

Scanning Multiple Barcodes

Challenge: Design a quality inspection system to ensure that the correct label and quantity of labels is present in each package.

Solution: A Vision solution complete with a 31MP GigE camera, Cognex VisionPro software, smart vision lighting, custom conveyor, Cognex Dataman, and control box with PLC.

Story: A label manufacturer produces unique, pressure-sensitive labels that are eventually molded directly into a container. These labels are printed, stacked, wrapped, and

loaded into boxes for shipping. Unfortunately, some boxes have shipped with incorrect and/or miscounted labels. The customer wanted a solution that would inspect each box before shipping. They reached out to the experts at EMP.

The EMP team knew this was not a simple barcode/vision application. The customer has a variety of labels; each with varying barcode locations, the height of the stack, and packaging size. The solution would need to read the barcode on the top of each label stack. In order to keep the camera stationary, EMP used a 31MP GigE camera to cover the entire 24x24" conveyor. They also

determined that a large light would be necessary in order to illuminate all of the 24x24" area without having to physically move the light.

The package is carried down the conveyor while a Cognex Dataman barcode reader scans the package to know which product should be inside the box. This triggers the vision system to look for the correct number of label stacks by reading each stack's barcode. The custom program also ensures that the barcode is the correct label. An image of each inspection is then saved to the customer's database for future reference. The whole solution was seamlessly integrated into the customer's current setup.

Are you looking to add an inspection system to your current set-up? Contact EMP today!

