



## Case Study

Gropper Dairy GmbH & Co. KG and  
Gropper Fruit Juice GmbH & Co. KG

noax industrial PCs simplify production,  
packaging, and logistics for a bottler of milk,  
water, and fruit juice



noax industrial PCs support employees in the production and distribution of dairy products

## 24/7 use promised for 10 years - delivered for 20 years

"We calculate 10 years runtime for our machinery and apply this value to IT in production and logistics" explains an IT department employee of Gropper Dairy GmbH & Co. KG and its sister company Gropper Fruit Juice GmbH & Co. KG. 10 years of runtime in IT is considered extremely long and a very high standard of achievement. When Gropper formulated this requirement, they knew this was

a valid notion. Their experience with noax hardware has proven to meet their expectations and that's why noax stainless steel

learn from Gropper Dairy when it comes to filling, processing, and selling sensitive and mostly liquid foodstuffs. In 1998, the dairy realized the completely sealed, waterproof and dustproof noax computers would be the best option for acquiring operating data. The IP69K protection rating of the industrial PCs guarantee humidity and solid ingredients cannot get inside of the PC, even if they are cleaned frequently with water and disinfectants. Their reliability and vibration resistance also helped convince the dairy to choose noax over 20 years ago.

### Better visualization

noax did not disappoint. When new equipment was needed, they knew who to contact. An IT representative at Gropper explains how

he looked at hardware from other companies and used industrial PCs from noax's competitors, but they could not withstand the extreme environmental conditions in the dairy. The dairy environment has temperature fluctuations, high humidity and most importantly, regular cleaning with water and disinfectants. "We had huge problems with the other equipment, whereas, noax completely met our requirements and were able to win us over with their ruggedness and reliability." Operational reliability was one of the main reasons they chose to go with noax industrial PCs again. This time, they decided to go with the 21-inch screen size. "The 16:9 format was very important for us because it displays a clear overview of the large data acquisition tables, providing the maximum amount of information at a glance."

"Our employees should be able to concentrate on their actual work, not on the system. It simply has to work."

industrial PCs are just as much a part of their inventory as the filling machines for yogurt, milk, and other Gropper products.

### In use for over 20 years

In 1998, the milk processing company from Bissingen, in the district of Dillingen on the Danube, ordered the first noax C15 industrial PCs with a 15-inch touchscreen for acquiring operating data during production. A few of the first generation IPCs are still found in the filling halls. After over 20 years of use, it is time for a new noax generation. The new devices can run software more efficiently and are easier to operate than their predecessors. Since 1929, Gropper Dairy has been bottling milk and processing various dairy products. The Gropper name does not appear on the packaging because the company supplies to large retail chains in Germany and abroad where the products are sold under the stores' own brand names. Their sister company has been producing fruit juices and smoothies since 2015. Gropper Fruit Juice GmbH & Co. KG is able to



*The noax terminals can be operated with fingers and while wearing heavy thermal gloves. Data acquisition, scheduling and other internal company software can easily be integrated.*

Gropper applies the same high quality standards to their products as they do in manufacturing other branded products. They have contracts with approximately 870 dairy farmers in the region, who supply about 355 million liters of milk to the dairy. 80 million of those liters meet the criteria for organic milk. In order to process this amount of milk efficiently and safely to produce different products, Gropper has been using noax industrial PCs in production and logistics for over 20 years. The company has chosen to use noax's hygienic and logistics industrial PC's once again because they have proven their reliability in longevity, ruggedness and functionality.

*noax stainless steel computers assist the entire manufacturing and bottling process, right up to delivery. The IPC's are ergonomic, intuitive and long-lasting.*



## Intuitive multi-touch

A data acquisition solution developed by noax is now running on the IPCs in Windows 10 IoT. They chose the larger monitors for better visibility. If the user is unable to view all data on one screen, they can move side-to-side or up-and-down. "That was also our goal," explains the IT specialist at Gropper. "We want to make the handling of hardware and software as easy as possible." Another great feature of the new stainless steel IPC's is the ability to zoom by only using 2 fingers on the touchscreen to enlarge the image, just like on a smartphone. The noax IPCs not only run the data acquisition software, they are powerful enough to run applications such as employee scheduling and any other needed software applications.

## Invisible IT

The intuitive application of the noax hardware quickly earned the acceptance of the staff. Frequent use was a primary objective when deciding on IPC's. "Our employees should be able to concentrate on their actual work, not on the system. It simply has to work," explains an IT department employee. "Hardware and software are supposed to work and not cause any trouble. That is what we mean by 'invisible IT'. The stainless steel computers from noax have proven their reliability. That is the reason we chose noax again." Currently, Gropper Dairy uses over 30 S21W noax units with a 21.5" screen size, in the bottling of milk, desserts, yogurt and other dairy products. It is very important for all the industrial PCs to have the same state-of-the-art technology so operations

are not interrupted if a terminal needs to be replaced. "It only takes 5 minutes and then the employee can continue working as usual," explains an IT specialist at



*An employee reviews details in a data acquisition solution. With the multi-touch, he can zoom-in easily.*

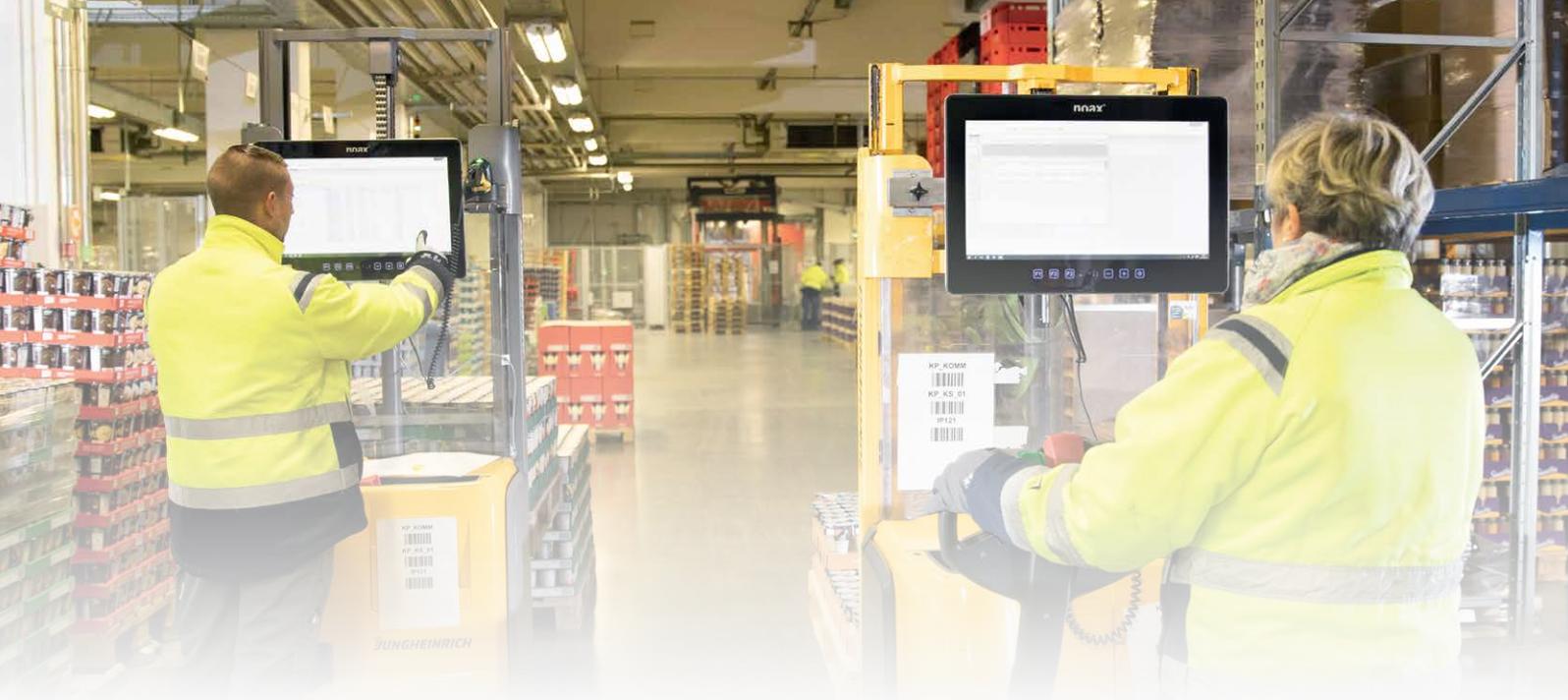
Gropper. The industrial PCs in production and in logistics are separate from the Internet, so updates cannot be installed

automatically. Therefore, only a few updates are required and if the occasion arises, IT can install during regular maintenance.

## Strong customer focus

The large 21-inch stainless steel industrial PCs are not only used in production, they are also in the freezer warehouse for outbound distribution. They are mounted on forklifts and provide current data for all orders to the order pickers. However, unlike the IPC's used in production, the industrial computers in logistics have a resistive touchscreen. Throughout the year, temperatures range between 2°C and 7°C (36°F to 45°F). It is important to have the ability to operate the touchscreens with fingers and with gloves. While latex gloves are in production, heavier thermal gloves are used in logistics. The touchscreens react the same with all operating variants so users don't have to remove their gloves to use the PC, which accelerates workflow and saves time. Production and logistics have different demands for the hardware. noax has developed solutions that optimally meets the needs in both areas of operation. "As a hardware manufacturer involved specifically in the food processing industry, noax is quite familiar with our requirements. We've learned this over the last 20 years. They implement our requests consistently and above all, quickly. To us, their focus on the customer makes noax a partner that will also provide us with what we need in the future", explains an appreciative IT dept. employee.

*"noax completely met our requirements and was able to win us over with their ruggedness and reliability."*



## Gropper Dairy GmbH & Co. KG and Gropper Fruit Juice GmbH & Co. KG

### Company Profile:

Since 1929, Gropper Dairy has been processing milk and dairy products. In 2019, they began bottling mineral water, as well. Their sister company, Gropper Fruit Juice GmbH & Co. KG, produces fruit juice and smoothies. They have approx. 870 employees at two locations: Bissingen (district of Dillingen on the Danube) and Stockach (district of Konstanz). In 2019, the family-owned business generated sales of approx. 680 million euro.

For more information, visit:  
[www.gropper.de](http://www.gropper.de)

## Requirements and Applications

### Objectives:

- ✓ Data acquisition
- ✓ Ensure traceability
- ✓ Production process visualization
- ✓ Order picking support
- ✓ Determine OEE
- ✓ Improve work ergonomics

### IPC requirements:

- ✓ Waterproof and dustproof - IP65 (NEMA 4)
- ✓ Full-HD display
- ✓ Adjustable screen brightness
- ✓ Rugged touchscreen for intuitive operation
- ✓ Easy to clean hygienic design
- ✓ Resistant to cleaning products
- ✓ Intuitive multi-touch operation with thick gloves
- ✓ Easy maintenance and installation
- ✓ Reliable

## Overview of Components

### Hardware:

- Industrial PCs: Steel S21Wx, Compact C15, and C21
- All-in-one motherboard developed by noax
- Extremely rugged touchscreen
- Bright, high-contrast TFT display
- Protection standard up to IP69K
- Completely sealed, no external fan

### Software:

- Operating system: Windows 10 Embedded
- Data acquisition software developed by noax
- SAP
- Viewer

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Case Study arranged in 2019

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