AIS
VISION SYSTEMS

Quality control on cosmetics lines

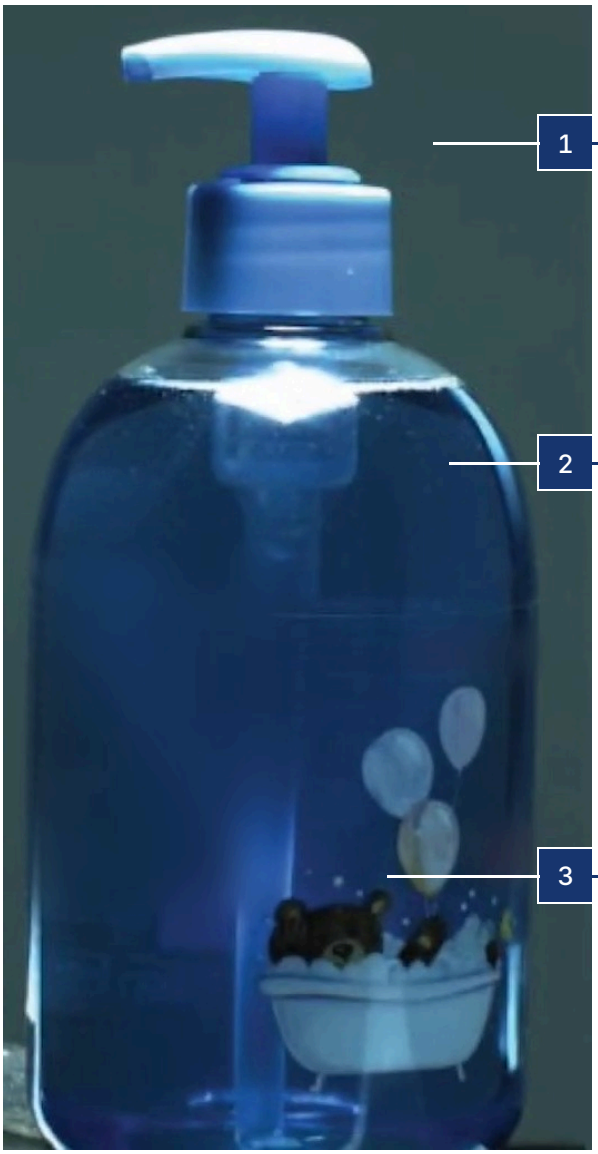
Machine vision inspects containers, caps, labels and codes to detect defects before products reach consumers.



- Cap and mouth: presence, position and integrity
- Label: 360° position and condition
- Codes: OCR reading and validation

A check for each area of the container

We develop machine vision systems that automatically inspect containers, caps, labels and codes on cosmetics production lines.



Cap and mouth

Presence, position and integrity of the cap or dispenser.

Pack

Visual container defects, inspected around the entire perimeter.

Label and codes

360° label position and condition; OCR reading and validation of batches and dates.



Bottles, tubes, aerosols and jars

The format determines where to look: closure, mouth, container, label or marking. We adapt cameras and criteria to each product reference.



Bottle with dispenser



Tube



Aerosol



Jar

Format	AIS Hopper	AIS REV 360
Bottle with dispenser	Dispenser and mouth	Label
Tube	Cap	Label
Aerosol	Overcap	Container and decoration
Jar	Lid	Label

OPTICAIS reads the marking: OCR on the bottle and the batch on the tube crimp.

Product-specific configuration

- Inspection views to suit the container geometry
- Recipes for batch, expiry date and codes for each product reference

Cap inspection, container by container

In AIS Hopper, high-resolution cameras and a deep learning model inspect the cap and mouth of glass, PET and derivative containers.



Missing cap



Tilted cap



Incorrectly closed lid



Missing overcap



Cap and label screen



Three live views of the cap



Version with conveyor



Equipment

Cameras	Three colour cameras for side inspection of the cap; optional overhead camera for the mouth
Software	Proprietary deep learning engine, with programming-free setup using examples
Height	Automatic adjustment to suit the product reference
Throughput	Up to 30,000 units/hour
Rejection	Automatic progressive or impact rejection of defective units
Options	Product centring device and TrazAIS for traceability and serialisation

The label, around its entire perimeter

In AIS REV 360, four colour cameras inspect the container through 360° without orienting it, with integrated Rosepetal artificial intelligence software.





AIS REV 360 on a production line.

What it inspects

- Label presence, position and tilt, and relative position between labels
- Double, inverted or lifted labels
- Tears, wrinkles, folds, stains and print defects
- Label integrity: logos, text and volume
- QR codes, barcodes and OCR marking



Missing label



Tilted label



Damaged container



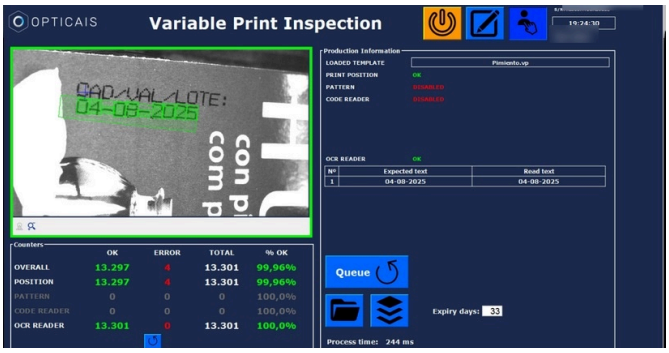
Illegible marking

Reading and validation of printed content

OPTICAIS reads text, codes and printed patterns and checks them against the criteria configured for each product, in line and in real time.



Batch and expiry date



Date on the container

Readings and checks

OCR text	Batches, dates and serial numbers
1D codes	Presence, legibility and content
2D codes	Data Matrix and QR
Fixed patterns	Printed symbols and fixed patterns
Marking	Thermal transfer, TIJ, CIJ, laser, dot peen and scribing
Recipes	Product-specific, without programming

Equipment

Camera	Compact smart camera with high-resolution lens and lighting
Polariser	For satin-finish materials
Indicator	Integrated visual OK/NOK status indicator
Operation	Touchscreen panel PC

- Automated marking inspection
- Real-time processing, up to 500 items per minute
- Adaptable to different industrial environments
- Intuitive interface and easy integration
- Statistics and cloud backup
- TrazAIS: traceability and serialisation

A check at every stage of the line

Each system is installed where the feature it inspects is produced: closure after capping, marking after printing and label after labelling.



AIS Hopper



OPTICAIS



AIS REV 360

1 **Filling**

2 **Capping**

Cap and mouth, with AIS Hopper

3 **Marking**

OCR reading and validation on the container and carton, with OPTICAIS

4 **Labelling**

360° label and container inspection, with AIS REV 360

5 **Case packing**

Conforming units continue; defective units are rejected in line



Cream jars on the conveyor, heading for capping and labelling.

Visible quality in every container

Automatic inspection provides data from each production run to act on product quality and brand image.



AIS Vision Systems equipment at Advanced Factories 2026.

- Greater productivity through automatic inspection
- Support for regulatory compliance and traceability
- A consistent brand image in every unit
- Integration into existing lines

A portfolio for every check

AIS Hopper	Cap inspection
AIS REV 360	All-round inspection
OPTICAIS	OCR reading and validation
TrazAIS	Traceability and serialisation

Send us samples

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