

DGVision 2.0: Artificial vision.

DGVision 2.0 is the most technologically advanced method for the orientation of containers of any kind before the labelling.

The solution includes the use of:

- an industrial PC
- an interactive operator panel with Touch-Screen display
- an applicative artificial vision system able to adapt to any current and future processing needs
- one (or more) cameras equipped with reflex filter, where no calibration will be needed for format change
- a set of special spotlights that enable operating in any light condition of the working environment without any interference of the light with the quality of the centring result.

The DGVision 2.0 software stores, manages and integrates all working parameters; i.e. image equalization, paths of the electronic cam, the data of every station (the data for possible mechanical adjustments of the motorizations of the labelling stations) to the current working format.

The DGVision 2.0 software manages the reports of the production and of the machine alarms, with productive indexes for statistic purposes and the historical memory of the production and the machine down times with the relevant causes. .

The DGVision 2. software 0 offers guided diagnostics of the sensors and a guide in line to the use and the setting of the system.

The DGVision 2.0 software has a system of Backup for the data stored on the hard disk of PC to avoid an accidental loss of the working data in case of anomalies.

Operation modes

The system finds a discriminating element (settled beforehand) and intercepts it.

The discriminating element can be a coat of arms or an inscription in relief on the glass, o spot on the capsules, a notch on the glass, silk-screen print on glass, a drawing on the label, an inscription or a single character on the label, a bar code, a reflex on glass, a shadow, etc.

The discriminating element is intercepted by the vision system. On the basis of the data picked up the vision system generates a response signal controlling the electronic cam and the labelling stations.

The recognition of the discriminating element is made through an image and not through a point; the orientation deriving is much more reliable and sure.

Advantages

Almost universal possibility of orientation of the containers to be processed.

Decidedly simple, easy and rapid format change it is sufficient to retrieve the format from the operator panel without performing any mechanical adjustments of the height, width and inclination on the electronic and electrical elements (limit of the optical fibre and photocell systems).

Orientation of the containers much more precise and sure, with immediate response time and with an increase in the production speed.

Memory containing 1000 different formats with simple and immediate research by format name (drop-down menu).

Network control

Service of remote assistance by means of internet connections: free remote assistance for 1 year and with a contract, if requested, for the following years.

It is possible to connect the machine to the net as it were a standards office terminal for your internal network.

It is possible to visualize the data of the production and alarm historical reports directly from your internal network or download them on a USB pen drive.

The machine is equipped with internal modem and can be connected to the EXTERNAL NETWORK (with access requiring your authorisation) by means of a simple INTERNET connection from the company network or with wireless key.

The connection to INTERNET allows the "total remote management" of the machine, the PC, and the PLC.

All data and electronic parameters can be retrieved, seen, optimized and modified (including the artificial vision) in real time and also during the machine operation.

Through the remote management it is possible to optimize the self-learning of new formats and therefore to follow (in remote mode) the operation of your personnel on the machine without the aid of a technician of ours present in your premises.

The software DGVision 2.0 software has a default chat line where our operator follows the operations being executed by your machine operators, besides it is possible to communicate also through Skype.

Some examples of orientation

- 1) Centring of the (dark or light) SPOT on champagne foil cap wrapping.
- 2) Centring of the LATERAL NOTCH on glass bottle
- 3) Centring the DEPRESSION on glass bottles
- 4) Centring of the part in relief on glass bottles.

