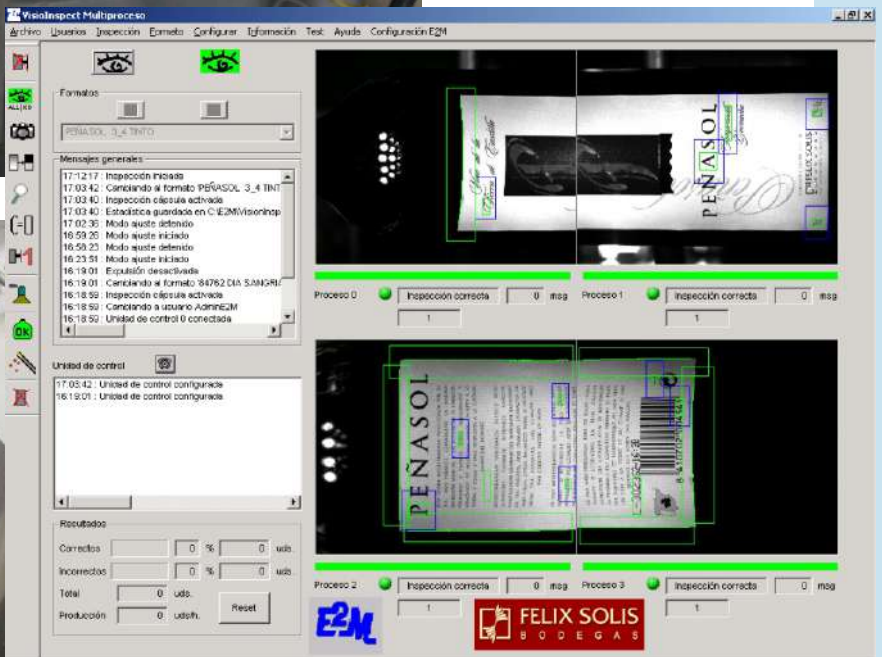




# VISIOLABELLING

Label Inspector inside Labelling Machine



Integral Electro-Mechanical Solutions

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## Introduction

Inspector VISIOLABELLING is an automatic equipment that by means of artificial vision, controls all the labels within the labeller. He automatically admits great productions and multiformats, adapting just by pushing a button, obtaining an instantaneous format change. It identifies each label completely inspecting his integrity and position.

This equipment has a very good quality/price rate and has the advantages of high quality range equipment. It is equipped with a flat colour screen TFT of 17", Windows interface, and incorporates the last advances of the computer science technology, as it is the remote diagnosis from our company through Internet, thus giving instantaneous technical assistance, without transport costs.

## Field of application:

It allows the inspection of all the labels of any package, transparent or opaque located within the labeller.

## Capability inspection:

Depending on the inspection necessities, one or two cameras can be installed, from one megapixel that would allow reading the smallest text in the back label, or colour cameras to discriminate similar labels. The aspects more commonly inspected are:

- Presence or absence of label, back label, roundabout label and closure label.
- Labels identification, detects labels positioned the other way round, or the positioning of a label corresponding to another product
- Detection of broken or raised corners
- Detection of labels duplicity
- Correct horizontal and vertical position of each label.

## Technique:

The strategy of the analysis system consists of the positioning of one or two cameras megapixel B/N (depending on the inspection necessities) in a strategic position within the labeller. The cameras will be fixed, with no need of monitoring system, thus will not be necessary the adjustment of their position for each type of format.

## Rejections:

We have diverse systems, from a proportional rejection for stable products or of great cadence, to multistep for unstable bottles.

## Options:

- Other inspections as labels on capsules, etc.
- Remote diagnosis system that saves time and money, with instantaneous assistance.
- Possibility of connection via port series a: computer, network of distributed control.

## Construction:

It consists of two parts:

- Enclosure of the cameras and illumination: Formed by a camera with illumination system and corresponding supports. The camera and its illumination system will be fixed inside a closed and hermetic IP66 of stainless steel and with the crystal frontal. The support of the camera has anchorages with pins to be able to quickly mount them and to disassemble for the cleaning of the labeller, obtaining a good registering of the position.

- The electronic-computer equipment is located in a stainless steel box, maintained with a rotator platform at the eyes height. At the main side there is the flat screen and control button. The takeout keyboard is located underneath. Measures: 450 wide, 290 depth and 350 height.

## Computer Equipment:

PC of last generation with framegrabbers of the most prestigious marks. The screen is formable to show 1, 2 or 4 images, being able to see any combination: for exemple the present bottle and the last defective. The counters of the processed and rejected bottles are shown. It allows to have limitless regions of inspection and to deal the image with diverse filters and to carry out calculations. He can keep the images from rejected products, for their later analysis. He has 2 connectors RJ45 for modem and network.

## Electronics:

Microprocessor controlled for all criteria. Everything can be programmed through the monitor and stored in memory for each container online produced. It will warn about any conflicting parameter introduced. The unit controls all the parameters, from the lighting to the most sophisticated ejector.

## Safety:

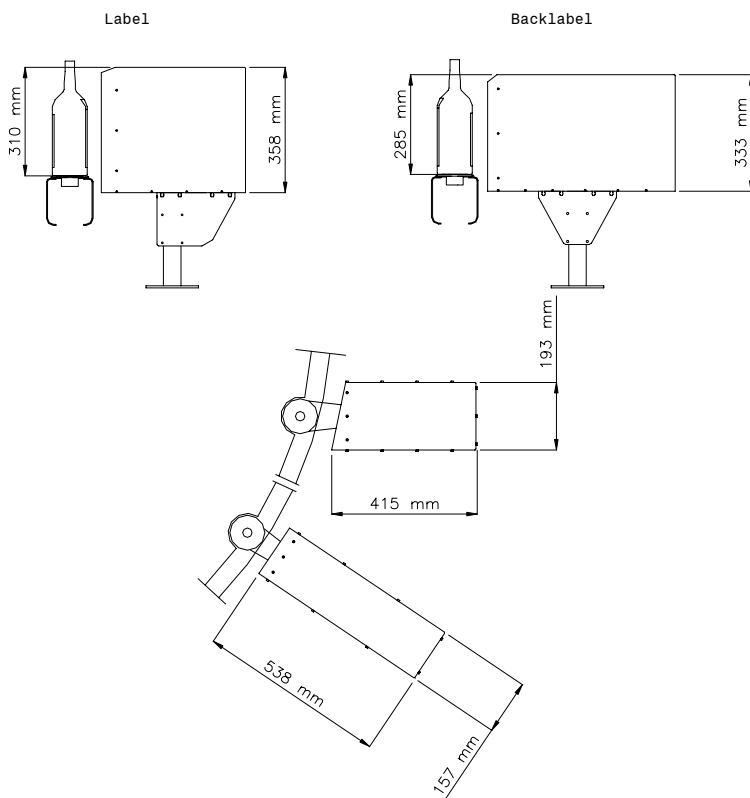
- Fulfils and exceeds all industrial compulsory norms.
- The electronics fulfil the low voltage norms and has passed the electromagnetic compatibility trials as well as quality tests and tests for life in harsh environments.
- All components are at least IP65 (NEMA Class 4).

## Maintenance:

No maintenance requirements.

## Technical Data:

Up to 40.000 containers/hour, depending on the analysis.



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