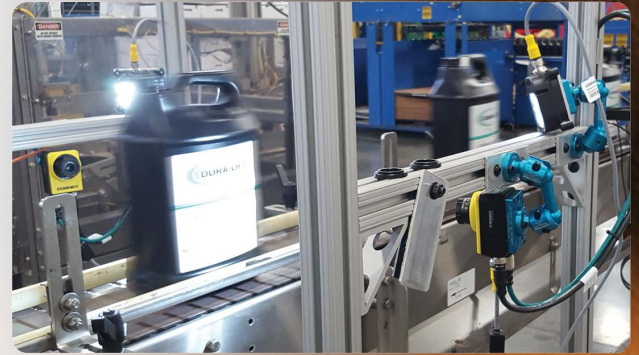


Machine Vision - Label Inspection

Challenge: Find a solution that can verify that the correct label is being placed on the right product, while moving on a high speed conveyor.

Solution: Smart cameras, Image based barcode reader, and custom software for HMI.

Story: A local bottle filling company was experiencing issues with incorrect labels being applied to their product. When the wrong labels were selected and applied to the bottles, or when inaccurate prelabeled bottles arrived, the company had to hire temporary workers to remove the incorrect labels. Each of the four lines run a variety of bottle sizes, that require 100% inspection.



The vision experts at EMP Technical Group were brought in to design a turn-key solution. They began by analyzing the customer's current process in order to define the scope of the project. An off-line evaluation was then completed to determine the necessary hardware and vision tools. EMP concluded that the InSight 7402 smart camera with Autofocus capability, would be used for inspecting the label on the bottle to ensure that it is correct. They also decided to use the Dataman 363 to read the barcode on the label and verify that this matches the label.

Their engineering team was then able to install and program each camera. Following the initial set-up, EMP ran many online tests to verify the system was performing as expected. The key to the success of this project was that the system needed to be flexible in order to inspect a variety of bottle sizes and shapes. One of EMP's software engineers was able to design a custom interface that allows the customer to select the desired bottle and the corresponding vision program automatically loads with all of the correct settings and vision tools. This saves the customer quite a bit of time when changing product on a line.

In the final step of the project, and arguably the most important, the EMP engineers ensured that the customer was very comfortable with the system and able to train any new products that are introduced in the future.

The turnkey solution from EMP Technical Group enabled the customer to achieve their goal of 100% product inspection