



Application Solutions

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Packaging Industry

Inspect Labels on Opposite Sides of a Shrink-Wrapped Bottle Multi-Pack

Challenge:

Dean's Foods, a dairy products packaging company, bottles drinkable yogurt under license for Dannon Foods. The final packaging is a shrink-wrapped carton containing 12 bottles. Labels are applied on opposite sides of the carton as it moves down a conveyor to palletizing. Dean's Foods needed to demonstrate 100% verification of label placement to Dannon to maintain the licensed business. Improperly labeled cartons that enter the supply chain get lost in distribution centers, may never reach the retail floor, and ultimately remain unsold, turning into a loss for the packager. The shrink-wrapping made label detection unreliable using conventional background suppression sensors.



Solution:



To get reliable detection of labels applied to the shrink-wrapped carton, Omron's F160 vision sensor and two cameras were proposed as the solution. Its preprogrammed Label Tool function simplifies setup to verify label placement. A trigger sensor synchronizes the inspections. After a lab test to verify proof-of-concept, Dean's Foods tested a demo stand containing an F160 vision sensor, a power supply and trigger sensor for two-weeks on their production line. With the test satisfactorily completed, Dannon was advised of the results. The system was installed and Dannon reimbursed Dean's Foods for the system costs.

For more information about Omron's F160 Vision System contact 866-88-OMRON or visit www.vision.omron.com