

Control Reliable Inspection Systems (CRIS)



OCR
1D & 2D Barcode
Product Inspection



Omni-Directional Barcode Systems



Fully Integrated Vision Systems



360° Product Inspections



Machine Vision, Auto-ID, and RFID



Dynamic Speed Compensated Reject System

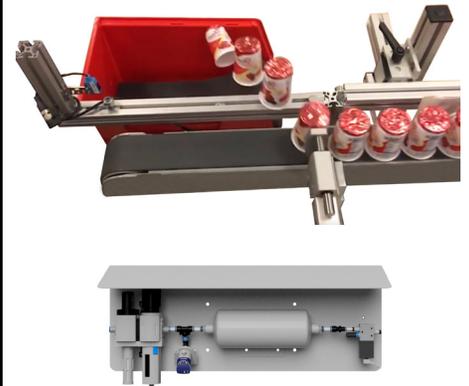


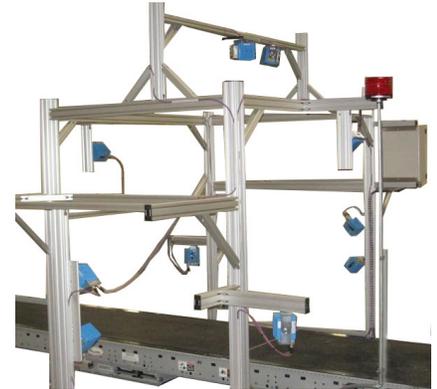


Image-Based Omni-Directional Barcode Scanning

A sortation system located at a distribution center had trouble sorting totes with difficult-to-read barcodes. We designed and implemented a multi-head camera system featuring the image-based Cognex DataMan 474 barcode reader. This system was able to read codes and labels at very steep angles resulting in higher read-rates and more throughput for the customer.

Laser-Based 5-Sided Omni-Directional Barcode Scan Tunnel

In this application, boxes of various sizes were traveling down the conveyor. Barcode labels were randomly applied in any orientation to the front, back, left, right, and top sides of the box. Usually the labeling process will control which side the label is placed on, but in this application that control was not possible. We engineered and installed SICK's modular scanning system that could omni-directionally read five sides of the box. The customer was satisfied because no matter how the operator placed the box onto the conveyor, the box would be sorted.



Control Reliable Inspection System for On-Line Barcode Validation

Through a compilation of requests from large packaging customers, Sensors Integration developed the Control Reliable Inspection System (CRIS). The CRIS is designed with fail-to-safe methodology. The system assumes each product is incorrect and must receive a positive match or pass to be allowed to continue down the production line. The CRIS also uses RFID access badges to track-and-trace employee interactions and time-and-date stamp all system events.

Control Reliable Inspection System 360 (CRIS 360)

The CRIS 360 inspects and verifies round, touching, and randomly oriented products. It uses a multi-head camera array looking simultaneously for barcode and graphic patterns to validate each product and allow it to pass the inspection point. If a flawed product is detected, the product will be rejected from the production line and the removal of the product will be confirmed. With the CRIS 360, no product gaps on the production line are required. This allows for higher line throughput and no false passes.



Optical Character Recognition and Verification (OCR and OCV)

Consumer products are increasingly requiring traceability. This system used a camera to verify that the correct text was printed onto a label. As the labels were applied, the camera took an image and used optical character recognition (OCR) and optical character verification (OCV) to determine if the correct text was printed. If incorrect text was printed, the system rejected the product.

