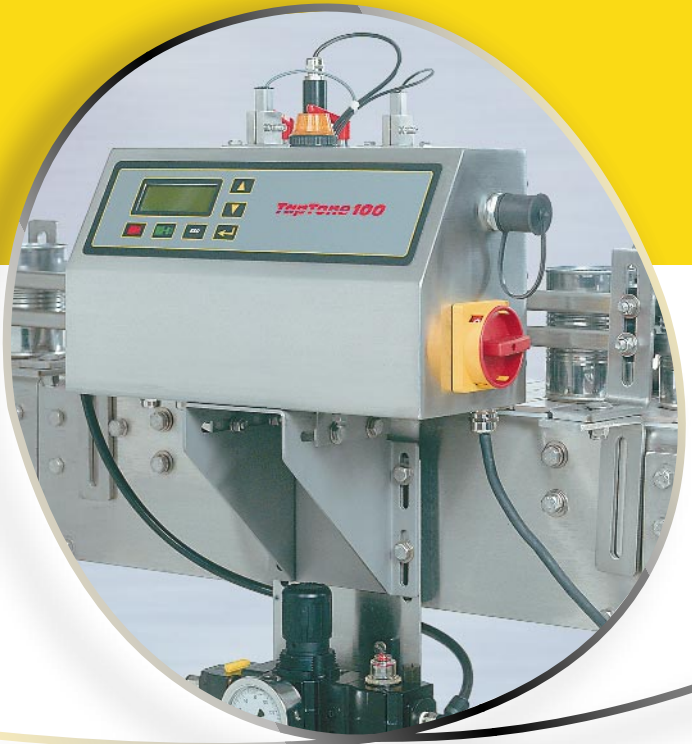


TapTone 100



User-friendly, Efficient and Affordable Package Inspection System

The TapTone 100 on-line inspection system incorporates various sensors for detecting defects in cans, bottles and jars. TapTone 100 system has a simple design and is extremely cost effective. A single conveyor mount configuration houses both the control electronics and rejector assembly. The "all-in-one" design requires minimal line space and no floor space, which is especially important for crowded production lines. The system specializes in detecting and rejecting containers with:

- Low vacuum
- Missing caps or lids
- Swelled cans
- Button-up lids
- Cocked caps
- Missing caps
- Missing tamper bands
- Missing labels
- Visible low fills
- Missing foil seals

A menu driven keypad with a minimal number of keys provides a simple to use interface. A height adjustment display feature provides feedback for proper sensor set-up. Self-diagnostics are utilized for continuous

Free Product Testing

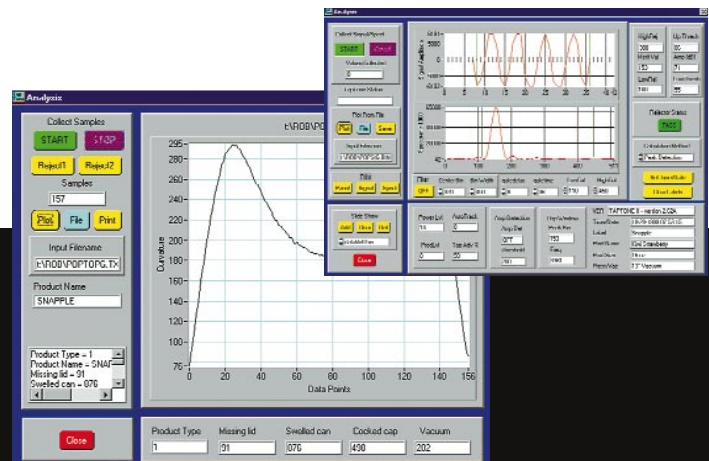
TapTone offers free product testing to assure that your product can be inspected with 100% accuracy before you purchase a TapTone system. Interested processors should send samples to TapTone for evaluations. Our applications engineers will return a comprehensive report on the testability of your product.

monitoring of machine performance. Additional capabilities of TapTone 100 include:

- Multiple inputs and outputs
- Fifty unique product types can be stored by name and/or number
- Six inputs for rejection of product from remote sensors or other inspections upstream
- Consecutive alarm to identify process problems

TapTonePC Software

The TapTone 100 also includes our latest TapTonePC software package. This user-friendly tool provides real-time production data analysis and graphical reporting to assist in monitoring product quality. Installation start-up and routine quality audits are made simple and accurate with TapTonePC.





TapTone 100

The TapTone 100 utilizes a proximity sensor to measure pressure or vacuum in food containers by measuring the lid deflection. The proximity sensor produces a continuous magnetic field that monitors the distance of the metal lid and produces a proportional analog voltage. This continuous signal is digitally sampled and stored in memory. The Digital Signal Processor (DSP) performs multiple algorithms on the stored data to calculate the relative curvature of the lid. The relative curvature value is then compared to user set limits where cans with lid deflection outside these limits are rejected. This technology can be utilized on food cans, beverage cans, glass jars and bottles with pop-button lids.

Features:

- Non-contact
- Inspects up to 2,000 containers per minute
- Menu driven key pad
- Parameter memory for 50 product types
- Digital signal processing
- RS-232 serial interface port
- TapTonePC software
- Consecutive reject alarm
- 6 optional inspection inputs
- 4 optional outputs
- Flash memory for easy upgrades
- Self diagnostics for troubleshooting
- Shaft encoder ready
- NEMA 4X rated enclosure

Technical Specifications:

GENERAL SPECIFICATIONS

Electrical	115–240VAC ± 10%, 47–85 Hz, single phase, 100 watts
Air	30–150 psi, 6 cfm (26.8 kPa–1054.2 kPa, 2832cm ³ /sec.)
Operating Speed	Up to 2,000 containers/min. or belt speed of 525 ft./min. (160m/min.)
Temperature	32 to 122 degrees F (0–50 degrees C)
Humidity	0–90%, non-condensing
Altitude	Sea level to 10,000 ft. (3,035 m)

ENCLOSURE

Dimensions	8 in. high x 14 in. wide x 6 in. deep (20 cm x 35 cm x 15 cm)
Construction	Single enclosure
Material	Stainless steel, NEMA 4X, IP65 rated
Mounting	Conveyor mounting
Keypad	Watertight touch pad (6 keys)
Lamp	Orange lens, 28 VDC, 5 watts
LCD Display	LCD 4 x 20 character, back-lit
Reject Signal	24 VDC, 1 amp, variable pulse width and delay
Communications	RS-232, 100 ft. max. (30 m max.)

REJECTOR

Stroke	1.2 in. or 1 in. (12 mm or 25 mm)
Construction	Stainless steel, conveyor mount
Wash Down	High pressure water
Regulator Assembly	Filter/Regulator/Lubricator module with lockout
Reject Pad	Stainless steel with black urethane
Operating Pressure	40–80 psi (2.8–5.6 bars)
Max. Line Pressure	150 psi (11 bars)

SHAFT ENCODER

Resolution	2540 pulses/revolution
Shaft Loading	Axial 40 lbs. (18.2 kg), radial 35 lbs. (15.8 kg)
Construction	Hard anodized aluminum, NEMA 4X, IP65
Wash Down	High-pressure water
Cable Type	4 conductor, 20 AWG shielded
Cable Diameter	0.182 in. (4.62 mm)
Cable Length	25 ft. (7.62 m) standard
Supply Power	5 VDC
Signal Output	5 VDC, two channels

SENSOR SPECIFICATIONS

Sensor Type	Analog proximity, 0–10 VDC
Material	Stainless steel

TRIGGER SENSORS

Photo Beam	Thru-beam pair, high speed, 10–30 VDC sink output
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INPUT SPECIFICATIONS

Inputs 1–4	5 VDC sinking input
Inputs 5 & 6	12 to 24 VDC, sink or source selectable

OUTPUT SPECIFICATIONS

Outputs 1–4	24 VDC source, dry switch, 0–60 VDC sinking, 1 amp max.
Selections	Alarm, lamp, reject signal, good signal, photo beam, shaft encoder

11/99. Specifications subject to change without notice.

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TapTone[®]
PACKAGE INSPECTION

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