

Application Brief: E3X-DAS Sensor

Quick Production Line Changeover

INDUSTRY

Food and Beverage

APPLICATIONS

Capping, Labeling, Filling, Case Packing

PROBLEM

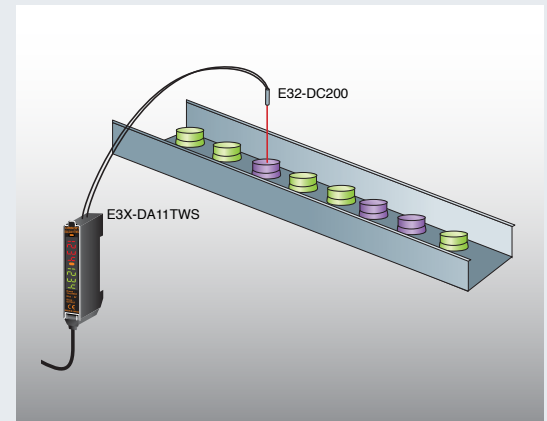
Production lines are being increasingly used to handle more than one product. However, engineers are finding difficulty in changing lines over quickly due, in part, to the resetting of sensors to accommodate different product types. This results in increased downtime and wasted profits until adjustments are made correctly.

OMRON ADVANTAGE

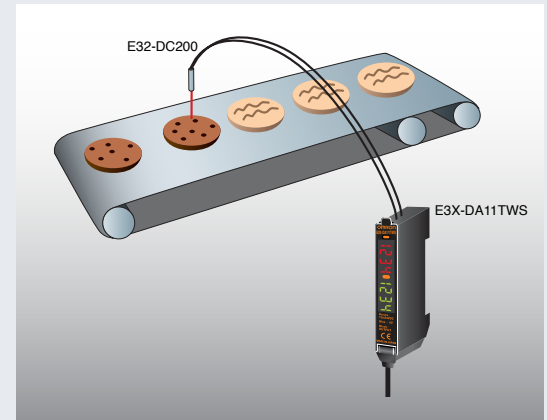
E3X-DA11TW-S Dual-channel sensor amplifier E32-DC200 Diffuse reflective fiber optic cable

With its two independent sensing output channels, a single E3X-DA11TW-S sensor can be preset to accurately detect different product types and activate outputs accordingly. It's like having two sensors in one. In addition, a large selection of slender fiber optics (wash down, corrosion resistant, armored, heat resistant, etc.) can be easily located in even the most space restrictive areas or harsh environments to ensure reliable detection.

APPLICATION DIAGRAMS



Sort caps of two different colors before they go into a capper.



Alert wrapper when to change rolls to match new product coming down the line.

Quick Production Line Changeover Application Details

ISSUE

The design or retrofit of production lines to produce more than one product is becoming increasingly important to reduce manufacturing costs. However, line changeovers are often difficult because of the many adjustments that must be made to the control and sensing systems, each of which typically requires significant adjustment to accommodate different products without wasting time and materials

CAUSE

To ensure accurate detection, sensors must be set up and tuned for specific objects. When the object being sensed changes, the sensor must be retuned to assure proper detection. Because sophisticated machines today have many sensors on them, adjusting all of them to accommodate a product changeover results in significant production time loss.

OMRON'S UNIQUE SOLUTION

The E3X-DA11TW-S sensor features a built-in dual-channel output that is like having two independent sensors in one. Each channel can be tuned to a different object allowing the user to use one sensor to reliably detect two separate objects without any intervention or added adjustment. In addition, a large selection of slender fiber optic cables (wash down, corrosion resistant, armored, heat resistant, etc.) is available for application in the most space restrictive areas or harsh environments to ensure reliable detection.

RESULTS

Production line changeovers are faster, more efficient and eliminate waste between set ups.

