

# CASE STUDY

## Vision-Guided Measurement Solution Improves Uptime for Pet Food Manufacturer

### SEGMENT

Automation

### DIVISION

SENSORS

### CUSTOMER

**Pet Food Production**  
**United States**

This pet food manufacturer produces high volumes of canned pet food using multiple packaging lines. The company has worked with Tavoron's Sensors Incorporated division for more than four years, relying on us for sensor technologies, vision systems, and custom automation support.

### THE CHALLENGE

The customer's packaging lines accommodate two different can sizes - large and small - requiring a manual changeover process involving hand crank adjustments to set the proper can spacing. Vibration during production often caused the "gap" between cans to shift out of spec, leading to operational issues.

Operators were required to physically measure the gap using calipers at scheduled intervals. If the gap was off, they had to manually readjust the spacing. This approach was not only time-consuming but also prone to human error, contributing to occasional production downtime and the risk of incorrect can sizes being run.

The production environment is also dusty, which posed additional reliability concerns for any electronic equipment used in-line

### THE SOLUTION

After years of supplying sensors and cables to the customer, the Sensors team was asked to recommend a better approach. We proposed a custom measurement gauging system that could continuously monitor can spacing without manual intervention:

The system included:

- Banner IO-Link Sensors for continuous gap detection
- Banner IO-Link Master for real-time data communication
- Exor HMI with a sealed front and back to meet IP67 dust- and splash-proof ratings, ideal for the plant's harsh environment

Our engineering team developed a custom program that displays the gap between two sensors on the HMI. When the gap is within specification, the gauge remains green; if it drifts out of spec due to vibration or other causes, the gauge turns red - prompting the operator to make an adjustment.

Mechanical installation required modifications to the existing line and thoughtful cable routing. Despite these challenges, the system was deployed quickly by the Sensors team.

## THE RESULTS

The implementation of this real-time gap monitoring system reduced operator workload and helped prevent incorrect cans from running on the line.

- Reduced downtime from improper can spacing
- Eliminated the need for manual caliper checks
- Improved production consistency and reliability
- Opened the door to future equipment bids and larger-scale projects with the manufacturer



## CUSTOMER FEEDBACK



The new gauging system gives us confidence in our changeovers and saves time. We appreciated the fast turnaround and the clear visual indicators. Tavoron's Sensors team delivered a practical solution that works.

— Maintenance Manager,  
Confidential Pet Food Manufacturer



## LOOKING AHEAD

While this project addressed a very specific operational issue, the results reinforced the value of automation-based measurement in high-volume manufacturing. The customer is now considering additional opportunities to automate manual checks across the facility and has engaged Tavoron on potential larger-scale equipment upgrades.

## EXPLORE AUTOMATION SOLUTIONS

Ready to reduce manual tasks and improve process consistency? Talk to an automation expert at Sensors today: [www.sensorsincorporated.com](http://www.sensorsincorporated.com).

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