

TECHNICAL CHARACTERISTICS

IMAGING PERFORMANCES

Camera type	High sensitivity CCD Color GigE camera
Resolution	Up to 2768 x 1032 pixels
Inspection width	Up to 600 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
Imaging and processing speed	10.000 capsules-tablets/min

MEASUREMENT ACCURACY

Minimum detectable foreign product	1 mm ²
Broken or chipped product	2 mm ²

SOFTWARE FEATURES

Self-learning procedure (wizard)	Yes
Light auto-adjustment	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 machine	Foreign product detection, wrong product
Development according to GAMP 5 rules	Yes

REMOTE ASSISTANCE

Remote support through network connection	Yes
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INTEGRATION ON MACHINES

Easy integration with most of machine models/manufacturers	Yes
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AFC
ANTARES
FOREIGN
CHECKER



AFC ANTARES FOREIGN CHECKER

AFC is the in-line inspection system designed to prevent cross-contamination and detect product defects during the phase of bottles filling with tablets and capsules.

Created out of the experience of Antares Vision in the most advanced industrial sectors, AFC was originally developed for the IMA-Swiftpack machines and is now available for retrofitting on all vendors' counting machines.

The AFC comes with a stand-alone, easy to fit, integrated module containing two high resolution colour cameras and a lighting system optimized to minimize reflections from the inox channels, thus allowing highest efficiency in defect detection.

Input-Output signals allow to command rejects of non-conforming products as well as synchronizing with machine cycles (start/stop/suspend production, etc.).

The AFC 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 gelatines.

100% INSPECTION

- Performed controls:
 - mixed-up products
 - colours correctness
 - shape
 - geometry (area, contour, major/minor axis)
 - cracks and breaks
 - chipping

SMART AND EFFICIENT

- It performs controls on mono and multi colour products.
- Up to 12 vibrating channels can be inspected at the same time.
- Virtually unlimited number of multiple control areas.
- Virtually unlimited number of memorized formats.
- Easy mechanical and electronic integration on every counting machine.
- Simple and fast auto-learning procedure: the software guides the operator along the phases of format creation.
- An automatic self-tuning procedure optimizes illuminator set up.
- 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.
- Automatic threshold tuning: analysing the last found errors, the software automatically adapts the acceptance thresholds, thus minimizing false rejects while keeping utmost control reliability.

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

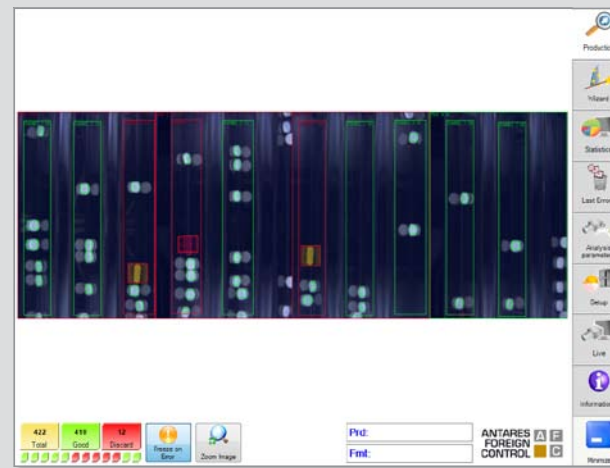
- Easy cleaning procedure: lighting system can be easily removed.

- 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.

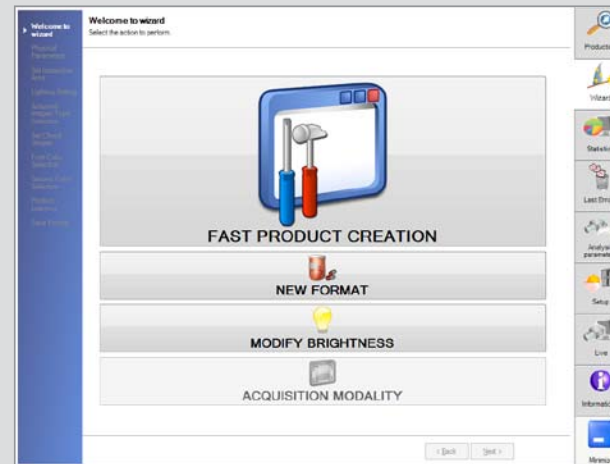
- Possibility of customized controls and ad hoc function development.

QUALITY AND VALIDATION

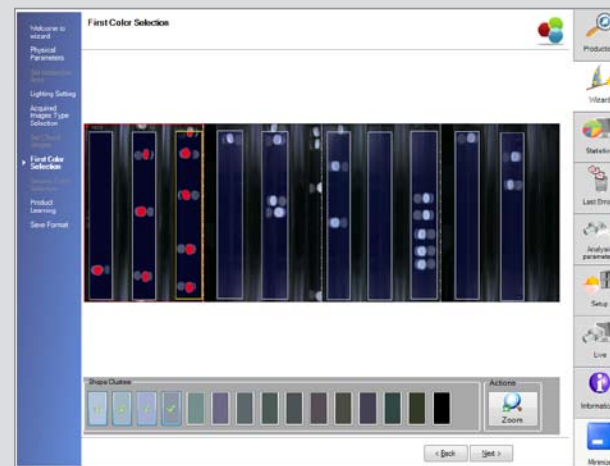
- Manages up to 5 user login levels.
- FDA 21 CFR part 11 and GMP Annex 11 compliant.
- Developed following GAMP 5 approach.
- Availability of all documentations involved in the GAMP approach.



MAIN PAGE WITH FOREIGN DETECTED PRODUCTS



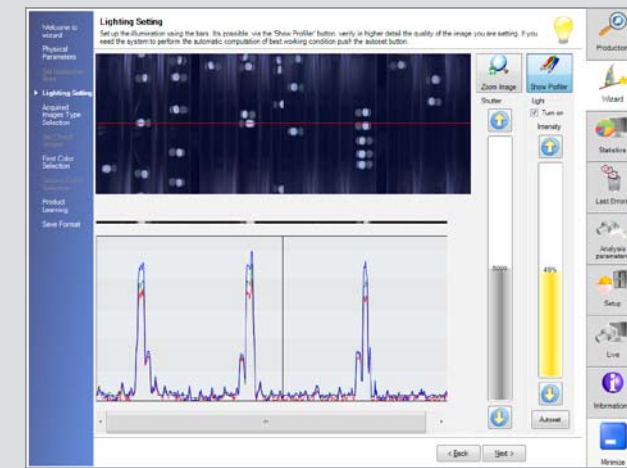
WIZARD MENU FOR NEW FORMATS OR MODIFICATION OF CURRENT FORMAT



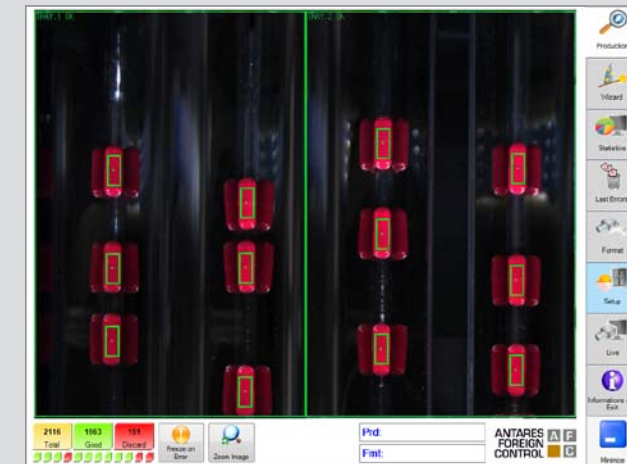
LEARNING PROCEDURE, FIRST PRODUCT COLOUR SELECTION



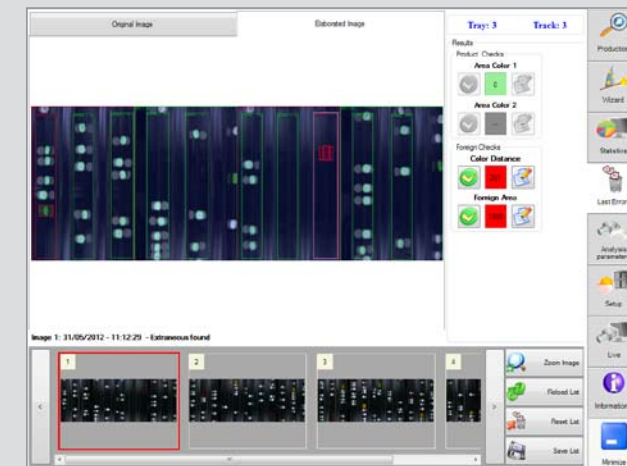
WIZARD PROCEDURE FOR CHECK REGION POSITIONING



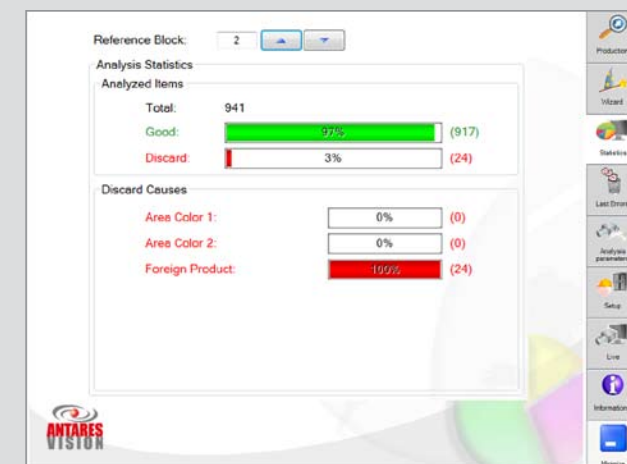
AUTOMATIC LIGHTING SET-UP



PRODUCTION PHASE



LAST FOUND ERRORS LIST WITH DETAILED ERROR TYPE



STATISTICS WITH REJECT CAUSE