

Twin Proximity Sensor

Proximity Technology has been used for decades to detect low vacuum in food cans. However, recent widespread use of bi-metal Easy Open (EZO) ends (steel ends with aluminum pull-tab) has presented a challenge for the traditional technology. The TapTone Twin Proximity Sensor is designed to detect and reject low vacuum and no vacuum steel cans with EZ-Open can ends (pull-tabs) at production speeds up to 525 feet per minute.

The Twin Proximity sensor is supported on T550 and PRO Series sensors only.

Features

- Vacuum inspections only with Twin Proximity Sensor.
- Adjustable Signal profile capture window for improved signal processing
- Dual high speed DSP (digital signal processors) for signal processing and communications.
- Four custom algorithms to calculate Profile, Height, Cocked and Contour.
- High and low fixed reject limits for each algorithm.

Applications

- All cans with Easy Open (EZO) can ends
- Bi-metal Easy Open (EZO) ends (steel ends with aluminum pull-tab)

Twin Prox

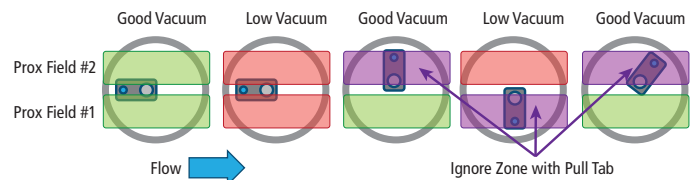
Detects low vacuum and no vacuum steel cans with EZ-open can ends (pull-tabs) at production line speeds up to 525 feet per minute.

How It Works

Theory of Operation

Teledyne TapTone is the pioneer and leader in proximity leak inspection technology. The system is designed with twin proximity sensors suspended over the customer's existing conveyor system. As the can passes through the system, with the pull-tab in different orientations the twin proximity sensors scan the EZ open can end and measure the can lid deflection on each can.

Signal processing is performed using the latest in high speed DSP (digital signal processor) technology. The signal processor is controlled by our PC software user interfaces with Ethernet capabilities for high speed streaming data or system monitoring and control. Our high speed proximity sensors provide accurate measurements at speeds up to 2000 CPM.



SYSTEM SPECIFICATIONS

Inspection Specifications

TapTone Twin Proximity Sensor

Operating Speed	2,000 containers/min maximum (120,000 containers/hr)
Detection Accuracy	0.005 in (0.127mm)
Conveyor Rail Settings	2mm to 5mm maximum for best inspection results
Can Spacing	None required for inspection
Vacuum Resolution	One to two inches of vacuum. Accuracy may vary depending on lid stock thickness and vacuum range. Mechanical line conditions may affect the resolution performance.



49 Edgerton Drive • North Falmouth, MA 02556 USA

P: +1 508.563.1000

F: +1 508.564.9945

E-Mail: taptone@teledyne.com