



PCS700
PRESSURE/VACUUM MEASUREMENT
LEAK DETECTION



Pressure measurement on carbonated products

PCS700-LS CO2

Pressure measurement system via "laser spectroscopy". Suitable for the inspection, without contact, of the pressure in all types of containers without being influenced by physiological changes of the closure or container itself. The patented calculation algorithm guarantees a very accurate result, and therefore a highly reliable inspection.

MAIN FUNCTIONS

The inspection is carried out through the analysis of the gases in the headspace, thus making the inspector INDEPENDENT of the type CLOSURE and CONTAINER. The technology, associated with a structure designed to optimize the acquisition and ease of use,

STANDARD INSPECTION

[depending to the 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

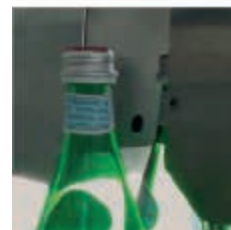
- ✓ All types of closures, all types of containers with at least 5% of transparency



Pressure measurement in beverages



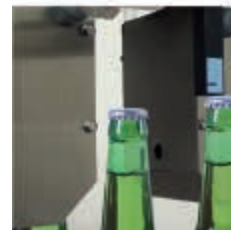
Principle - Pressure measurement



Pressure measurement in sparkling water



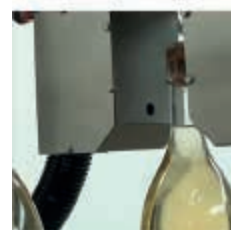
Results clear and understandable



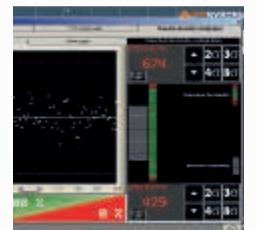
Pressure measurement



Automatic settings procedure

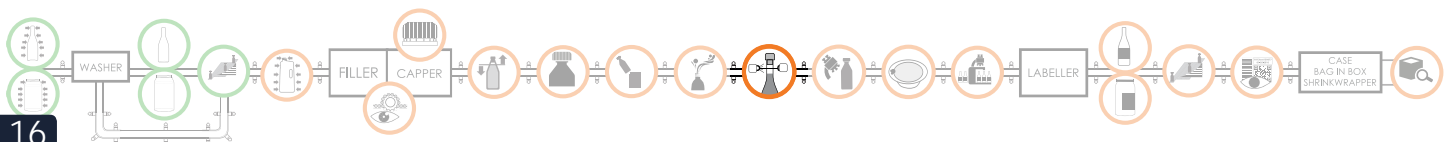


Pressure measurement



Automatic rejection levels

Feasibility and accuracy of the system indicated in the FT System's official Technological Warranties



Vacuum/Pressure measurement system via "laser spectroscopy". Suitable for the inspection, without contact, of the pressure in all types of containers without being influenced by physiological changes of the closure or container itself. The patented calculation algorithm guarantees a very accurate result, and therefore a highly reliable inspection.

Pressure measurement on still products



PCS700-LS H2O

MAIN FUNCTIONS

The inspection is carried out through the analysis of the gases in the headspace, thus making the inspector INDEPENDENT of the type CLOSURE and CONTAINER. The technology, associated with a structure designed to optimize the acquisition and ease of use

STANDARD INSPECTION

[depending to the 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

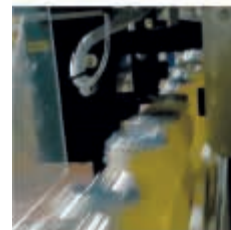
- ✓ All types of closures, all types of containers with at least 5% of transparency



Installed in-line



Principle - Pressure measurement



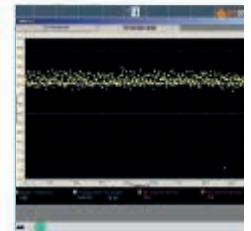
Example product pasteurized in-line



Principle Material and level



Example product pasteurized in-line



Graphical results

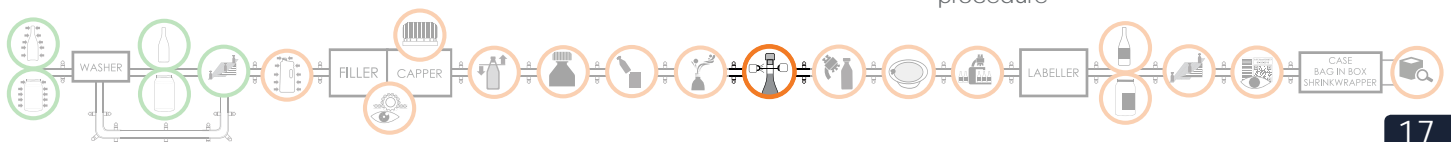


Automatic settings procedure



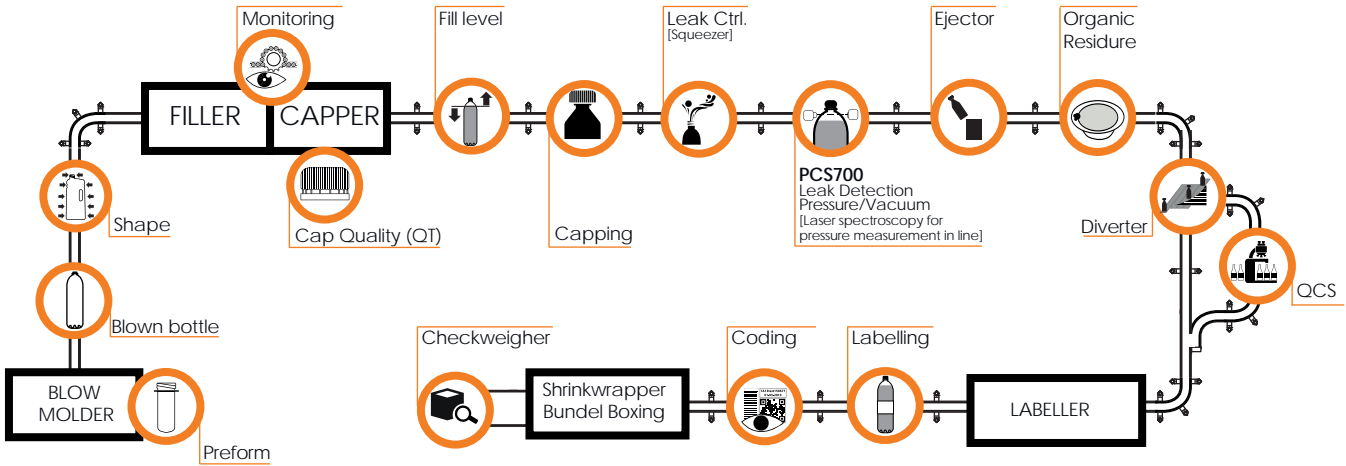
Automatic rejection levels

Feasibility and accuracy of the system indicated in the FT System's official Technological Warranties

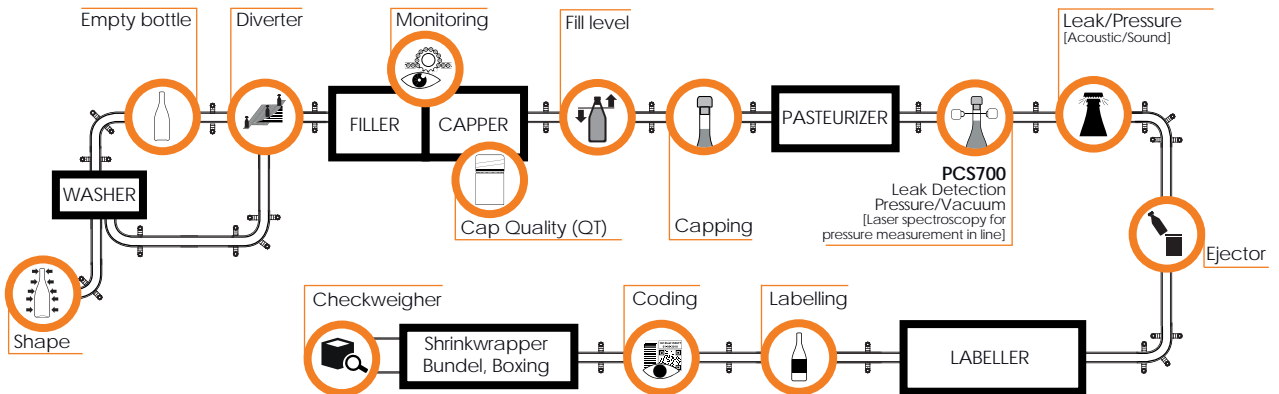


FT SYSTEM HAS A COMPLETE RANGE OF CONTROL AND INSPECTION SYSTEMS in order to ensure the high quality of your product allowing the optimization of your production reducing costs

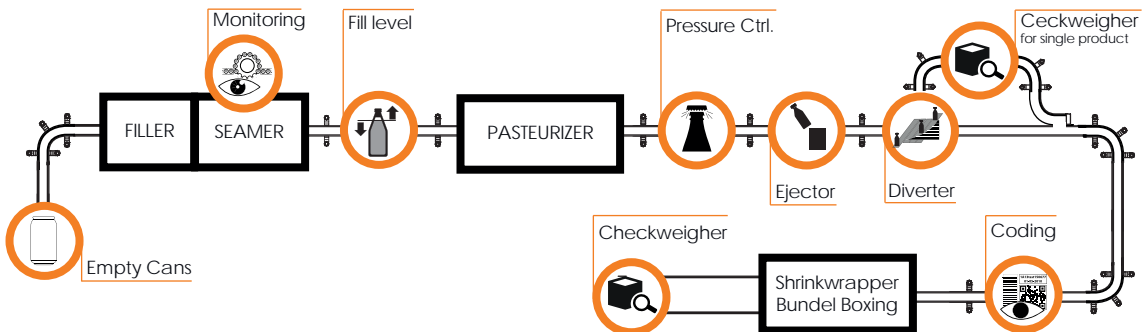
FOR YOUR... PLASTIC LINE



FOR YOUR... GLASS LINE

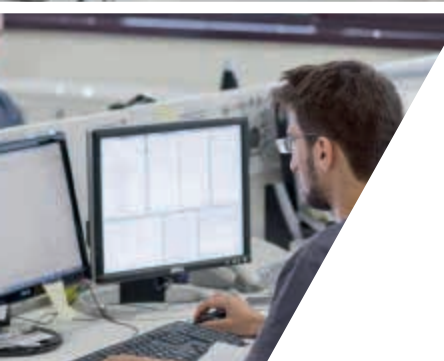


FOR YOUR... CANS LINE



FOR YOUR... LABORATORY





+ FT SYSTEM

Founded in 1998, FT SYSTEM has specialised in the design and production of quality control monitoring systems along the entire bottling and packaging line.

From the inspection of empty containers and caps to the fill levels, from the accurate capping to the leakage detection, from measuring the internal pressure of the container to the weight control, the label checking to laboratory analysis, FT SYSTEM guarantees the quality of your packaging products by optimising production and cost reduction.

+ INTEGRATED AND TOTAL QUALITY SOLUTIONS

The simple and intuitive multiple inspection stations along the entire packaging process can also be integrated into a single control panel for a total overview of the quality and production performance.

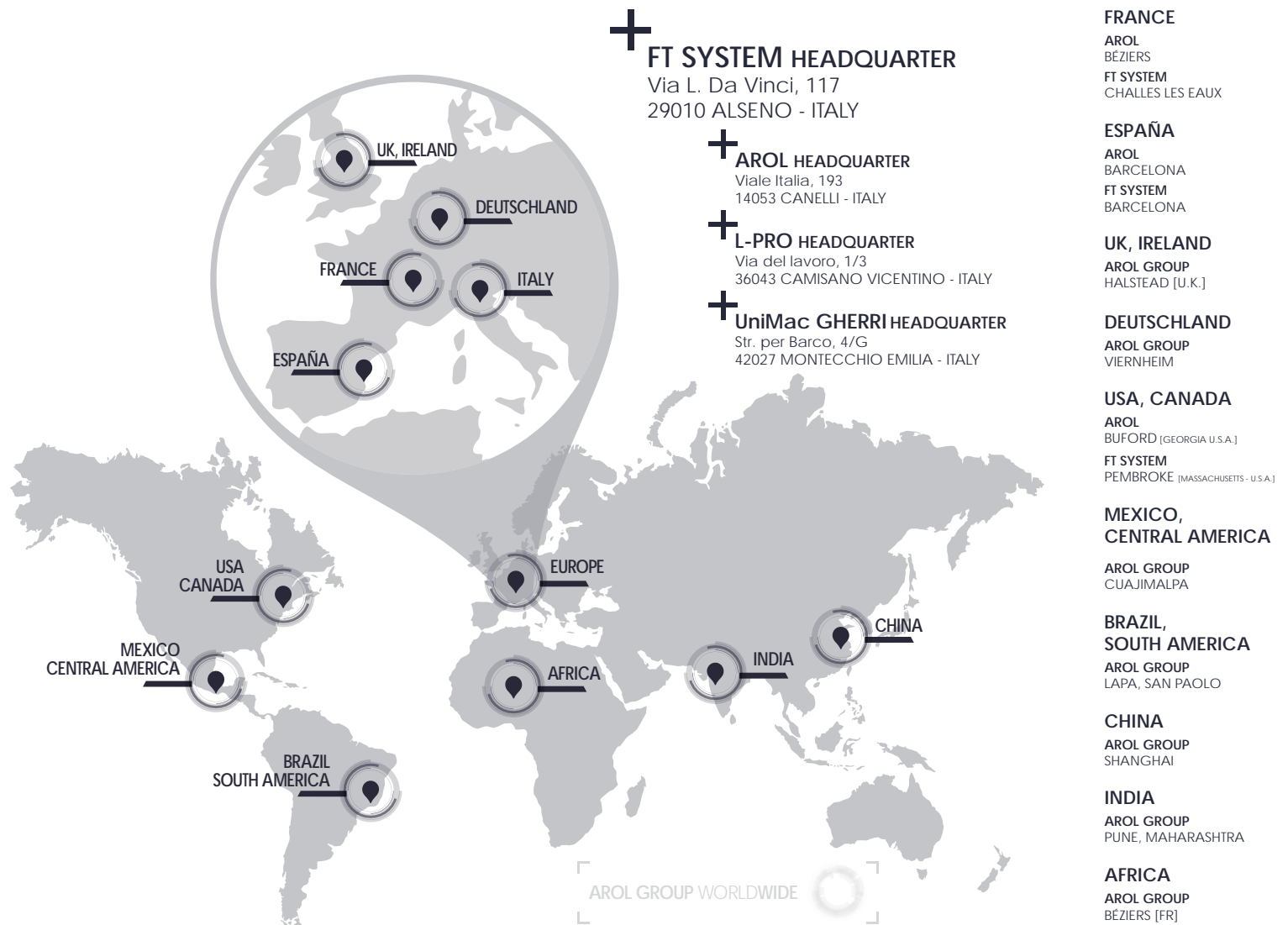
+ CONSTANT RESEARCH

The heart of FT SYSTEM is its R & D team, assisted by a developed network of partnerships with universities and international research centers, dedicated to the most innovative and non-destructive inspection technologies: high frequency, X-ray, infrared, optical, laser, artificial acoustic and visual analysis.

+ GAS SENSING

L PRO-GAS SENSING is a FT SYSTEM patented technology dedicated to laser spectroscopy.

A revolutionary and innovative method, which has enabled the design and the realization of nondestructive instruments of analysis and measurement of gas inside closed containers. The main fields of application of L PRO technology are the bottling of wine, beer, water and soft drinks and even the wider industry and pharmaceutical industry.



+ **FT SYSTEM HEADQUARTER**
Via L. Da Vinci, 117
29010 ALSENO - ITALY

+ **AROL HEADQUARTER**
Viale Italia, 193
14053 CANELLI - ITALY

+ **L-PRO HEADQUARTER**
Via del lavoro, 1/3
36043 CAMISANO VICENTINO - ITALY

+ **UniMac GHERRI HEADQUARTER**
Str. per Barco, 4/G
42027 MONTECCHIO EMILIA - ITALY

FRANCE
AROL
BÉZIERS
FT SYSTEM
CHALLES LES EAUX

ESPAÑA
AROL
BARCELONA
FT SYSTEM
BARCELONA

UK, IRELAND
AROL GROUP
HALSTEAD [U.K.]

DEUTSCHLAND
AROL GROUP
VIERNHEIM

USA, CANADA
AROL
BUFORD [GEORGIA U.S.A.]
FT SYSTEM
PEMBROKE [MASSACHUSETTS - U.S.A.]

MEXICO, CENTRAL AMERICA
AROL GROUP
CUAJIMALPA

BRAZIL, SOUTH AMERICA
AROL GROUP
LAPA, SAN PAOLO

CHINA
AROL GROUP
SHANGHAI

INDIA
AROL GROUP
PUNE, MAHARASHTRA

AFRICA
AROL GROUP
BÉZIERS [FR]

AROL GROUP WORLDWIDE