TECH-HINT





C-VIU Cigarette Visual Inspection Unit

MACHINE TYPE: 121 – 121A REFERENCE CODE: AF.031 – AF.031A – C.007

Description

The C-VIU (cigarette visual inspection unit) is the new G.D vision system for the cigarette surface inspection on makers checking all the production to reject defective cigarettes and to guarantee a high level of visual quality.

The visual inspection is performed by two high speed video cameras, located on the transfer drum and on the inspection drum, and an elaboration unit connected to the machine control system.

The two high speed cameras allow inspecting nearly the entire cigarette surface performing the following checks:

- cigarette length and tipping paper length
- quality of tipping paper anchorage to cigarette rod
- presence of tipping paper flag effect
- presence of spots and tears on tipping paper
- presence of spots and holes on cigarette rod paper
- presence of flattened ends
- presence of tears on the cigarette open end

C-VIU Cigarette Visual Inspection Unit

The C-VIU features a patented algorithm that, thanks to the elaboration of two consecutive pictures of the same product, is able to detect external objects (e.g. flying particles) between the cigarette and the camera avoiding false rejects.

For each defect and for each brand, it is possible to set and adjust all the parameters related to the defect itself via the HMI, so as to define the acceptability ranges, the reject limits and the geometrical characteristics of the defect (e.g. dimension of the spot)

C-VIU software collects quality data and manages them automatically to alert the operator about parameter drifting (using quality thresholds) and giving him the possibility to adjust machine parameters preventing production of defective cigarettes and rejects.

In addition, the C-VIU database stores the pictures of the last rejected cigarettes to support trouble-shooting during machine running.

Advantages

- Significant increase of product visual quality
- Patented algorithm to avoid false rejects
- Easy setting procedure
- Quality thresholds and possibility to view the pictures of the last rejected cigarette during machine running

Assembly time

Three (3) working days for installation by one (1) mechanical and one (1) electrical technicians and two (2) working days for machine run-up.

Validity

The kit can be retrofitted to any 121-121A machine equipped with inspection drum with inclined plates and featuring Beckhoff control system.

For previous control system technologies, it is required a feasibility study based on machine S/N.

How to order

Machine S/N and format dimensions are required to complete the Production Order. For further information please contact <u>eNews@gidi.it</u>.



TECH-HINT





C-VIU Cigarette Visual Inspection Unit

MACHINE TYPE: 121H – 121P REFERENCE CODE: AFP.004

Description

The C-VIU (cigarette visual inspection unit) is the new G.D vision system for the cigarette surface inspection on makers checking all the production to reject defective cigarettes and to guarantee a high level of visual quality.

The visual inspection is performed by four high speed video cameras (two per each tipping section track), located on the conical spacing drum and on the inspection drum, and two elaboration units connected to the machine control system.

The four high speed cameras allow inspecting nearly the entire cigarette surface performing the following checks:

- cigarette length and tipping paper length
- quality of tipping paper anchorage to cigarette rod
- presence of tipping paper flag effect
- presence of spots and tears on tipping paper
- presence of spots and holes on cigarette rod paper
- presence of flattened ends
- presence of tears on the cigarette open end

C-VIU Cigarette Visual Inspection Unit

The C-VIU features a patented algorithm that, thanks to the elaboration of two consecutive pictures of the same product, is able to detect external objects (e.g. flying particles) between the cigarette and the camera, avoiding false rejects.

For each defect and for each brand, it is possible to set and adjust all the parameters related to the defect itself via the HMI, so as to define the acceptability ranges, the reject limits and the geometrical characteristics of the defect (e.g. dimension of the spot)

C-VIU software collects quality data and manages them automatically to alert the operator about parameter drifting (using quality thresholds) and giving him the possibility to adjust machine parameters preventing production of defective cigarettes and rejects.

In addition, the C-VIU database stores the pictures of the last rejected cigarettes to support trouble-shooting during machine running.

Advantages

- Significant increase of product visual quality
- Patented algorithm to avoid false rejects
- Easy setting procedure
- Quality thresholds and possibility to view the pictures of the last rejected cigarette during machine running

Assembly time

Three (3) working days for installation by one (1) mechanical and one (1) electrical technicians and two (2) working days for machine run-up.

Validity

The kit can be retrofitted to any 121P-121H machine with Beckhoff control system. For previous control system technologies, it is required a feasibility study based on machine S/N.

How to order

Machine S/N and format dimensions are required to complete the Production Order. For further information please contact <u>eNews@gidi.it</u>.