CASE STUDY | Citizen CL S521 helps
Dutch hospital improve patient safety

CITIZEN
Micro HumanTech

The Citizen CL S521 printer has enabled The Netherlands' Spaarne Hospital to improve patient safety by enabling accurate, on-the-spot printing of labels and wristbands. The multi-purpose, easy-to-use printer is minimising the likelihood of error by replacing hand-written labels with printed text and barcodes, enhancing service and saving time for staff in a busy hospital that serves an increasing number of patients.

Spaarne Hospital is a modern and dynamic hospital in Hoofddorp, staffed by 2000 people and operating around the clock. The hospital treats a wide variety of patients using the latest techniques and to do this it relies on a fully digital patient record. "We needed to modernize the identification process in our hospital," explained William de la Rambelje Garcia, Project Manager ICT Spaarne Hospital. "My job was to seek a printing solution that would suit a series of needs, not only by printing wristbands for patient identification but also labels for blood test samples, baby food, envelopes – a whole range of uses. For example, a patient that has to go to an outside specialist must take a written order from a doctor. These papers contain important patient information and we wanted to output these notes from the digital records. So we needed to research and source a versatile printing solution."

William and his team looked at three label printer vendors and compared their offers across several criteria. Flexibility was the main criteria, because the printer was required to perform many different tasks, but user-friendliness was important, too. The team looked at how easy it was to change the media on each printer and evaluated both the available options and layout of the display on each unit. Also, the ICT department looked at the printer drivers in order to judge compatibility with the existing systems at Spaarne Hospital and, given the various demands that would be placed on the unit, considered the quality of the labels to ensure the right durability.

The CL S521 is a precision engineered, fast-printing unit that can handle a range of media types, including specialised labels and wristbands. With a high resolution 300dpi print head it can produce the clear, crisp output that is vital in applications such as this where barcodes are being printed on small-sized labels.
A failed barcode can result in a sample being taken again, causing unnecessary patient discomfort – or, worse still, being wrongly attributed, which is a danger to patient safety – but high quality barcode reproduction minimises such risks.

Spaarne
Z I E K E N H U I S

"The CL S521 is so compact and easy to use," William added, "we can put label printers in the rooms where the samples are being taken. Again, this reduces the risk of putting wrong information on the sample."

>>>

As William explained, the CL S521 also offers peace of mind when it comes to media loading. "When you open other label printers, you can see the head. With Citizen, the print head is one whole unit. That means I don't have to worry that the printer is going to break if a user handles the printer roughly or is inexperienced in performing maintenance. To reload media in the Citizen printer you just put the roll in the holder. That was one important reason why we chose Citizen over the rest. "

"Before we integrated the Citizen CL S521, 75% of our labels were hand-written; now approximately 90% are printed," William explained. "Each of our 50 hospital departments has one printer but some have two or more. In total, Spaarne Hospital has purchased 170 Citizen CL S521 units."

"If someone in the laboratory receives a sample with a hand-written label and they cannot read the name, message or instruction, this is not good for the patient. For some patients, every movement causes pain and it would cause a lot of unnecessary discomfort to ask such a patient to repeat a test because the label was unreadable. But with the CL S521 in combination with our hospital information system, we can provide high quality labels with readable text and bar codes that enable staff to complete processes swiftly and efficiently. I believe that by using the CL S521 to print labels and wristbands we have significantly improved patient safety and that was my highest priority. In addition, by digitising our label printing and using barcodes we are able to reduce the amount of printing that we do, which is in line with our ambition of becoming a paperless hospital. "

"We compared the service provided by the three vendors and, overall, we were very satisfied with Duranmatic, a service provider with expertise in label printing solutions," William said. "We were impressed with the service and support offered by Duranmatic, the answers that they gave to our queries, and, of course, the printer itself, which was the Citizen CL S521. The printer excelled above the competition due to its robustness, compactness and ease-of-use. With the Citizen CL-S521 we can now easily print digital information on items such as wristbands and blood tubes so that they can be quickly and effectively identified."

Featuring printers:

CITIZEN CL S521

- Front exit - prevents damage from moisture or foreign objects
- Variable paper width - 0.5 inches (12.5 mm) – 4.6 inches (118.1 mm)
- Durable design - Citizen's proven Hi-Lift™ all-metal mechanism
- Paper thickness up to 0.250mm
- Fast print out - 6 inches per second (150 mm per second)
- Large media capacity - holds rolls up to 5 inches (127 mm)
- Hi-Open™ case for vertical opening, no increase in footprint and safe closing.
- Low space requirement - integrated power supply enables clean work station

About Citizen Systems Europe

Citizen Systems Europe operates from London, UK and Esslingen, Germany covering Europe, Middle East and Africa. Citizen offers a broad range of thermal label & barcode printers, portable and dot matrix printers, mini and POS printers. Via a network of specialized partners, these are sold into markets as diverse as industrial, retail, healthcare and mobile applications.

Citizen Systems Europe is a wholly owned subsidiary of Citizen Systems Japan and part of the Citizen Watch Company of Japan. The globally operating group produces its world-famous eco drive watches and mini printers, industrial print systems and machine tools, crystal oscillators, LEDs and other electronic components.

About Duranmatic

Duranmatic BV, located in The Netherlands, was established in 1985, and specialises in exclusive products and solutions in the field of Industrial Automation (Industrial), Automatic Identification (Auto ID), Point of Sale Systems (POS) Scanning and Automation (total solutions with fixed scanning and vision systems).