

TAPTONE

500

Multi-Function Inspection System for Plastic, Metal and Glass Containers

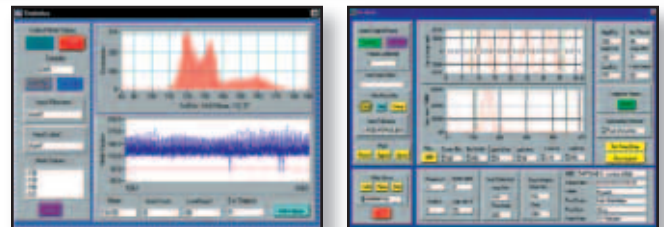
Multiple Sensor Technology in One Inspection System

- Fill Level
- Leak Detection
- Vacuum Detection
- Pressure Detection
- Physical Defects

*High or cocked cap,
missing cap, damaged crowns,
missing labels, missing tamper
bands and missing foil seals.*



Optional
TapTone
PC Software



Remote set-up and control of system by a computer
and real time data collection



TELEDYNE TAPTONE
Package Inspection Systems
A Teledyne Technologies Company

www.TapTone.com

TAPTONE

500

Multiple Sensor Technology in One Inspection System

Versatile Inspection/Simplified Control

The TapTone 500 provides complete inspection of containers for physical defects, fill level, leak detection, pressure and vacuum. When connected with TapTone PC Software, this value-packed combination provides an unbeatable system for fast product setup, ease of use, timely data collection and reject tracking. The TapTone 500 is a cost effective solution for inspection of your plastic, metal and glass containers.

Features

- Up to 2,000 Containers per Minute
- 1–3 Primary Inspection Sensors
Acoustic, Proximity and X-ray
- Up to 7 Optional Digital Inputs
- Two Independent Reject Outputs for Container Sorting
- Floor and Conveyor Mounting Options for Sensors
- NEMA 4X, IP65 Rated



How It Works

Acoustic Technology

Measures pressure or vacuum in containers that do not have a measurable lid deflection—such as beer bottles, coffee bricks, plastic jars with composite closures and milk-based drinks in steel cans. The acoustic sensor works by applying a “tap” to the top of each container. The tone response is directly proportional to the pressure or vacuum inside the container. The frequency of the tone is measured and compared to user set reject limits where containers outside the limits will be rejected. The acoustic sensor is used on metal lids or crowns where the product does not touch the lid.



Proximity Technology

Measures pressure or vacuum in food cans, jars, and bottles with pop-up lids by measuring lid deflection. The proximity sensor produces a continuous magnetic field that monitors the distance to the metal lid and produces a proportional analog voltage. The continuous proximity signal is digitally sampled to produce a merit value of the lid profile. The profile value is then compared to user-set limits. Containers with lid deflection outside these limits are rejected.

Software and Network Capabilities

- Quick Product Changeover and Set-up
- Password Protection
- Ability to Store Multiple Product Types
- Supports Multiple Languages
- RS-232 Serial Interface Port

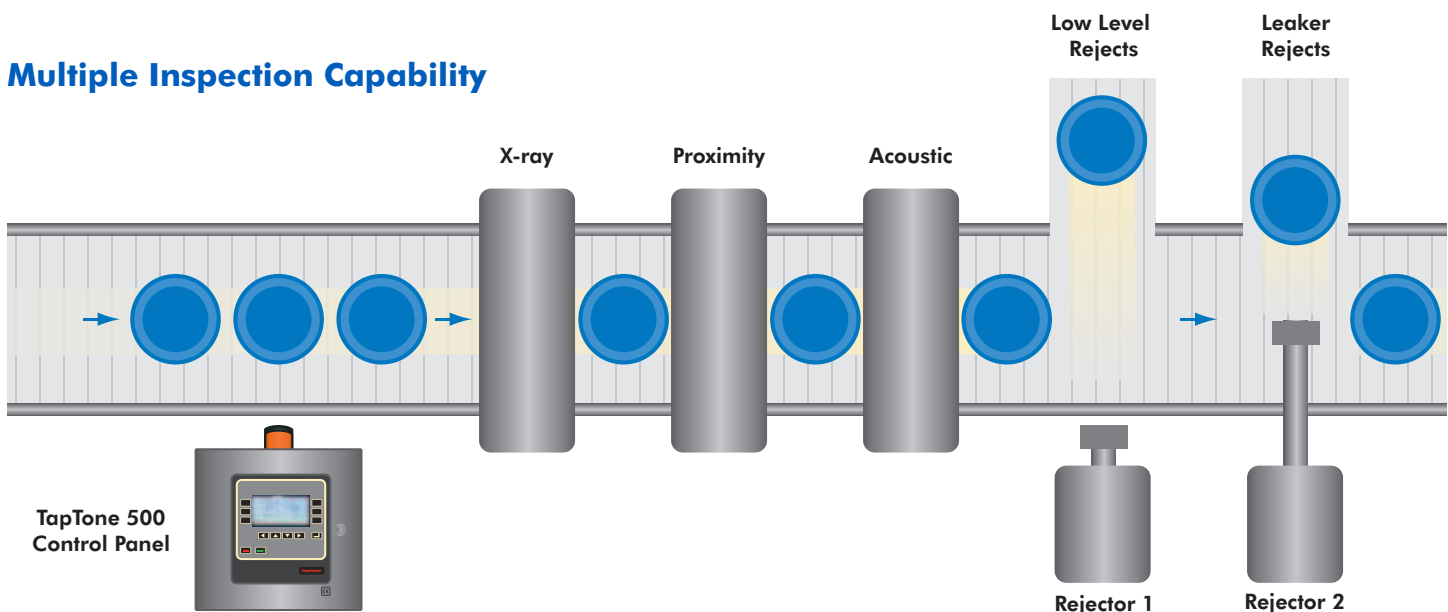
Additional Inspections

Including missing cap, high/cocked cap, missing tamper band, missing foil seal and missing label.

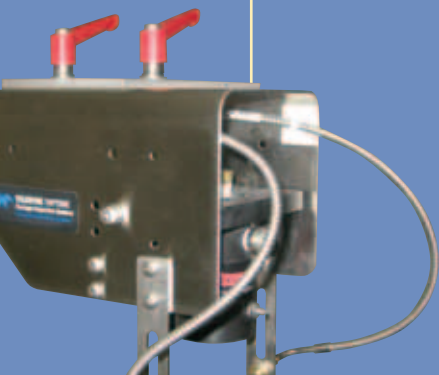
Rejection Technology

Used to reject faulty products off a conveyor at a high rate of speed. With your choice of "hard reject" or "soft reject," you have the flexibility to reliably reject products that have not passed your inspection criteria. Teledyne TapTone carries a full line of rejectors. Refer to the TapTone Rejector brochure for detailed product information.

Multiple Inspection Capability



verage cans, glass
ng the lid deflection.



X-RAY Technology

Measures the product fill level in steel, aluminum, glass, plastic and paper containers. An X-ray tube is used to produce a low-energy X-ray beam. The X-ray beam penetrates the side of the container in the area of the fill level. An X-ray detector is positioned on the opposite side of the container to measure the intensity of the beam after it goes through the container. The intensity of the beam is then compared to acceptable energy levels to determine the relative fill level of each container. The X-ray sensor is used to measure both overfilled and underfilled products in all types of containers.



TAPTONE 500

SYSTEM SPECIFICATIONS

GENERAL SPECIFICATIONS

Electrical	115–230 VAC \pm 10%, 50–60 Hz, single phase, 300 watts, 15 amp
Digital Outputs 1-6	5–60 VDC, 3.5 amps, normally open
Digital Inputs 1-7	3–30 VDC, sourcing
Operating Speed	2,000 containers/min maximum (Proximity, X-ray, Laser, Digital Inputs) 1,500 containers/min maximum (Acoustic)
Operation Temp.	32°–122° F (0°–50° C)
Humidity	0–90%, non-condensing
Altitude	Sea level to 10,000 feet (3,035 m)

CONTROL ENCLOSURE

Material	Stainless steel, NEMA 4X, IP65 rated
Wash Down	Low-pressure water
Human Interface	LCD 240 x 128 pixels, back-lit
Reject Signal	24 VDC, 1 amp, variable pulse width and delay

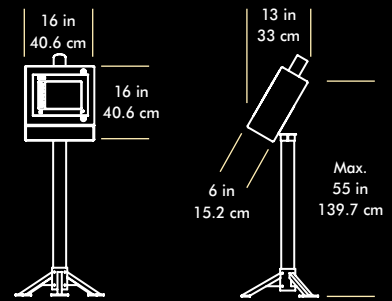
X-RAY SENSOR

X-ray Source	X-ray tube, 30–75KV, < 0.2mA
X-ray Detector	Photo Multiplier Tube (PMT), 1.0 in (25.4 mm) detection range

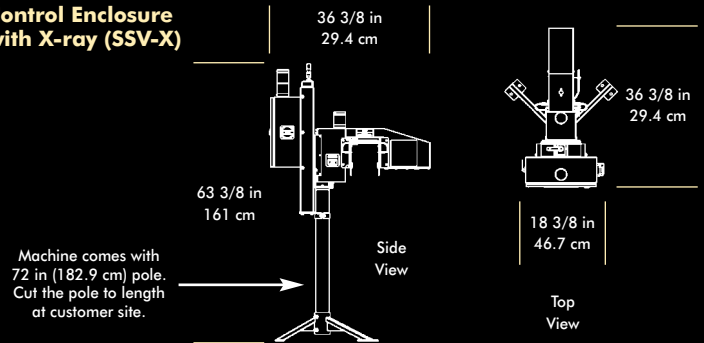
FREE PRODUCT TESTING

Teledyne TapTone offers free product testing to assure that your product can be inspected with the proper technology before you purchase a TapTone system. Our application engineers will return a comprehensive report on the testability of your product. To submit samples for evaluation, call us or visit our website to obtain a Sample Testing Form.

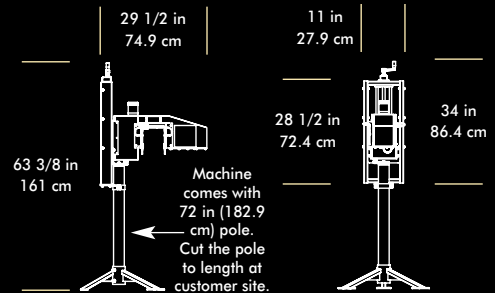
Control Enclosure



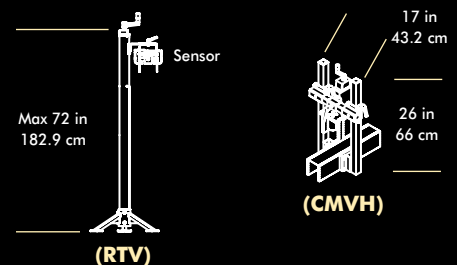
Control Enclosure with X-ray (SSV-X)



X-ray Mounting Remote (RTV-X)



Optional Sensor Mountings



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ISO 9001 Certified CE Compliant

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