

# Chark-produkter's traceability leaves nothing to chance - Datalogic - Datalogic

Customers can feel safe when purchasing sausages and patés manufactured by Chark-produkter AB in Billesholm, Sweden, since they have full control where it concerns their suppliers and raw materials.

In accordance with the EU's regulations for the food industry, Chark-produkter started a project a few years ago in order to improve their own traceability system, which at that time was totally manual. They turned to their IT-supplier emPART AB to develop a system. emPART AB contacted in turn DataFångst Svenska AB to find suitable hardware. The system that Chark-produkter and emPART have developed together, and which is unique in its segment, has been running for about a year now. This system makes it possible for Chark-produkter to study in detail every manufacturing process and trace every single ingredient. The system is based on a list of requirements from BRC "British Retail Consortium", which makes sure that there are routines for all stages and for all unforeseen situations that could arise. All working stages should also be measured according to a scale of risk factors that the company decides upon themselves; but which must be consistent.

The bar code links together the process

All deliveries are marked with a bar code label. All employees in the factory wear a bar code. All that is manufactured is linked to a manufacturing order that also contains a bar code.

At each stage the bar codes are scanned with a mobile computer, Skorpio™. The entire factory is covered by a wireless IP65 rated net for dust and moisture. Every time something is scanned with the mobile computer the information is updated in the traceability system.

Each product that is delivered to a store is marked with a batch number. If something should go wrong, Chark-produkter just needs to enter this batch number to find the following information: which manufacturing order does the product belong to, which customers have received a delivery with the same batch number, which ingredients are used in the product and from where the ingredients come. No ingredient is too insignificant, even spices as well as the flakes have been used to smoke the smoked products. All check controls and measurements taken throughout production are also shown.

Security from receiving to shipping

Chark-produkter has approximately 150 suppliers and about 500 different ingredients, including everything from spices and flakes to meat products. When the ingredients arrive at the factory, they are entered into the system together with the name of the supplier. The temperature that the products

had at the time of delivery, as well as who received the delivery are also registered. Bar codes are printed and applied.

A manufacturing order is prepared at the office the day before manufacturing. A bar code is printed on the manufacturing order that specifies the batch number and all information behind the manufacturing order is linked together in the program.

The batch number follows the goods all the way from production to the shops and the consumers' fridges.

#### Hygiene is important

In order to enter the factory, a certificate of health must be signed, hands washed, all jewellery removed and protective clothing put on. Once in the factory, there are different hygiene zones. For example, in the blue zone everything is absolutely clean, which means that packing material is not allowed here. In the red zone, the packaging materials are allowed and in the yellow zone the goods are in fact packaged.

#### Solution

The application is made in C++ and .Net. There are seven access points placed in the factory. Before making the installation, DataFångst measured the facility in order to analyse where the access points should be placed and how many were required. The mobile computer Skorpio™ is used to scan the bar codes and enter information. In order to choose a mobile computer, DataFångst brought several different models that met the requirements. The staff tested the different models and chose Skorpio™. The environment in the factory is harsh and a mobile computer that is proven effective against dirt and moisture is a must. After one year in use in this environment, the mobile computers still work without any problems.

"The advantage with this system is that we are in control of all products and are able to find information about everything we need to know", says Rolf Lofström, Quality Manager. "Until now we have never had to recall any of our products, but if we would, this system would be of enormous help. If a recall were issued on any product, we have to contact everyone that has received products from us containing the same ingredients. Imagine it is the salt that is contaminated; what enormous impact that would have. This system is really an insurance for quality so that we quickly and easily are able to trace all affected products/ingredients.

Customer: Chark-produkter AB

Industry: Manufacturing

Application: Receiving, Shipping

Country: Sweden

Datalogic Mobile Solution: Warehousing

Datalogic products: Skorpio™

Datalogic Mobile partner: DataFångst Svenska AB, emPART AB AB