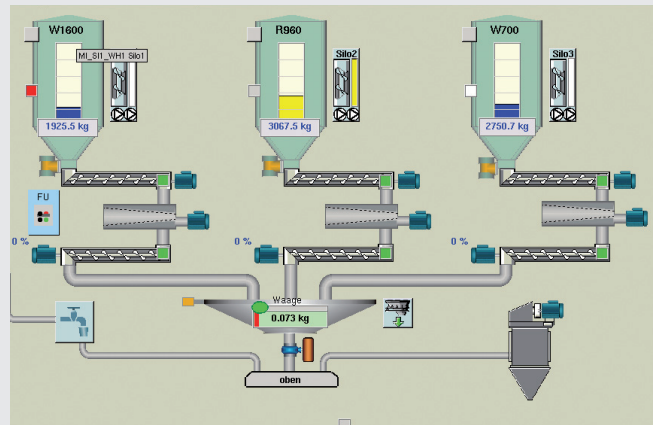


## Arlberger Dorfbäckerei GmbH

<b>Scope of Project</b>	Central control system and control cabinets for the building management, ventilation and silo installation
<b>Particularities</b>	Software connection to cooling unit controllers as well as interface to the company's own recipe management system
<b>Plant Location</b>	Pettneu / Austria
<b>Client</b>	Arlberger Dorfbäckerei GmbH

### KEY FACTS

aX Software	automationX
aX Hardware	1 aXPBC Profibus counter
aX Server	1 redundant server pair
aX Client	2 operator stations production 1 operator station office
I/O's	680 via Siemens ET200S
Data Points	400 via RS485
Interfaces	Cooling unit controller
Network	Profibus TCP / IP
Field	2 frequency converters 1 scale 1 dosing line 3 silos



### OUR PARTNER

The Arlberger Dorfbäckerei is a high-quality bakery specialising in the production of outstanding and tasty bread and pastries as well as a supplier to the hotels and restaurants in the Arlberg region. In addition, special types of bread, such as the original wood-fired oven bread, are baked for all the Ruetz bakeries in Tyrol and Vorarlberg.



## THE CHALLENGE

AutomationX was commissioned to implement the control and monitoring for most of the technical equipment. The decision in favour of AutomationX was mainly influenced positively by the possibility of remote control and monitoring of all technical systems and by the highly available and reliable concept at reasonable prices.

## THE SOLUTION

### High availability and flexibility - No technician needed on site

A redundant server pair is responsible for controlling the HVACR systems of the plant. Three ventilation systems, heating systems, one silo installation, control of heat recovery, monitoring of the cooling systems as well as a number of HVACR signals such as power meters are controlled and monitored by the automationX software. The technical management based in Kematen thus has the possibility of calling up and comparing online consumption curves, dosage tolerances or climate conditions, and changing reference values, if necessary.

If the programming also needs to be changed, such as the integration of an additional humidity sensor in the ventilation system, this can be done in a cost-saving way via the internet.

### Silo installation / water dosing

Flour dosing is carried out by a spiral conveyor. automationX receives the dosing orders via an interface from the company's own recipe and order management system, and is responsible for the dosing. The clear process diagrams and detailed reports allow for easy configuration and optimisation. The excellent interaction between software and systems engineering provided for the most accurate dosing values in this project. No conventional electronics were used for the water mixing machines. Input/output modules control the valves of the water mixing machine, and the automationX software takes care of temperature regulation and dosing.

### Ventilation systems / cooling systems

Due to a special procedure for interrupting and delaying the fermentation process, these rooms were equipped with controllers by the cooling system manufacturer. automationX is, however, responsible for the parameterisation and recording of data. A serial software interface communicates with the cooling unit controllers. Proof of temperature profiles is one of the requirements of quality assurance.

With the help of automationX, all significant signals and measured values are recorded and thus this quality requirement is met.

### Conclusion

Due to its availability, its clear diagrams of the systems as well as its technical performance in dosing and sensitive processes such as ventilation control, the automationX system has successfully established itself equally in the fields of technology, production, and management.

Functions that exceed those of basic systems on the market, such as visualisation, trend charts or storage of historical data, contribute a great deal to quality improvement and energy optimisation.

