



## Case Study

### Henglein-Group

noax industrial PCs document production and support employees at a manufacturer of pre-packaged foods



noax industrial PCs document manufacturing processes in the production of pre-packaged foods.

## Keeping up with the latest technology with SAP S/4HANA and still continuing to choose noax after 10 years of service

You can always mix the spaetzle dough yourself and let it run into the boiling water with a spaetzle slicer but why do that when you can easily skip these steps with pre-cooked spaetzle from the pack. And yet you can still personalize it according to your own taste. For example, refine it with poppy seeds and butter or use Emmentaler to make cheese spaetzle . . . there are no limits to your imagination. The Henglein Group has specialized in the manufacture of such pre-packaged products.

"From the ability to run because of the endurance of the devices in production, the noax IPCs are really great. You really can't say enough about that."

### Hardware and software state of the art

The company, which is headquartered in Wassermungenau, about 35 kilometers southwest of Nuremberg, manufactures spätzle and knöpfle as well as ribbon noodles, potato dough for dumplings, gnocchi and potato products, as well as baking dough and yeast dumplings. The raw materials are supplied by local farmers. Henglein has long-term cultivation contracts with them. In its three plants, approximately 1,200 employees of the Henglein Group mainly process wheat flour, durum wheat semolina and potatoes. At their locations, they produce a total of over 150,000 tons of fresh produce every year, which corresponds to around 330 million packages. Henglein products can be found in almost every German supermarket. Aside from that the company exports to almost all EU countries, including the United Kingdom, Norway and Switzerland. Henglein guarantees its customers a delivery within 72

hours of ordering. In order to leave nothing to chance when it comes to quality, safety and adherence to deadlines, the company relies on the most modern processes and above all on high-tech. Ultimately, they want to meet their own demands for product quality, but also the ever-evolving customer requirements. From the raw material, the recipe, the semi-finished product, the packaging, every component and every production step up to the finished product is digitally recorded. This is the only way to process the orders with flexibility and efficiency. To process this volume of data, Henglein relies on noax industrial PCs and the SAP S/4HANA ERP system. The special thing about it: The system uses the new SAP HANA database. With its help, employees can analyze and process large amounts of data in the same system, and in real time. On the hardware side, Henglein has been using the noax S15 industrial PCs since 2012. In October 2018, the food manufacturer increased its IPC inventory by another 38 noax S21WP industrial

PCs at the locations in Wassermungenau and Klosterhäseler.

### Completely traceable

For a production order, the employees first order the raw ingredients from the warehouse. They are booked out of stock and booked into the first production step. On the touchscreen, the employees see the respective quantities that they have to add to the mixture. The software guides you step-by-step through the recipe. The employees record every single step on the industrial computer: As soon as one process is completed, the product is booked out of the corresponding area and booked as a semi-finished product into the next. This way every step in production can be traced; the entire production remains fully traceable with just a simple click of the mouse. Thanks to the latest IT.

### Well protected from the finest flour

Both of the noax industrial PCs, the S15 and the larger S21WP, are completely enclosed and have a stainless steel housing without grooves or cracks, so that no traces of food settle, which could provide a breeding ground for microorganisms. This also means that they are state-of-the-art in food processing. A point that is very close to the heart of Daniel Henglein, member of the management team and responsible for strategic planning and controlling, after all, industrial PCs are used in the immediate vicinity of the production machines. "The smooth surface without joints were extremely important to us and, above all, that the housings are appropriately



State-of-the-art technology: noax IPCs and SAP S/4 HANA support employees in production

*Pre-packaged products make life easier: Even inexperienced people can have a tasty meal in no time, especially since they also offer a wide range of individual variations. The Henglein Group produces a variety of pre-packaged products based on wheat and potatoes. State-of-the-art technology ensures that the food in the pack always guarantees a consistently good taste and meet the legal requirements for hygiene and traceability.*

*The industrial PCs from noax form the central building block in production control. Their robust construction, along with the Henglein employees, have supported their reliability for almost 10 years and thus ensure the taste and the excellent quality of the popular Henglein products.*

*The goods are at the customer no later than 72 hours after the order. In order to keep its delivery promise, Henglein has invested in state-of-the-art technology. Noax industrial PCs are an integral part of this.*



equipped so that no dirt settles that we cannot wash away."

The production of puff pastry is an example of why those responsible place high value on a robust design of the computer: To make puff pastry, for example, the employees first add wheat flour to a mixer, other ingredients follow later.

One line processes between 700 kg and 800 kg of flour per hour. During the pouring process, flour dust is released into the surrounding air, which settles on surfaces, i.e., also on the hardware.

The completely enclosed design of the noax industrial computers in accordance with protection standard IP69K prevents flour dust or other impurities from penetrating the inside of the computer and damaging the sensitive electronic components. Wheat flour contains gluten, a protein that belongs to the flour, on one side gives good baking properties and makes the dough both firm and supple, but on the other hand also becomes very sticky when it comes in contact with water. For this reason, the devices at Henglein are not cleaned with water at this point, but dry cleaned if possible and, if necessary, wiped with a damp cloth. This way contamination with flour dust can be easily removed. In other areas, such as the potato processing, they are exposed to water and detergents. As you can see, they have many challenges to face. When making the selection, Henglein attached great importance to reliable function in dust, vibrations and moisture. Thanks to their robust construction, Henglein has been able to rely on the functionality of the noax IPCs for almost ten years. The medium-sized company installed the first industrial computers in its production facilities back

in 2012. Since then, they have been running without any noticeable disruptions and are still doing their job. The IT management comments as follows: "The noax IPCs are really top-notch in terms of their ability to run and the ability to withstand the elements in production. You really can't say enough about that." The IPCs continue to run and run. Of all the IPCs that we own, we have only had to send one in for service in the last 5 years, and only because an employee damaged the display with a rough tool." Because of the great experience Henglein has had with the noax hardware they decided to order more industrial PCs from noax. But this time those responsible chose the larger 21-inch screen. It allows a better view of details on the screen and is even easier for



*Robustness, easy handling, easy cleaning - noax IPCs show their strengths in production at Henglein.*

employees to operate, even with gloves. Most employees are already familiar with opening files with the index finger and moving items from their smartphones, but with noax this also works with gloves. That was also one of the reasons for the decision in favor of noax.

Up until 2012, when Henglein used the first noax industrial PCs, the employees documented all information about production with pen and paper. These processes were lengthy, cumbersome and, above all, very error prone. Subsequent transfer to electronic data processing systems improved this significantly. Today, with the complete digital recording of the individual production steps, another significant step forward could be achieved, especially since all data about production are now available digitally in real time. This now even enables complex key figures such as the overall system effectiveness (OEE) to be collected, which permanently provide information about the efficiency in production. The food manufacturer uses the most modern technology not only for the processing itself, but also for its documentation. The noax industrial PCs with the SAP S/4HANA software represent the central element. The transparency that the company achieves is a strong argument for Daniel Henglein as controller: "Everyone has access to the data from production in real time. We know exactly how efficient our production is at the moment and can take measures immediately if necessary. "Before the new purchase, the controller and his IT management team also explored the market to see what else was out there, but due to his positive experience with noax he decided again for the manufacturer from Ebersberg. Henglein believes that the robust design of the industrial PCs speaks in favor of noax: "The quality, durability and reliability of the noax IPCs are simply so good that the price can be justified in any case. We would definitely choose noax again."

**"We would definitely choose noax again."**



## Hans Henglein & Sohn GmbH

### Company profile:

The Henglein Group was founded in 1936 as Haulage company launched. The grandson of the company's founder rose in 1985 to manufacture pre-cooked dumpling dough and other pre-packaged products for wheat and potato. Today the company offers a wide range of products for cooking and baking. Every year the 1,200 Henglein Group employees produce around 38,800 tons of wheat flour. The products are sold to retailers and wholesalers consumers in almost every country in the EU.

More information at:  
[www.henglein.de](http://www.henglein.de)

## Requirements and Applications

### Objectives:

- ✓ Acquisition of logistics and operational data in the production of food on the basis of potatoes and wheat
- ✓ Fast and uncomplicated traceability
- ✓ Speed and flexibility to update orders in real time on the IPCs
- ✓ Guiding the employees in the composition of the recipes
- ✓ Ensuring product quality
- ✓ Documentation of all work steps in production
- ✓ Improvement of the workflow
- ✓ Recording of complex production Key figures (OEE)

### IPC Requirements:

- ✓ Completely closed construction according to protection class IP69K
- ✓ Easy to read display
- ✓ Smooth surfaces without grooves or cracks
- ✓ Adjustable screen brightness
- ✓ Regular cleaning
- ✓ Running safety and stability
- ✓ Easy maintenance and assembly
- ✓ Operation with gloves

## Components

### Hardware:

- Industrial PCs Steel S21WP and Steel S15
- Noax all-in-one motherboard developed in-house
- Input: particularly robust multi-touch screen
- Bright, high-contrast TFT display
- Protection standard IP69K
- Completely closed, without external fan

### Software:

- Operating system: Windows 10
- ERP system: SAP S/4HANA

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