



Zebra® printers support accurate mobile application labelling for German automobile logistics supplier

Cars, bumper to bumper, as far as the eye can see... E.H. Harms GmbH specialises in logistics for new and second-hand cars, having built a European network to support this activity. The hubs of this network are the car terminals where the service offering is supplemented by technical services. This includes installing extras and reconditioning vehicles, fitting hands-free kits, fire extinguishers or shelves in delivery vehicles. The company also carries out a full inspection and assessment of second-hand cars, preparing them for subsequent dispatch.

Maximising its storage space at the LogPort site in Duisburg to its full capacity, Harms can handle 4,200 new and second-hand cars. The car terminal - located on the former site of the Rheinhausen steelworks - stores vehicles temporarily while they are technically processed and then dispatched. To ensure that no vehicle accidentally goes through the process twice or ends up at the wrong dealer, Harms has each car labelled directly on site using Zebra® QL 420™ mobile printers. Each vehicle ID label has a 17-digit chassis number, colour, model details, as well as information about the work to be carried out to order. The completed tasks are centrally recorded on the ERP system by simply scanning a bar code on each vehicle ID label.

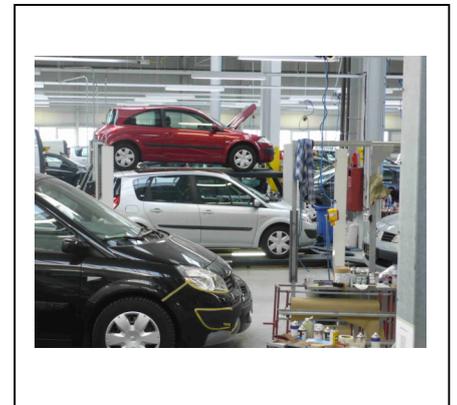
The challenge

At its old Cologne based site, Harms employees previously had been using stationary printers located at a fixed central point. Offline scanners were used to record vehicle data directly, but staff still had to return to the office where the scanner data was imported into the host system. The data was then printed onto a label and brought back to the relevant vehicle. This was a time consuming process with potential risks of mistakes being made. Therefore it was necessary that a state-of-the-art mobile printing solution would be needed for its new site at Duisburg.

Other sites previously had applications with online radio data transmission terminals used along with mobile bar code printers to save staff the need to move around the sprawling sites, which is very time-consuming, and to raise productivity. However, with the deficiencies of these printer models (once the cutting edge of technology) became evident over time.

- Printers had to be connected to the radio transmission terminals via a cable, which proved to be impractical for users.
- Users complaints about the printers' heavy 1.5kg weight.
- Printer batteries had to be replaced one or twice, depending on the printers' activity during an 8 hour shift. With no suitable battery life indicator, staff would get caught unawares when the battery went dead.

Complex printing technology required transparencies to be frequently replaced by users to ensure labels were clear and legible. Such fiddly manoeuvres were particularly un-user friendly when being carried out in the field.



Solution Technology

Zebra® QL 420™
mobile printers

Bluetooth® connectivity



The Solution

It was this user feedback which helped E.H. Harms' managers to outline a clear requirements specification for the ideal bar code printer. Wireless connectivity, light weight, easy-to-use and long battery operating life were all key criteria.

The systems integrator that was chosen was a specialist in implementing automotive ID applications for operational and planning warehouse and transport logistics and had already installed, managed and maintained the existing printers at E.H. Harms, as well as the S-UHF radio systems.

After carrying out marketing research, the Zebra QL 420™ mobile printer was chosen. Being specifically designed for warehouse use, it is designed to be suitably compact and robust. A rubber over-mould protects the printer's sharp edges. This ensures vehicles are not damaged if an employee accidentally knocks against the vehicle paintwork with the printer while working on the vehicle. However, it was particularly the printer's light weight - 907 grams including the battery - and the various connectivity options which were key factors in choosing the QL 420 printer. In terms of connectivity, the QL 420 can be networked via WLAN, Bluetooth or IrDA. Given that all the car terminals will be equipped with WLAN in the future, this was an important factor. Online scanners were planned to be used in Duisburg with the new mobile printers, which have Bluetooth Radio.

After an initial 2 month testing phase at the Harms head office in Bremen, the company's systems integrator recommended a 1:1 Bluetooth connection between the scanner and Zebra QL 420 mobile printer as the most stable and suitable solution.

In order to tailor the printed labels exactly to E.H. Harms' requirements, the systems integrator supported its customer in adapting the print files on the IBM iSeries server. "When we were setting up the iSeries server our contacts at Zebra were on hand with practical advice," says Frank Verhufen, Managing Director of Harms' systems integrator. "By carefully analysing the process requirements beforehand and thanks to our effective management during the implementation phase, we were able to completely eliminate potential sources of errors. As a result of this, the project was able to run in real-time without any problem, which has given a great boost to the staff's acceptance."

Tanja Matthews, whose job includes managing IT projects at Harms in Duisburg, confirms the positive impression which using Zebra printers is making on her colleagues. "The trial has gone without a hitch.

Cooperation between our systems integrator and Harms has been excellent, which has now allowed us to develop our work processes quickly but also extremely thoroughly. The Zebra printers are also impressive by how easy they are to use in a day-to-day context. The batteries last for three shifts, with a clear display giving information on the current charge status. In addition, the thermal direct process does not involve any laborious procedure for changing colour ribbons and it produces clear legible labels. The problem with the labels fading behind the vehicle's side window whenever exposed to strong sunlight can be resolved by using specially layered consumables."

In the meantime, the Zebra QL 420 printers are being used in Duisburg on a daily basis to quickly and efficiently register incoming cars and to save time, with no more need to walk round the site. E.H. Harms' site in Kelheim has also been benefiting from the experiences from the Duisburg site, and has since implemented the same infrastructure. Other Harms sites will now also gradually follow suit in the future.

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