



# Logics & Controls

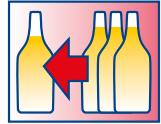
Our inspection systems  
for filling and packaging lines



The inspection for perfection



**Loginspect**



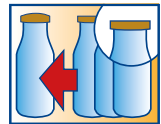
**Logilevel**



**Logicap**



**Logicork**



**Logiconvex**



**Logiclosure**



**Logicapsule**



**Logilabel**



**Logilook**



**Logipush**



**Logisort**

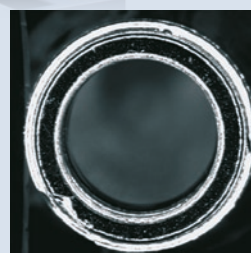
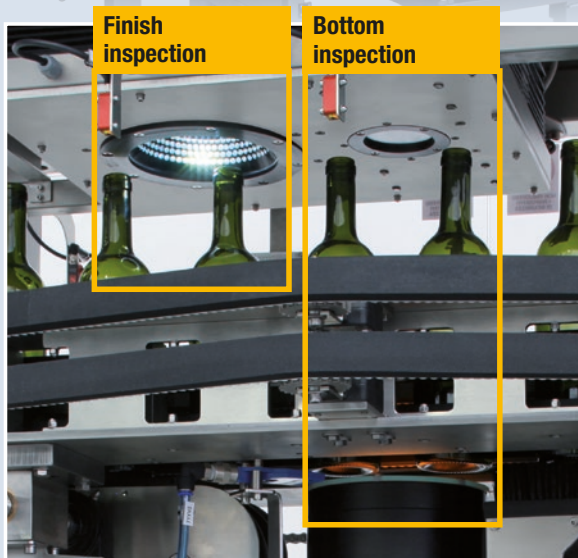


**Logiweight**



Linear empty bottle inspection system that checks the quality, integrity and the cleanliness of empty containers. Modular system for the inspection, before the filling, of all surfaces of empty bottles or jars, made of glass or PET. It checks for the integrity, the cleanliness and it ensures

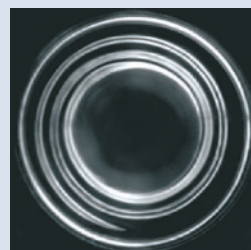
the absence of foreign bodies or residual liquid.



#### Finish inspection

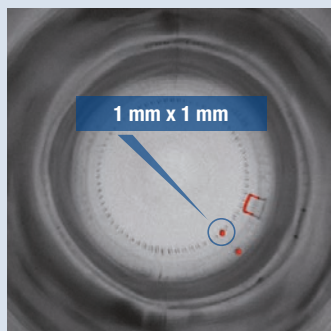
It inspects the bottle mouth to detect breakage or scuffing on the sealing surface.

A special angled light emphasizes the internal and external edges of the bottle finish.



#### Thread inspection

The thread is inspected to identify breakages or scuffing, using a special optical unit that allows to check all its length.

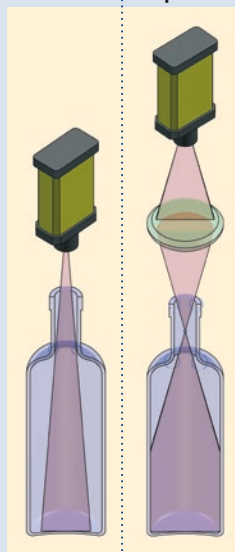


#### Bottom inspection

The bottom is inspected to detect foreign bodies or breakage. It uses a special optical unit that moves the focal point inside the neck and this allows to see the bottom completely even in long necked bottles, such as Bordeaux bottles.

Traditional bottom inspection

Logics & Controls bottom inspection



#### Residual liquid module

It identifies bottles with residues of water in the bottom, by means of a special high frequency sensor. It is particularly sensitive to small traces of caustic soda.

#### Sidewall inspection

The sidewalls are inspected to detect foreign matter, contaminants, breakage and check the degree of scuffing.

It uses a special multi-camera system together with a controlled rotation of the bottle inside the central module.

This allows to achieve a better quality and resolution than traditional systems using mirrors.





Camera system that checks correct closure of containers while they are moving on the line.

It inspects integrity and correct position of cap and warranty ring with great precision.

## Logiclosure

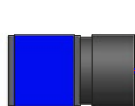
It is normally completed with the Logilevel to check the filling level. The Logifiller function can be added for the diagnostics of filling valves and capping heads and for detecting bottle explosion. A compact system that can be easily installed to any new or existing line, this product has all the necessary features to check correct operation of filling and capping systems.

It can be extended also with:

- Camera inspection of closures from different angles
- Cap ovality check before capping.
- Inspection of details like writings, codes or seals.
- Label inspection by means of sensors or cameras.
- Motor controlled changeover.



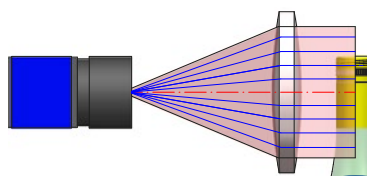
Logiclosure does extremely precise measurements at any point of the image thanks to our exclusive optical systems that eliminate the perspective distortion and consequently the parallax error which standard optical systems present.



### TRADITIONAL vision system

#### IMAGE DISTORTED BY THE ANGLE OF VIEW

- LARGE MEASUREMENT ERRORS
- MANY IMPORTANT DETAILS ARE LOST



### Vision system LOGICS & CONTROLS

#### NO ERROR DUE TO THE ANGLE OF VIEW

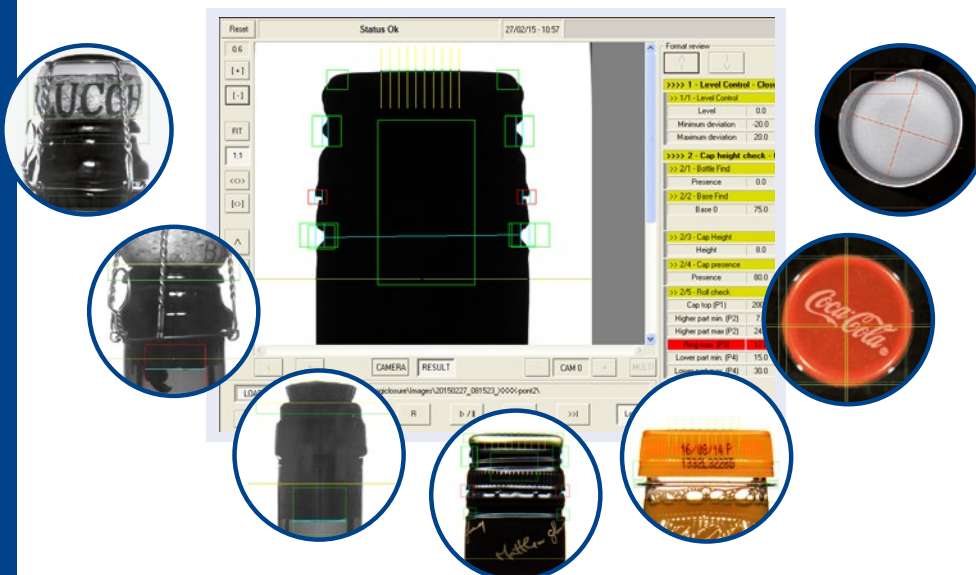
- MAXIMUM MEASUREMENT  
ACCURACY ON THE ENTIRE IMAGE
- NO DETAIL IS LOST



## ONLY ONE camera system for all type of caps

The closure quality check can be made with all type of closures: plastic, metal, glass and corks.

With aluminium screw caps it checks also the depth of the thread.







Logilook

Total, simultaneous, 360° inspection of all labels, capsule, motifs and decorations present on the container. Regardless of the way the bottle is facing, the system checks all labelling on the container using a single high-resolution camera and a special optical unit designed and manufactured exclusively by us. It is the only system that can operate on the line with any container shape (cylindrical, conical, oval, square, rectangular or triangular) and contents (wine, spirits, oil, preserves, jam, etc.).

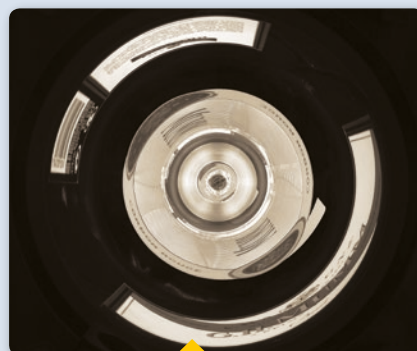
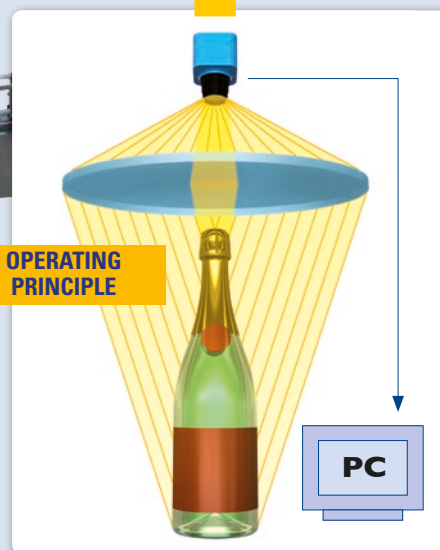


Image acquired by the camera



Optical system

## LOGILOOK HP



The HP module can be integrated into the Logilook in order to read barcodes, batch codes, label codes, matrix codes and almost any small detail in general. With this module, optical units are added and positioned inside Logilook to increase the resolution of the focus area.



Operating interface



Logilabel

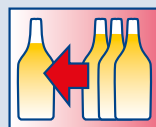
It checks for the presence of labels, neck labels or medals, made of paper or plastic, glued or self-adhesive, by means of sensors installed on the labeller machine. When labels are wrap around or when bottles are shaped, the check can be made on the conveyor with in-line sensors.



Logilabelscan

Special checking system, an intermediate between standard photocells and camera systems, that checks for presence and position of labels. Very simple to use, it works through self-learning of the reference curve.

Requires the installation of particular optical sensors on the labelling machine.



### Logilevel

It checks with great accuracy the filling level inside glass, plastic or ceramic containers, even totally opaque ones, through a high frequency capacitance system.

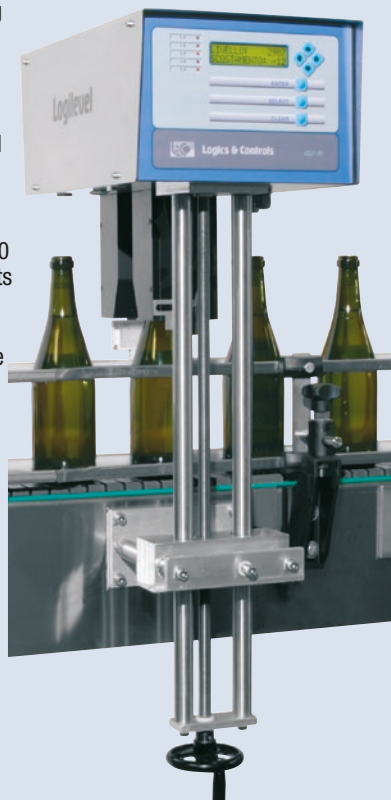
Measures the level of any kind of liquid like water, wine, spirits, soft drinks, oil, vinegar, milk, distilled water, detergents...

Available in various versions for containers from 20 to 5000 ml. It can be expanded to make other checks in other points of the bottling line using the same electronic unit.

In the Logilevel Remote version, the level measuring bridge is installed inside the filler, before the capper, in order to detect immediately a level problem, eventually avoiding to cap bottles.

Main characteristics:

- Self learning of reference level.
- Setting of minimum and maximum level thresholds.
- Display of counters and statistical data and transmission to external systems.
- It can drive all our rejection systems or it can work as a simple alarm.



### Logilevel Plus

Same characteristics of the Logilevel, plus:

- The changeover is completely automatic, not only for position parameters but also for level parameters.
- The positioning is made by means of encoder controlled motors.
- The format can be selected by the operator or it can be received from the filler machine.

### Logilevel Touch

Same characteristics of the Logilevel, plus:

- Graphical interface with touchscreen display
- Text display also in non-Latin characters.
- Real time display of graphics, curves and trends.



All LOGILEVEL models can be supplied with a floor mount.



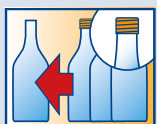
### Logicapsule

It detects the capsule presence and verify its length.

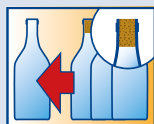


### Logiwire

It checks the presence of the wirehood over the mushroom cork.

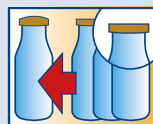


### Logicap



### Logicork

It checks the presence of corks and plastic or metallic caps.



### Logiconvex

Using inductive or laser sensors, it measures the convexity on metallic covers when the vacuum should be guaranteed.



**Logipush**

This rejector, by means of a pneumatic cylinder, pushes the defective bottle sideways in a rejection table or in a disposable container.

It can be connected to all our inspection systems



It is possible to choose between following models:

- LP, normal rejector, up to 36.000 containers / hour
- HP, high speed rejector, up to 72.000 containers / hour



**Logisort**

It gently diverts containers with guaranteed stability, independently from their shape and from production speed.

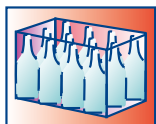
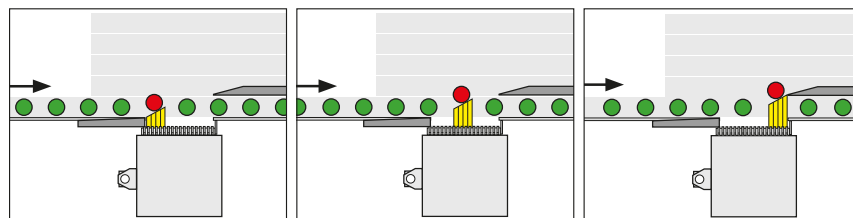
By using several small diverter segments, it dynamically creates a guide during the container

passage and it diverts it to a parallel conveyor. Since the container is guided and not pushed, there is a guarantee that it will not fall during the side movement.



It is suitable for any type of empty or full container, made of glass, plastic or metal, of any shape: cylindrical, conical, rectangular, triangular, oval...

It can be used also as a stand-alone system for continuous diverting into several lanes to feed packaging machines.



**Logiweight**

It checks the weight of cases, cartons and packs, detecting with precision the defective ones because one or more pieces are missing or because one container is damaged.

It is precise, reliable and easy to use.

Its insertion in line is easy thanks to modules that can be combined together according to needs. It is the ideal final control before palletizing.

Completely automatic, it requires the presence of the operator just for the changeover

It can be expanded with other controls:

- Open flaps detection.
- Reading of bar codes or matrix codes.
- Inspection of applied labels.
- Wet carton detection.



**Logics & Controls**

**The inspection for perfection**

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