

CASE STUDY

Enterprise Mobility

Future proofed solutions for the perfect taste
with Enterprise Mobility



The user:

- Silesia Gerhard Hanke GmbH&Co.KG
- Medium-sized manufacturer of flavours for the food and beverage industry
- Family-owned company with international presence and production facilities in America, Europe and Asia

The challenge:

- Modernisation of mobile computers at the location in Neuss
- High robustness and availability
- SAP applications easy to develop and customise

The solution:

- Hardware: BARTEC Mobile Computer MC series with integrated 2D barcode scanner
- Operating system: Windows Mobile
- Software: Remote access to SAP applications

Result and advantages:

- Robust solution for data acquisition and feedback in Ex zone 2
- Simple adaptation and new development of SAP applications through the standard operating system
- High quality: fast and reliable scans
- Simple procurement and management (standard hardware, standard operating system)
- Alternative operating systems available, e.g. Android for the future changeover to SAP HANA (HTML5)

In the food and beverage industry, automation and digitalisation go hand in hand with safety. Flavour manufacturer Silesia therefore consistently relies on robust and universally applicable mobile computers from BARTEC in Ex areas. The result: More availability and efficiency in production and logistics as well as simple adaptations of SAP applications.

Whether confectionery or bakery products, culinary products or beverages, including coffee, tea and dairy products, the “flavour experts” from Silesia have been shaping the taste of tomorrow for more than 100 years. But it is not just that: The company is also at the forefront when it comes to automation in the Ex areas.

Risk of explosion due to volatile components

At the Neuss location, liquid flavours are produced according to strictly confidential recipes. The ingredients of the respective flavour creation also include volatile liquids, such as alcohol as a carrier. They are initially filled into large storage tanks, from where they are distributed to production via pipelines. Since flammable atmospheres can arise when the tanks are filled and later dispensed by hand, there are many explosive areas in the company that have to be taken into account when automating and digitising processes.



Mobile computer with scanner and explosion protection

In the course of the changeover from the previous process control system to SAP, Silesia was looking for a current generation of mobile computers with integrated barcode scanner for its mobile enterprise applications in Ex zone 2. System integrator PANDA PRODUCTS recommended the BARTEC Mobile Computer series, which is available for Zone 1 (MC92-IS) as well as Zone 2 (MC93-NI). From the broad portfolio of integrated reading devices, the medium-sized flavour manufacturer selected a 2D barcode scanner. SAP connection and data exchange take place via WLAN and Bluetooth is also supported.

Robustly built and universally applicable

The 4.3" touchscreen made of special tempered glass can withstand harsh environments and is easy to read even in the most varied lighting conditions. Silesia chose Windows Mobile as the operating system. As an alternative to Windows Embedded systems, BARTEC also offers the current device generation with Android. "Thanks to the standard operating system and the many other options, we were able to easily adapt the devices to our requirements," reports Lutz Schaffrath, SAP coordinator at Silesia. "The devices are robustly built and work very well overall. In practice, the fast and accurate scanning process is particularly convincing."

Use Case 1: Automatic tank filling

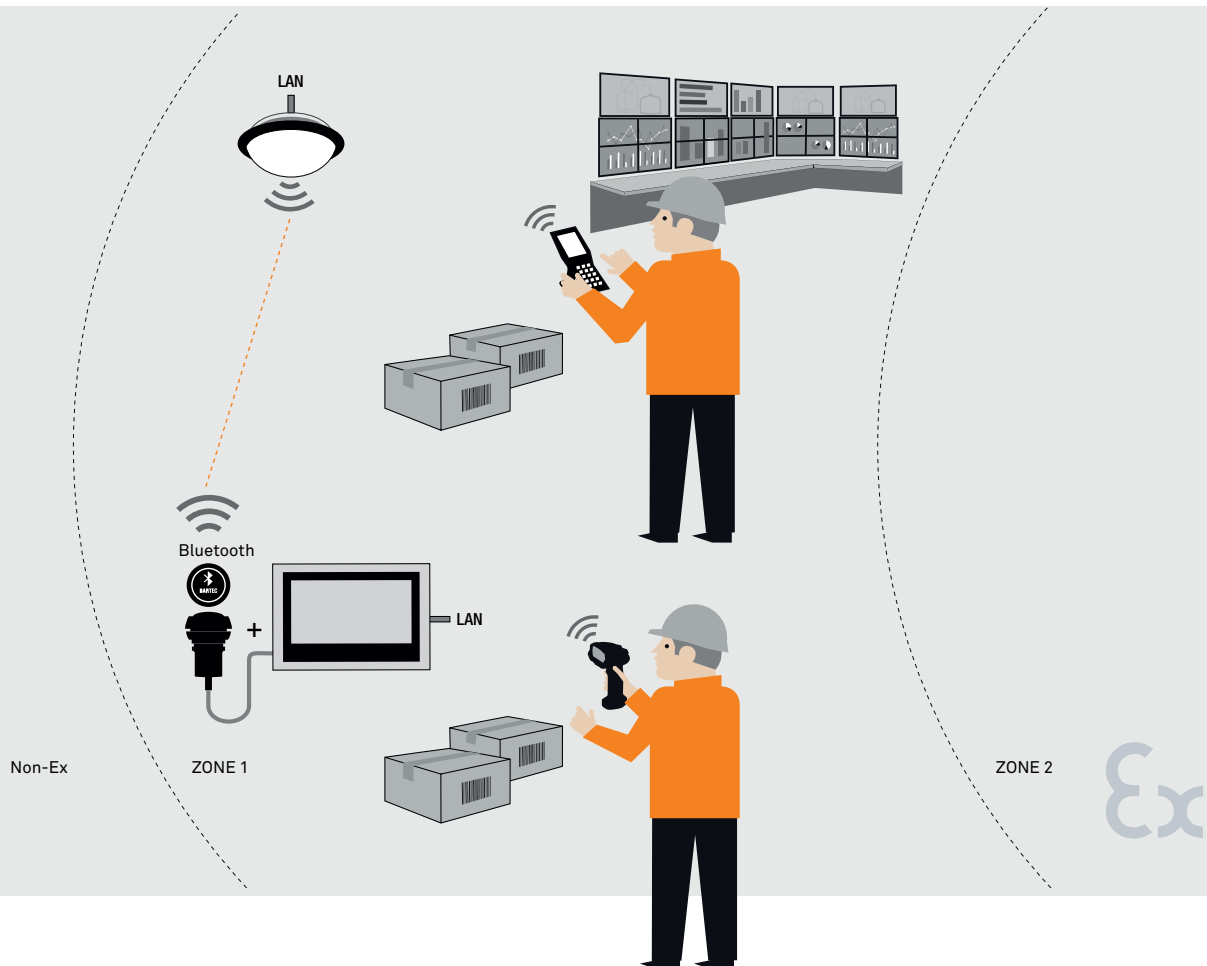
The most important selection criterion for Lutz Schaffrath was the availability. In terms of reliability, the previous devices – also from BARTEC – had already proven themselves. Universality was now added as a new requirement.

“The standard operating system Windows Embedded enables us to program or adapt any SAP applications by our software partner IGH at low cost,” explains Lutz Schaffrath.

The first application for the new mobile computer: The automatic dosing device in storage tanks. This is where, the delivered containers and the tank to be filled from the warehouse are scanned. After the data has been compared by the ERP system (matching of the information tank, material and batch), the correct amount is automatically conveyed and booked. To be on the safe side, a comparison is then made with a manual level measurement and subsequent feedback via the keyboard of the mobile computer.

Use Case 2: Manual bottle filling

The second application scenario for BARTEC's EX-certified mobile computers: For manual dosing in production, employees regularly fill ingredients, such as orange oil or semi-finished products from canisters into bottles. For this purpose, the employee first scans the barcode on the canister with the MC92 and then the bottle label, which references the material and batch number. Once the three pieces of information have been successfully matched, they are released and posted.



Use Case 3: Paperless inventory

Silesia implemented a third use case with a completely new SAP application. As part of the annual inventory, the employees use BARTEC mobile computers to verify the storage locations of the bottles for manual dosing. The inventory document is posted directly in the background to the ERP system and processed later. In addition, Lutz Schaffrath sees many other options for digitally mapping manual processes by means of the mobile computers, and thus making them less susceptible to any errors. For example, re-bookings in the hazardous materials department will be paperless in the future.

“BARTEC’s mobile computers are great. They run absolutely reliably and offer us many new application possibilities in the Ex area.”

- Lutz Schaffrath, SAP Coordinator, Silesia

Future-proof investment

Lutz Schaffrath is very satisfied with the renewed decision in favour of BARTEC.

“The devices run reliably and with high performance as usual. The standard operating system allows us to quickly adapt and develop new SAP applications.”

Until the changeover to SAP HANA and HTML5, the company wants to switch to Android in parallel. In this respect, Silesia can also rely on the highly functional robust Enterprise Mobility Portfolio from BARTEC, because the BARTEC Mobile Computers also enable a suitable update as a future-proof companion.

