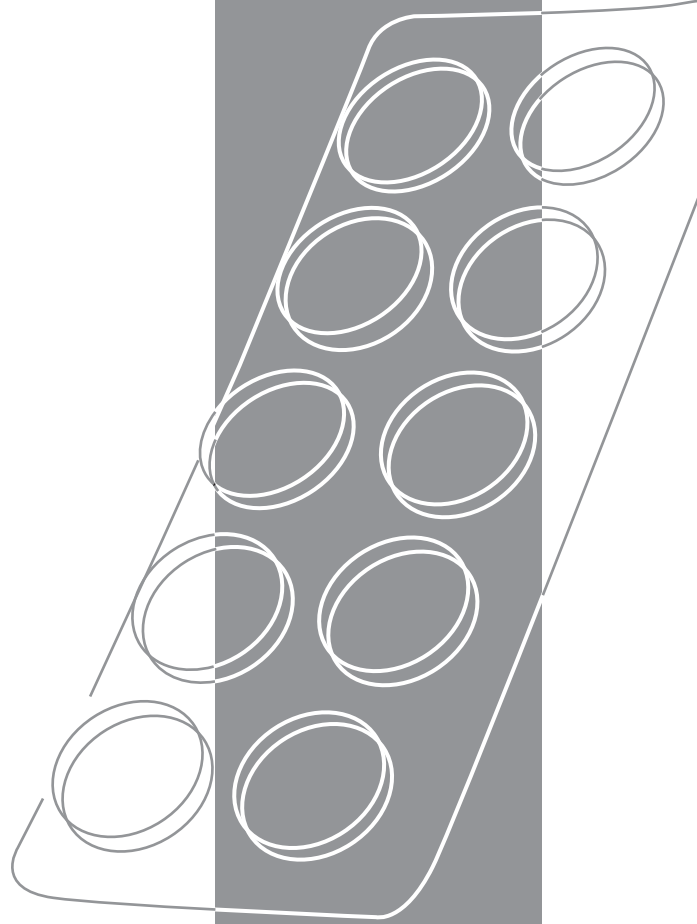




**ANTARES**VISION



**BFC**  
**BLISTER**  
**FILLING**  
**CONTROL**



# BFC BLISTER FILLING CONTROL

Blister Filling Control is an in-line inspection system that ensures the highest quality standards in pharmaceutical packaging lines, through the inspection of any kind of tablets and capsules in all types of blisters.

Created from the experience of Antares Vision in the most advanced industrial sectors, Blister Filling Control was developed thanks to the ten year partnership with the IMA Group and the leading pharmaceutical companies worldwide.

The BFC is integrated into the Antares Vision architecture and may therefore be integrated with all traditional line controls such as tray inspection, all the Universal Packaging Inspector suite, as well as all the Track and Trace systems.

## FEATURES AND BENEFITS

### IT WORKS WITH ANY KIND OF TABLETS AND CAPSULES

- The system can process tablets, capsules, hard and soft gelatin, printed and embossed products. (image 1-2)

### IT WORKS WITH ANY SUPPORT MATERIAL

- Compatible with any support material: transparent PVC or colour PVC, Alu-Alu, polypropylene, PVDC.

- Improved algorithms to manage the low contrast with white products on white PVC. (images 3-4)

- Optimized compensation of the image in case of support deformation (chewing-gum effect).

### 100% INSPECTION

- Performed controls:
  - counting
  - colour correctness
  - shape
  - geometry (area, contour, major/minor axis)
  - presence of spots and impurities
  - cracks and breaks
  - chipping
  - mix-up, vagrant and extra products

### SMART AND EFFICIENT

- Simple and fast auto-learning procedure: the software guides the operator along the phases of format creation. (image 5)

- An automatic self-tuning procedure optimizes illuminator set up, product colour selection and pocket position detection. (images 6-7)

- Presence of text on capsules or tablets do not affect the control.

- Easy and user-friendly graphic user interface based on stand-alone 15" touch screen display or directly integrated in the machine HMI. (image 8)

- Automatic threshold tuning: analysing the last found errors, the software automatically adapts the acceptance thresholds, thus minimizing false rejects while keeping utmost control reliability. (image 9)

- Advanced statistical analyses with detailed reject typology to help detecting the reject causes in the upstream production process. (image 10)

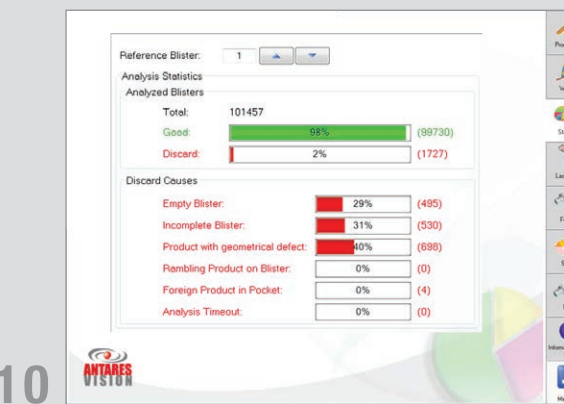
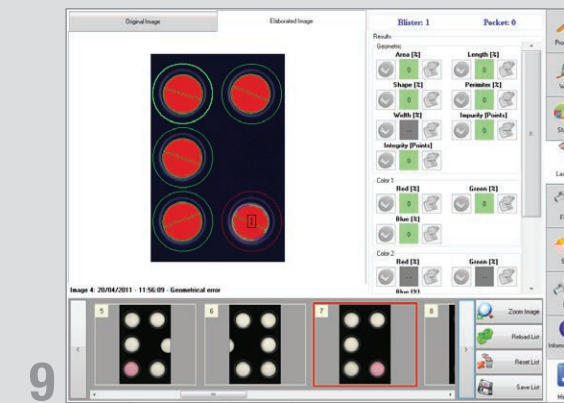
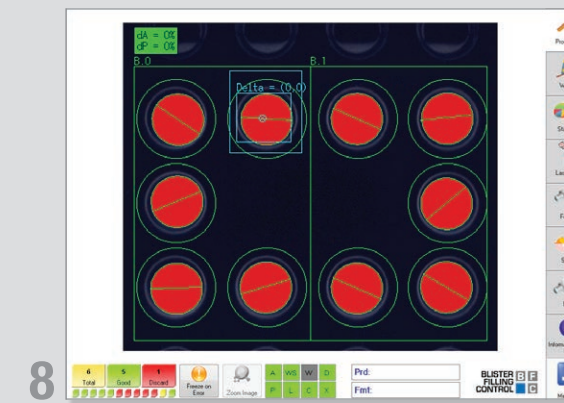
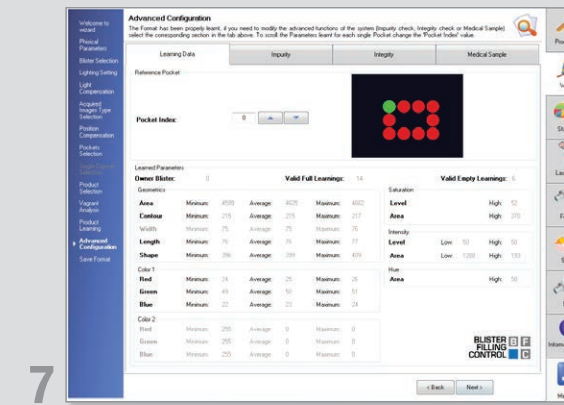
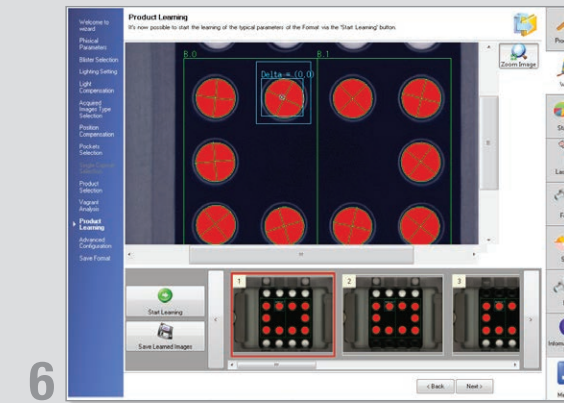
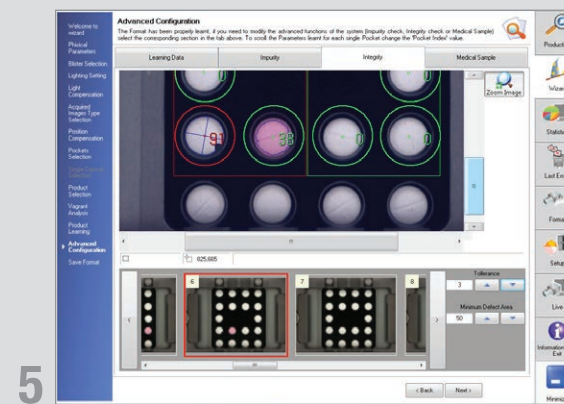
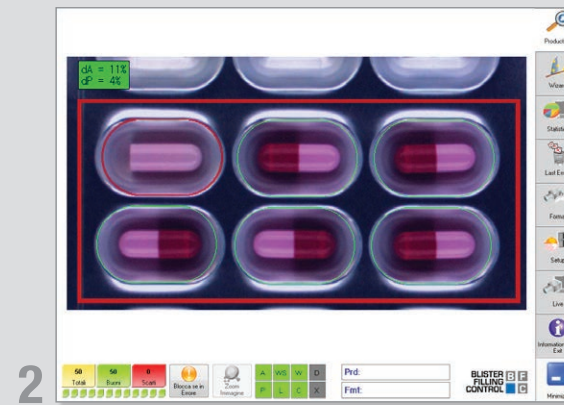
- Easy cleaning procedure: lighting system can be easily lifted to allow easy access to the formed foil.

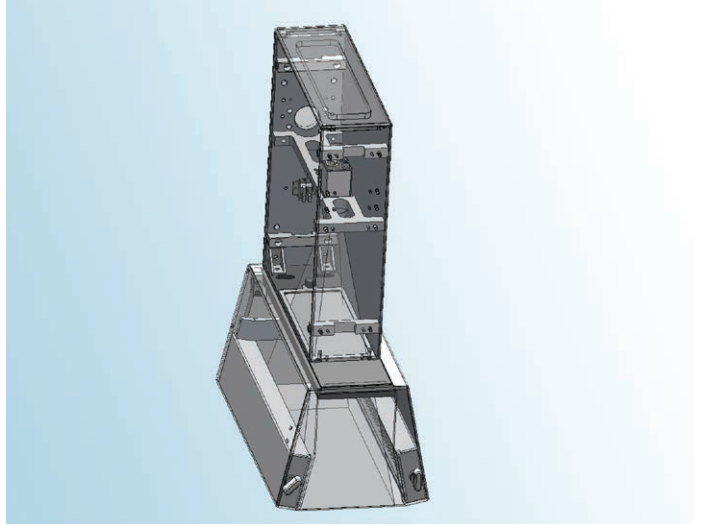
- The highest reliability is ensured by image processing performed with real time-embedded technology and by the total absence of critical components such as hard disks.

- Possibility of customized controls and ad hoc function development.

### QUALITY AND VALIDATION

- Manages up to 5 user login levels.
- FDA 21 CFR part 11 and GMP Annex 11 compliant.
- Developed following GAMP 5 approach.
- Availability of all documentations involved in the GAMP approach.





## TECHNICAL CHARACTERISTICS

### IMAGING PERFORMANCES

Camera type	Colour CCD Gigabit Ethernet
Resolution	Up to 1600 x 1200 pixels
Inspection width	Up to 400 mm
Analyzer	Real time operating system
Lighting	Cold white light, high power LEDs
Led duration	Over 30.000 hours
Image quality optimization through dedicated HW and SW	Yes
Direct strobo lighting	Yes
Backlight strobo lighting	Optional
Imaging and processing speed	Virtually unlimited (over 1500 blisters/min)

### MEASUREMENT ACCURACY

Minimum detectable geometrical variation (area/length/width/circularity/simmetry)	Up to 3% (depending on pill surface)
Broken or chipped tablet	Up to 3% (depending on pill surface)

### SOFTWARE FEATURES

Self-learning procedure (wizard)	Yes
Light auto-adjustment and compensation	Yes
Automatic pocket detection and positioning	Yes
Tracking of pocket position	Yes
Automatic threshold tuning from last errors	Yes
Image errors storage (for automatic threshold adjusting and visual analysis)	50
Multi-language platform	Yes
Available languages	English, French, Italian, German, Spanish, other languages available on request

### HMI

Display	Stand-alone 15" touch screen display or fully integrable in the machine HMI
Hardware	Solid state disk and custom buttons on panel

### SECURITY AND VALIDATION

User login levels	Configurable, up to 5 levels
FDA 21 CFR part 11 compliant	Yes
Alarms to blistering machine	Correct blister, empty blister, incomplete blister, vagrant product detection, foreign product detection, lighting system efficiency
Development according to GAMP 5 rules	Yes

### REMOTE ASSISTANCE

Remote support through network connection	Yes
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### INTEGRATION ON BLISTER MACHINES

Native integration on all IMA blister machines	Yes
Easy integration with most of machine models/manufacturers	Contact Antares Vision or ask your dealer for more details

