



**FTSYSTEM**

INSPECTION FOR QUALITY

LEAK DETECTION  
PRESSURE/VACUUM MEASUREMENT



# Vacuum/Pressure Inspection

VP600/700-IoT Series [AS|PX] | TB5000-IoT

Ideal to ensure product compliance with the quality standards checking vacuum presence or correct internal pressure in closed containers.

A complete range of “sensor based” solutions for the pressure/vacuum inspection in order to identify leaks or non compliant products. The technology, structure and sensor technology will change according to the container and closure kind

## AVAILABLE SOLUTIONS

[Standard model/configurations]

- ✓ VP600-AS [ACOUSTIC SOUND TECHNOLOGY BASED]
- ✓ VP600-PX [INDUCTIVE PROXIMITY TECHNOLOGY BASED]
  - LEAK DETECTION
  - VACUUM PRESENCE CHECK
  - PRESSURE PRESENCE CHECK
- ✓ TB5000 [INDUCTIVE PROXIMITY TECHNOLOGY BASED + X-RAY/HF]
  - LEAK DETECTION
  - CORRECT PRESSURE CONTROL
  - FILL LEVEL CONTROL

## FEATURES

- ✓ maximum flexibility in the used technology
- ✓ No change to the existing line for installation
- ✓ Independent structure for eliminating noise and vibration and ensuring maximum accuracy and minimum maintenance
- ✓ Designed to be integrated with additional inspections
  - Minimum/maximum level control
  - Label presence
  - Monitoring

## ADVANTAGES

- ✓ IMPROVE PRODUCTIVITY
  - Reduction of the number of rejects in case of malfunctioning of the capper through the control on consecutive rejects
- ✓ IMPROVE QUALITY
  - Eliminate customer complaints related to pressure leak
  - Eliminate customer complaints related to product deterioration for vacuum leak
  - Ensure product quality

## TYPE OF CONTAINER

- ✓ Crown cap, twist-off cap, cans  
(In association with the correct sensors configuration)

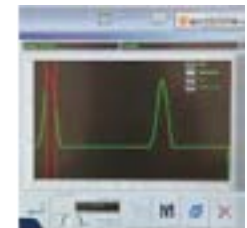


VP600 Series [AS|PX]

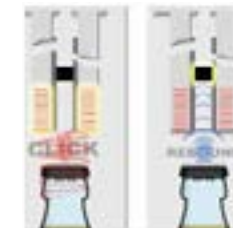
TB5000 Series



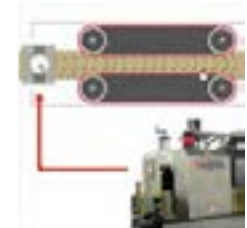
Acquired signal (600 series interface)



Acquired signal (700 series)



VP600-AS Principle Acoustic sound [sonar]



TB5000 - Principle: Phase 1 Fill level inspection [X-Ray or HF Tech.]



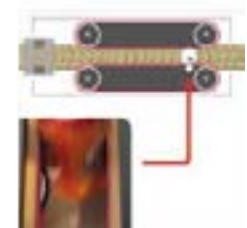
VP600-PX - Principle Proximity sensor of Twist-Off



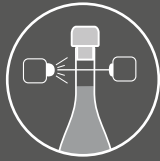
TB5000 - Principle: Phase 2 Dynamic guides for product positioning



VP600-PX - Principle Proximity sensor on cans



TB5000 - Principle: Phase 3 Pressure measurement



# Pressure measurement on carbonated products

PCS700-IoT Series

Direct PRESSURE measurement and contact-less LEAK DETECTION system. Its innovative technology is completely INDEPENDENT of the TYPE OF CLOSURE AND CONTAINER, thus allowing to measure the pressure or the vacuum degree in the products which would otherwise be impossible to inspect through the other systems currently on the market.

Innovative in-line application of Laser Spectroscopy technology. The analysis of a laser beam passing through the headspace of a container is able to provide the information related to the pressure present in the headspace. This method enables a direct measurement which is not affected by physiological changes of the closure and container itself. The patented calculation algorithm guarantees a precise and reliable result on the 100% of production.



## STANDARD INSPECTION

[depending on configurations]

- ✓ LEAK DETECTION
- ✓ CORRECT INTERNAL PRESSURE

## FEATURES

- ✓ Laser technology (measure based on the CO2 molecules)
- ✓ Inspection for products added with CO2
- ✓ Independent of the type of closure and container
- ✓ Without color limitation (5% transparency required)
- ✓ No change to the existing line for installation
- ✓ No mechanical wear
- ✓ Independent structure for eliminating noise and vibration and ensuring maximum accuracy and minimum maintenance
- ✓ Designed to be integrated with additional inspections
  - Level control
  - Cap/closure presence
  - Label presence
  - Monitoring

## ADVANTAGES

- ✓ IMPROVE PRODUCTIVITY
  - Reduction of the number of rejects in case of malfunctioning of the carbonation systems (or pressurization systems) through the control on consecutive rejects
- ✓ IMPROVE QUALITY
  - Eliminate customer complaints related to incorrect carbonation or pressure
  - Eliminate customer complaints related to product deterioration for leak
  - Ensure product quality
  - SPECIFIC FOR "Champagne" or "Classic Method" INDUSTRIES
    - Identification of "fermentation problems" before the "degorgement" phase
    - Identification of leak after the final capping phase
    - Avoid cap ejection or bottle burst due to the too high pressure inside the bottles
    - Ensure to respect the legal requirements in terms of CO2 pressure

## TYPE OF CONTAINER

- ✓ All types of closures, all types of containers with at least 5% of transparency



Pressure measurement Champagne line



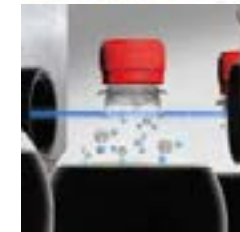
Principle - Pressure Wine, classic method



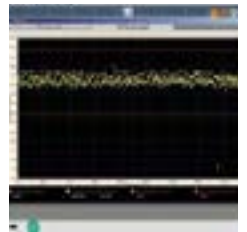
Principle - Pressure/leak Beer [after pasteurizer]



Results clear and understandable



Principle - Leak detection CSD products



Graphical results



Automatic settings procedure



Automatic settings of rejection levels



# FTSYSTEM

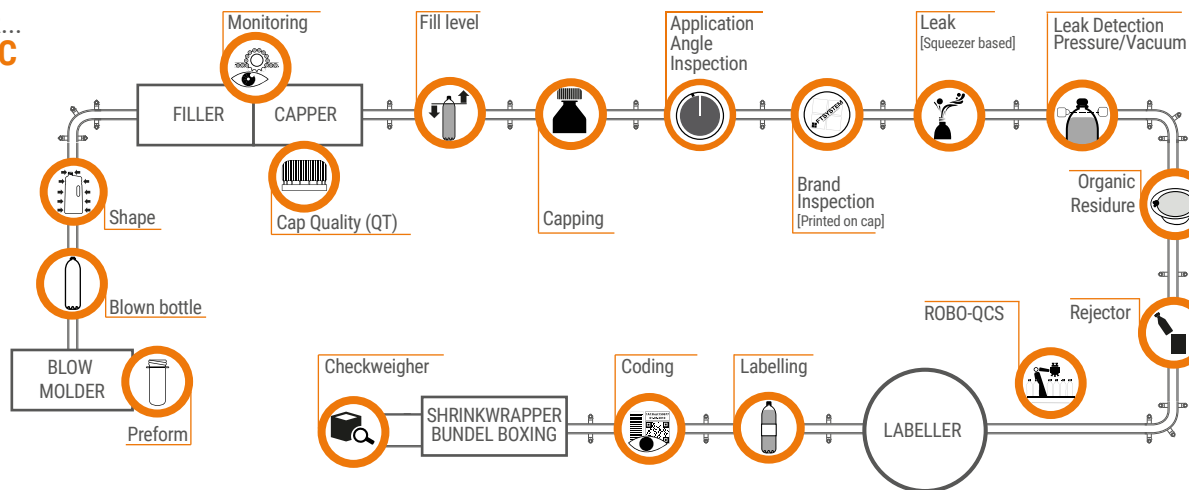
INSPECTION FOR QUALITY

## CHOOSE YOUR SOLUTION

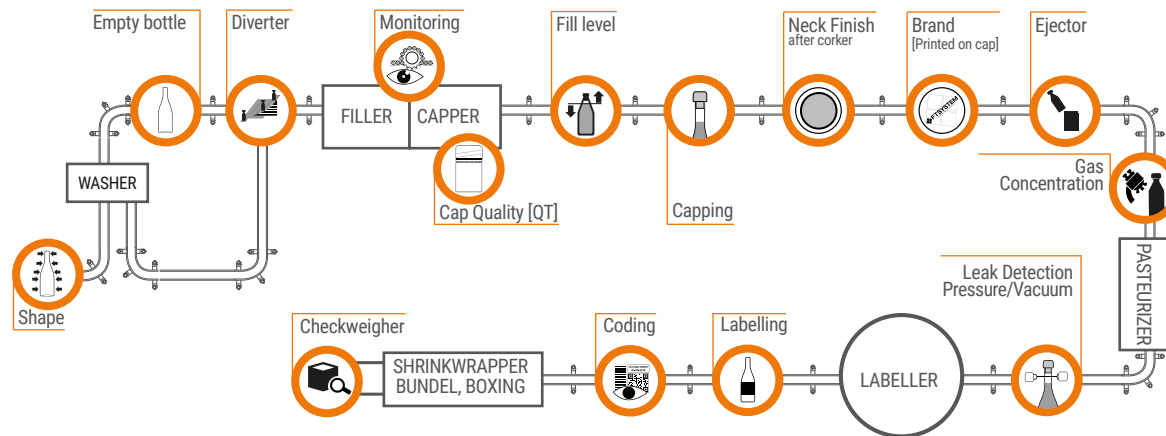
FT SYSTEM HAS A COMPLETE RANGE OF INSPECTION AND TRACKING SYSTEMS

in order to ensure the high quality of your product allowing the optimization of your production reducing costs

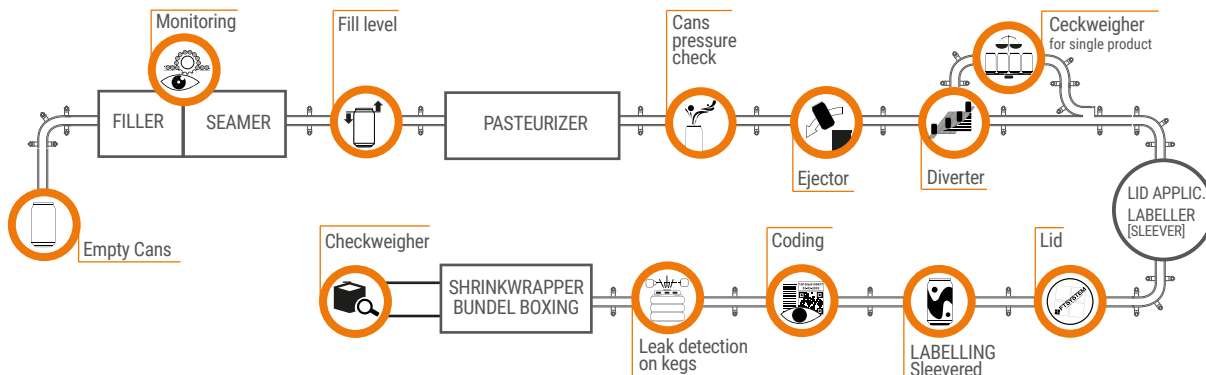
### FOR YOUR... PLASTIC LINE



### FOR YOUR... GLASS LINE



### FOR YOUR... CANS LINE



### FOR YOUR... LABORATORY NON-DESTRUCTIVE ANALYZERS



EVO-C02  
Total pressure  
CO2 Partial  
pressure  
CO2 dissolved



EVO-O2  
O2 concentration  
[NON pressurized  
products]



EVO-TRACE  
Very low  
concentration  
of CO2



EVO-N2  
Total Pressure  
[Nitrogen dosed  
products]



EVO-V  
Vacuum level  
[Hot-filled and  
pasteurized  
products]



EVO-P  
O2 concentration  
CO2 concentration  
[Bags & Trays]



ANTARES VISION WORLDWIDE

**FT SYSTEM**  
**HEADQUARTER**  
 Via L. Da Vinci, 117  
 29010 Alseno (PC) - ITALY  
 +  
**LPRO**  
**Laser Spectroscopy division**  
 Via Torino 1/L  
 35035 - MESTRINO (PD) - ITALY

**ANTARES VISION**  
**HEADQUARTER**  
 Via del Ferro, 16  
 25039 Travagliato (BS) - ITALY

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30+ LOCAL PARTNERS  
 60+ COUNTRIES SERVED  
 + R&D SITES

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