

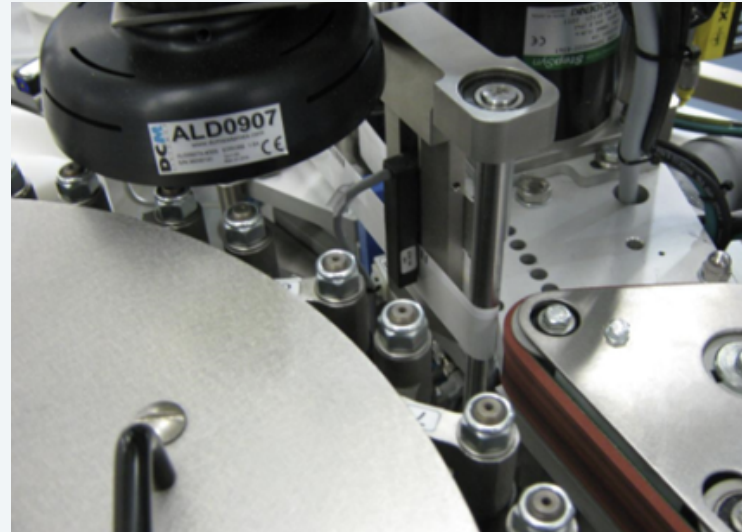
Industry: Pharmaceutical  
Services: Reliability Plan  
Machine: Labeling machine  
Benefits:



Reduced operational costs by addressing problems before they occur



Improved quality and safety



## Introduction

In the pharmaceutical industry, precision and reliability are paramount. Our client, a longstanding pharmaceutical company operating across multiple countries, faced a challenge with one of their critical assets: a labeling machine capable of applying 7 labels per second.

As their trusted partner in **reliability projects**, we embarked on a journey to enhance the performance of this vital machine.

## Situation

The client observed an anomaly in the operation of their labeling machines, where at times, due to its high speed, adhesive labels would be lost or become stuck inside the machine.

This posed a dual problem: compromising product quality and potentially mixing labels for different products, which could lead to significant implications downstream. With three to four repeated instances of the same machine, the issue seemed widespread, necessitating a comprehensive solution.

## Solution

To face the challenges, we initiated an in-depth engineering study to comprehend the intricacies of the labeling machine's operations and be able to devise an effective solution.

After this exhausting analysis, we identified the need for a new optic sensor to detect failures in real-time. This sensor would halt the machine upon detecting any anomaly, allowing operators to intervene promptly.

The proposed solution involved integrating a new optic sensor into the labeling machine. This required meticulous planning and execution, including developing integration specifications, ensuring compliance with pharmaceutical industry standards. Additionally, we implemented a secondary control cell to provide further assurance in label application accuracy.

## Results

The results were transformative. The solution proved to be not only effective but also economically viable, with a return on investment achieved in less than six months. Key outcomes included a 50% reduction in deviations on the production line, thereby enhancing product quality and regulatory compliance. Moreover, the solution garnered such success that the machine's company decided to adopt it as an optional feature for their new labeling machines, showcasing its value and impact on operational efficiency and reliability.