

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

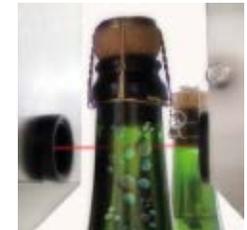
- IMPROVE PRODUCTIVITY
 - Reduction of the number of rejects in case of malfunctioning of the carbonation systems (or pressurization systems) through the control on consecutive rejects
- IMPROVE QUALITY
 - Eliminate customer complaints related to incorrect carbonation or pressure
 - Eliminate customer 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



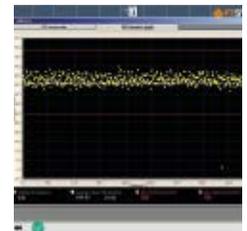
Principle - Pressure/leak
Beer [after pasteurizer]



Results clear and understandable



Principle - Leak detection
CSD products



Graphical results



Automatic settings
procedure



Automatic settings of
rejection levels

Direct VACUUM/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.

Pressure measurement on still products



PCS700-IoT Series
[Nitrogen dosed, hot-Filled, pasteurized, vacuum, ...]

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 or vacuum 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
- ✓ CORRECT INTERNAL VACUUM LEVEL

FEATURES

- ✓ Laser technology (measure based on the water vapour molecules H2O)
- ✓ Inspection of products added with nitrogen
- ✓ Inspection of vacuum packed/pasteurized products
- ✓ Independent of the type of closure and container
- ✓ Without color/material 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/foil presence
 - Label presence
 - Monitoring

ADVANTAGES

- ✓ IMPROVE PRODUCTIVITY
 - Nitrogen doser monitoring for a reduction of the consumptions
 - Reduction of the number of rejects in case of malfunctioning of the nitrogen dosing systems (through the control on consecutive rejects)
 - Reduction of the number of rejects in case of malfunctioning of the pasteurizer (through the control on consecutive rejects)
 - Reduction of the number of rejects in case of malfunctioning of capping/closing systems (through the control on consecutive rejects)
- ✓ IMPROVE QUALITY
 - Eliminate customer complaints related to incorrect internal pressure
 - Eliminate customer complaints related to product deterioration for vacuum leak
 - Eliminate customer complaints related to product leak

TYPE OF CONTAINER

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



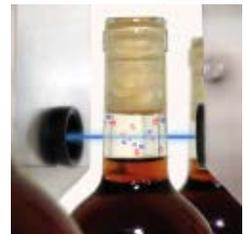
Installation example



Principle - vacuum [hot-filled product]



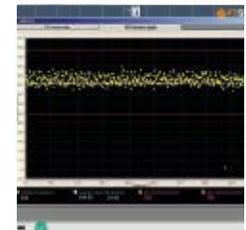
Example - pressure Nitrogen Dosed product



Principle - vacuum Still Wine [vacuum capping]



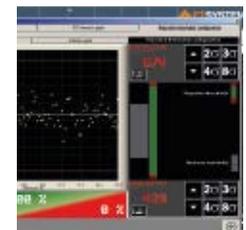
Example - vacuum [hot-filled + pasteurized]



Graphical results



Automatic settings procedure



Automatic settings of rejection levels