

TapTone DSC-TB



PRO Series DSC-TB

Patented Pouch Inspection Technology identifies leaks caused by defects in the seams or fitment closure.

PRO Series DSC-TB Sensor

The PRO Series Dual Sensor Compression Twin Belt (TB) sensor is specifically designed for pouch inspection. The patented technology is designed to identify and reject leaking pouch style containers caused by defects in the seams or fitment closure.

Features

- Belt speed 25 – 350 feet/minute (7 – 106 meters/minute)
- 1,500 containers per minute maximum
- Variable speed belts
- 36" to 76" (914 mm to 1930 mm) conveyor height
- 230VAC or 460VAC Power
- 15psi pressure sensor calibration
- NEMA 4X, IP65 Washdown, 304 Stainless Steel

Applications

- The Twin Belt (TB) conveyor set is designed specifically for micro leak detection in containers and stand-up pouches
- The Twin Belt conveyor uses a patented pressure sensor design between the compression belts for minimum leak size detection of .006"

Leak Detection for Closures

- Plastic Fitment
- Induction Seal

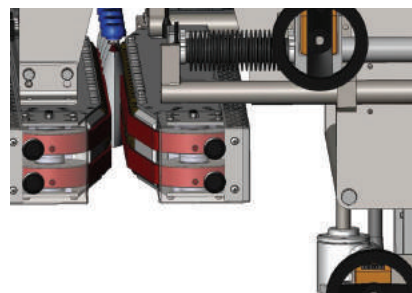
Leak Detection for Containers

- Stand-up Pouches
- Micro Leak detection in flexible containers

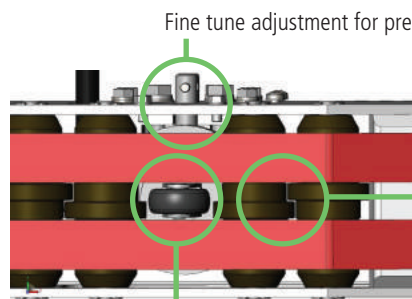
How It Works

The TapTone PRO Series Pouch Inspector system finds and rejects leaking and damaged pouches at production line speeds up to 200 feet per minute. The patented system is designed with dual pairs of parallel belts suspended over the customers' existing conveying system. As the pouch passes through the system, the dual pairs of parallel belts apply force to the sidewall of the pouch. This action increases the internal pressure of the pouch, evacuating a small amount of product out any leak areas, thus allowing a comparative measurement to be taken at both the infeed and the discharge of the system. Comparing the pouch to itself eliminates typical variations seen in the production environment (Fill Level, Product Temperature, and Seal width).

Utilizing advanced DSP technology the TapTone PRO Series controller analyzes each of the individual sensors as well as their comparative measurement and assigns three resulting merit values to each pouch. If any merit value is outside of the acceptable range, a reject signal activates a remote reject system.



Fine tune adjustment for precision pressure sensor position.



Fine tune adjustment for precision pressure sensor position.

Overlapping roller system for even compression.

Patented pressure sensor design between the compression belts.

SYSTEM SPECIFICATIONS

PRO Series DSC-TB Specifications

Operating Speed	1,500 containers per minute maximum
AC Line Voltage	230 VAC Standard, 1-Phase 460 VAC Optional, 3-Phase
Container/Pouch Size Range	4" (101mm) minimum container/pouch height 17" (432mm) maximum container/pouch height 5" (127mm) maximum container/pouch width
Color Touch Screen	Easy to use menus
Shaft Encoder	Stainless Steel, IP 65 rated
Language Display	English, German, Spanish, Portuguese, Chinese, French, Italian, Dutch
Reject Alarms	Consecutive and percent reject fault output
Fail Safe Rejection	Reject acknowledgement alarm if rejection is not completed
Down Container Detection	Down pouch containers will be rejected (with optional sensor kit)
Ready / Fault Alarms	Two isolated relay outputs (Ready/Fault)
Advanced Algorithms	New algorithms for acoustic, proximity and digital sensors
Soft Rejectors	Up to two Segment8 rejectors per system
Multiple Sensor Capability	Integrates up to 4 primary inspection PRO Series sensors (Dual Compression, Proximity, Vision, X-ray)
Inspection Inputs	3 Analog sensors, 2 Digital sensors
Product Types	Up to 99 product set-ups providing quick changeovers

Material & Control Enclosure

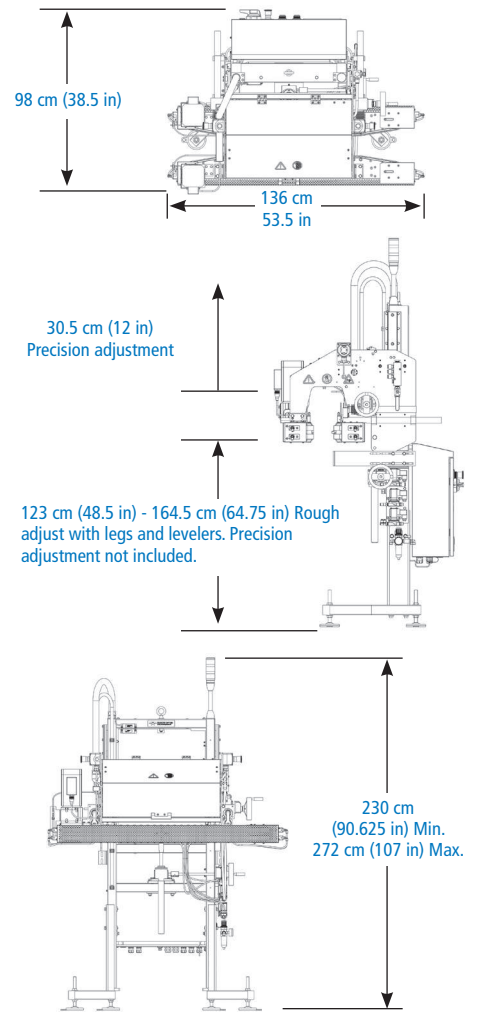
Wash Down	Fully sealed to withstand wash down
Enclosure Environmental Rating	Stainless Steel NEMA 4X IP65 rated
Human Interface	12" Color touchscreen PC, IP 65 rated

Software & Network Capabilities

Password Protection	Up to 1000 password users
USB Ports: 3	Two external ports w/watertight USB socket and one internal USB port on face of PC
Data Logging Ethernet Port	Streaming data port for data collection
Plant Control Ethernet Port	Ethernet IP or Modbus TCP (Optional)

10/2021 Specifications subject to change without notice.
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PRO Series DSC-TB (Standard frame model)



PRO Series DSC-TB

OPTIONS

Air Pressure Monitoring

Monitors and displays the air pressure at the rejector. Alarm signal will activate if the air pressure drops below the user pre-set limits.

Belt Wash

The belt wash system is designed to clean and dry the compression belts on the DSC-TB

Rejectors

TapTone offers a line of pneumatic and standing rejection systems.

Reject Verification

Detects a container that has failed the inspection but has not been rejected from the production conveyor.

Trigger-Blow-off

Keeps the lens of the photo triggers clean. For use in harsh environments.