### A CASE STUDY

# How customized solutions reduced errors in a diagnostic instrumentation company





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#### **CUSTOMER BACKGROUND**

A diagnostic instrumentation company is a renowned global company and an industry leader that is made up of various testing labs works to manufacture testing equipment and instruments to sell to laboratories and physicians. The laboratories and physicians will use these products to test samples for pathogens. This company is a partner of Computype's and we have overcome challenges with and for them over the years.

#### THE CHALLENGE

The initial challenge this company was facing involved a piece of testing equipment they had created. The equipment included a single line scanner that, when scanning a barcode on a sample, only scanned one line through the code. This meant that if there were any minuscule defects on the barcode, it would not scan, slowing down the process and compromising the integrity of the sample.

The testing equipment was programmed to process samples constantly and automatically, including overnight without supervision. The challenge was that if the barcode had a defect and couldn't be read, the equipment did not only reject the sample, but the entire process would stop. Operators would load up the equipment before leaving for the night, it would stop due to a defect, and they would come in the next morning to an unexpected backlog of unprocessed samples. From a scheduling and productivity standpoint, this can only be stated as a nightmare of a problem.

Additionally, reprogramming the unit was not a possibility without having to revalidate to guarantee error-free barcodes. This presented a challenge as it had to be fixed immediately; however, there seemed no easy solution.

This company brought their issue to Computype because we had been working with this company for years on other labeling solutions, so they knew that Computype had the ability to customize barcode and label solutions to specific needs, and knew we had the engineering resources to help.

#### **OUR SOLUTION**

An emphasis point for this application was the elimination of defects in barcodes; to ensure this, the company asked if there were any way to inspect every label after production and printing, but prior to finishing and shipping. This was not a service capability that Computype had ever offered. Furthermore, technology to accomplish this task at the high volumes this customer required in a reasonably quick manner simply did not exist. However, we committed to collaborating with our engineering group to see if we could create a solution.

Computype engineers developed a high-speed scanning system that looked for defects. The purpose of this system is to detect imperfect barcodes right away by scanning each code, which is 3/10 of an inch tall upwards of fifty times. Certain parameters are specifically set per customer and if more scans than allowed 'fail', the barcode will be scrapped. This process ensures that unreadable barcodes will never have the opportunity to halt a sample processing workflow.



As a result of Computype creating this system, this company has since received higher quality barcodes that keep their processes and workflows functioning at optimal performance. Computype capitalizes on the service that our customers need to get their job done well and simply as possible. We overcome tough challenges in order to secure a guaranteed solution to our customer's challenges.

Ultimately, Computype created a work center within our manufacturing facility that is dedicated to this particular customer and designed specifically to quality check the barcode labels to this stringent specification.

#### **HOW COMPUTYPE HELPED**

Prior to working with Computype on this particular issue, this customer had diagnostic equipment in which the configuration was unforgiving to any small errors or defects. With the implementation of our workstations, quality checks, and pre-printed barcodes, they are able to accomplish 100% barcode read rates in a challenging environment.

The outcome is that of high productivity, workflow efficiencies, and increased more accurate throughput.

