Copan Italia optimises revolutionary medical analysis machine with Zebra printing solutions

Background:

Copan (COllection and Preservation for ANalysis) Italia was founded in 1979 to produce disposable items for chemical and clinical test laboratories. Over the years Copan Italia has invested heavily in the development of its technology and organisation to optimise production phases and the quality of its products.

Copan first approached Zebra in 2005 for help with the performance improvement of its own traceability systems (printing and reading barcodes). Managed using software developed both for production scheduling and logistics management, Zebra provided a robust printing solution in conjunction with Label Matrix management software from partner, Teklynx.

Challenge: How to maximise the huge potential of integrating WASP with printers and barcode readers

In 2007, Copan developed a revolutionary device called WASP (Walk-Away Specimen Processor), capable of performing blood and urine analyses in significantly less time than other methods. The device, which is distributed worldwide and operates 24/7, enables every hospital and laboratory where it is deployed, to increase its own potential volume of analyses in a short space of time. A WASP device can analyse 1,000-1,200 samples during a typical 8-hour shift.

The WASP device is set according to the specific requirements of the hospital or individual analysis laboratory, and every label has a barcode containing information about the patient and the type of analysis. As the only manufacturer of this type of processing device in the world, Copan requested consultancy from partner, KFI, to assess how to maximise the huge potential of integrating printers and barcode readers with the innovative WASP device.

Solution: Optimising the workflow of the WASP with Zebra ZM400 printers

Based on Zebra's previous work, Copan had no hesitation in deciding to integrate the WASP with Zebra ZM400 printers. As a trusted supplier whose printers had already been widely used in other areas of the company, the solution was a straightforward decision, and offered immediate benefits including cost savings and a guarantee of high performance levels. The decision to use the same Zebra ZM400 printer - which was already used in production, but suitably configured and equipped with some specific options for the application - generated significant synergy in terms of availability of spare parts, and guaranteed comprehensive technical support. Thanks to Zebra’s global presence, WASP devices are currently deployed in some of Italy’s biggest hospitals, as well as throughout Europe, and in Canada, the United States, Japan, China and Australia.

Integrated with software developed by Copan IT for managing the WASP device, Zebra’s ZM400 printer provides an ideal solution due to its seamless integration with the company’s applications, offering a simplified configuration system, and exceptionally easy maintenance.

Results

WASP solution installed in over 200 hospitals and labs worldwide
Benefits:

Significant increase in the number of WASP devices produced and exported worldwide

In just 8 months from the start of development of the WASP, Copan Italia achieved a highly innovative solution offering remarkable performance levels in time spent in sample analysis.

The ZM400 printer, integrated within the WASP device, has met the automation requirements of a highly complex technological environment, and has demonstrated its reliability and performance by subsequently enabling modifications to be made to the WASP, helping to achieve even higher performance levels.

Increase in volume of samples analysed

The WASP guarantees high performance capability and allows all hospitals and laboratories using it to increase the volume of samples analysed in a very short space of time.

Integrated with the WASP machine, the Zebra printing solution allows Copan to optimise operations with a high level of reliability and to prevent potential interruptions in the production line, which would negate the benefit of increased volumes of samples analysed.

Reduction of human error in analysis

The WASP is set up according to the specific requirements of each hospital or laboratory, and every label printed by the ZM400 includes a barcode containing information relating to the patient and type of analysis. This capability significantly reduces the risk of human error in the sample analysis process.

The performance levels offered by Zebra’s ZM400 printers match our operational requirements which had put a great strain on the technical structure. We fully intend to continue using this range, given the printers’ excellent results. - Davide Fania, Business Development Manager at Copan Information Technologies Srl