



DLoG provides transparent and efficient retraceability for TANN

Terminal solutions from DLoG GmbH in Austria achieve international success:

Not surprisingly, in response to the infamous food scandal that took place in the 1990s, the EU developed rules and regulations for consumer protection. A new concept in the regulations which was adopted is the principle of "retraceability." In order to comply with the new instructions, SPAR Österreichische Warenhandels-AG (SPAR Austria) installed a terminal solution from DLoG GmbH to assist with their logistics.

Since January 1, 2005, manufacturers of food and feed products must insure that all food, feed, and feed ingredients can be traced all the way back through the entire food store chain. On January 1, 2006 even stricter hygiene requirements for production and distribution of food wares came into effect. These new regulations are for all production, processing, and distribution of food wares and for export of these products. Production, transportation, storage and distribution (trade, gastronomy, hotel industries, etc.) all are included within the scope of the regulations. In the course of this, and for expected future developments in the area of quality assurance, we discussed with SPAR how with the help of modernization investments they would be able to satisfy these future requirements within their operations.

SPAR Austria is the largest private employer in Austria, with about 60,000 employees, and owns the TANN brand, which is their meat and sausage production operation. In the main facility in Föderlach in the state of Carinthia, the key activities are meat handling; the delivery of beef, calf, and pork halves; as well as meat cutting. The experts at TANN had been searching for some time for a solution which guaranteed compliance with seamless retraceability for cutting, weighing, packing, and labeling. Simultaneously they wanted to raise the entire production process to a modern, rapid and efficient level. Christian Terbou, Manager of Applications for TANN Production, was responsible for

Feature overview

Customer:

- TANN is the internal meat and sausage production facility of SPAR Warenhandels-AG (SPAR Merchandise and Trade), Austria.

Requirements:

- Industrially suitable terminals for mobile and stationary implementation, easy to clean and disinfect.
- Sufficient ports for bar code scanners, chip card readers and additional peripheral devices
- Lean operating system on Compact Flash (without hard disks)

Products used:

- DLoG MPC 5/110, IPC 6/215

Benefits:

- Seamless mapping of the entire production workflow in IT system providing accurate retraceability of the goods.
- Optimization of all production processes to a modern and efficient level

the evaluation of the solution. "We needed an industrial solution. The majority of terminals needed to be installed in stationary locations, but some needed to be implemented in mobile applications," Terbou described the situation at the time.

The food production industry introduces particular hardware challenges

Terbou became aware of DLoG GmbH during his research into appropriate industrial PCs. "I searched for industrial PC on the Internet and came across DLoG," he recalls. "My partner at DLoG was Manfred Lachauer, who guided me through the entire project with exceptional competence. Together we found the right product combination for TANN. Subsequently I recommended the concept proposal to our division and resource management teams who made the final decision."

Terbou's IT team had defined clear requirements gleaned from experience with the previous system. There were two critical areas of the previous system which needed to be addressed: One issue was that this software system required particular hardware, which TANN considered an unpleasant restriction and an additional cost. The other concern was that the system ran on a client-server infrastructure. This created a situation where one was forced to install expensive and, due to the raw environment, failure-prone PCs in the middle of the meat production area.

The new concept was completely different: Instead of PCs, small industrial terminals (IP 65) would be used in production. Ideally the terminals would be running under the extremely lean operating system of Compact Flash memory. Giving up the hard disks would increase reliability and the corresponding waiting time would be minimized. In addition there needed to be different versions of the terminals available for the mobile, as well as the stationary applications.

"DLoG fulfilled these requirements completely. A single competitor had developed a similar system, but had yet to demonstrate a practical implementation. With respect to the level of investment, we placed further value on DLoG as a partner, because the terminal specialist already had good references within our company and had a proven track record with other customers," explained Christian Terbou. To continue: "At TANN Föderlach we decided on 180 stationary DLoG data terminals, the DLoG MPC 5/110, which work

on ProFood from Syspro. In addition, six to eight mobile terminals were installed on our vehicles." The DLoG MPC 5/110 terminal proved itself worthy of implementation in production and logistics through comprehensive testing. The multifunctional terminal combines a large 10" or 12" color TFT display with excellent screen quality and is easy to operate either via the display or touch screen. Network cards, bar code scanner connections, chip card readers, or other peripheral devices can be integrated according to need. USB and serial ports are standard.

According to Manfred Lachauer, International Sales Manager at DLoG, the steel version of the MPC 6 is especially well suited for the demanding, hygienic use in meat-processing business or in groceries and luxury food manufacturers. "The food-safe, smooth casing made of V2A steel is easy to clean and disinfect," says Lachauer, "and all connectors are particularly safeguarded with waterproof coverings. This guarantees long term reliability, even in environments where liquids and cleaning fluids are continuously in use."



Seamless IT monitoring ensures retraceability

To ensure the retraceability the entire production workflow is mapped in the IT system. This begins with the delivery from the slaughter house. Every pork and beef half is marked in the slaughter house with an ear mark and a unique bar code number. Already 12 hours before the delivery, TANN receives via electronic data exchange a delivery dispatch containing not only the delivery time, but all of the bar codes included in the delivery as well. Immediately upon arrival the actual bar codes are read via DLoG terminals with scanners and are compared with the dispatch list by the inventory control system. The delivery is only accepted when all data are in agreement. When each animal half is scanned upon arrival, it simultaneously receives a 10-digit, internal SPAR batch number. The distinct connection between the internal batch number and the bar code of the supplier ensures the retraceability to the slaughter house, and from there further back to the farm or animal raising facility.

Subsequently the animal halves are cut into further portions. Every piece that comes from an animal half receives a part batch number, which is saved with the source animal half batch number. When the individual cuts of meat are packaged, package labels are printed for the customer with the part batch number, the batch number, a description, and a (128) bar code. The packaging is completed by the inventory control system according to customer request. Employees are only allowed to pack the batch numbers that are generated by the system. The control comes from the scanning of all of the delivery unit components before the delivery. "We work exclusively with a 1 to 1 recording of entries and with a 'from – to' principle. With this there can be no debit, that is, no delivery without a traceable history, anywhere in the entire system. Whereas earlier we worked only with internal batches, without concern for the outside, today the referencing of earmarks and batch numbers ensures the complete retraceability," explains Christian Terbou. All steps in the production process now begin and are concluded with scanning or data entry processing on the DLoG terminals.

Sausage manufacturing particularly challenging

How reliable this principle truly is can be seen in the sausage production process. Here recipes are separated into the components by the system and the ingredients are requested by batch number and checked before going into produc-



tion. This is not only true for the meat portions, but all the additional ingredients are also uniquely retraceable: „For example our salt delivery is also given a retraceable batch number. The finished sausage product receives a part batch number which references all of the batch numbers of all of the meat and additional ingredients of that product. With this TANN can guarantee seamless retraceability throughout the complete meat and sausage product process.

Rapid rollout and high acceptance by employees

The rollout of this new merchandise management system and terminals took just a few weeks and was made easier by a team-oriented, detailed preparation phase. From the start the hardware and software were optimized to work together, so that upon installation no problems suddenly surfaced. Training went smoothly due to the ease with which the touch screens are operated. About six weeks before the launch of the new system Mr. Terbou and his team trained the department leaders and they in turn trained their own users.

About half of the employees at Förderlach are directly affected by the conversion. The new system was immediately accepted, because it significantly eased the workload and was so easy to operate. The paperless order picking from the slaughter house to the grocery store offers overall an appreciable time and cost savings.

These successful experiences in Förderlach led to the implementation of the system in TANN operations in St. Pölten and Marchtrenk in the same year. "By the middle of 2006 the rest of the TANN facilities had implemented DLoG's terminal inventory control system. In total there are more than 200 terminals in operation," says IT project manager Terbou. "With the conclusion of this project SPAR and its meat production operation TANN move to the forefront of European information technology."



Information in this document is subject to change without prior notice. The software and hardware designations used in this text are in most cases also registered trademarks and are thus subject to law. Windows® is a registered trademark of Microsoft in the U. S. and other countries.

DLoG GmbH

Werner-von-Siemens-Str. 13

D-82140 Olching

Phone: +49 (0) 8142 / 2860-0

Fax: +49 (0) 8142 / 2860-10

E-Mail: info@dlog.com

Internet: www.dlog.com

© by DLoG GmbH 2006