

KSMVISION

INSPECT 360+ DSC

Empty & Closed Can Inspection

FMCG industry



KSMVISION
OPTICAL QUALITY INSPECTION

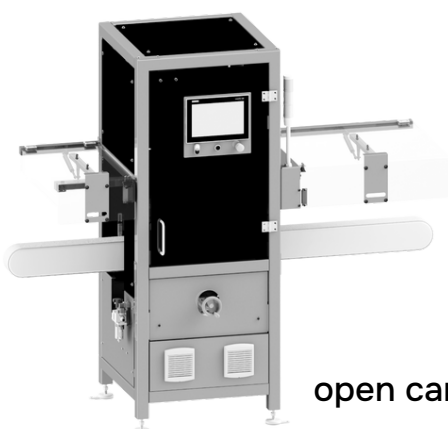


Fully automated IT system for can inspection

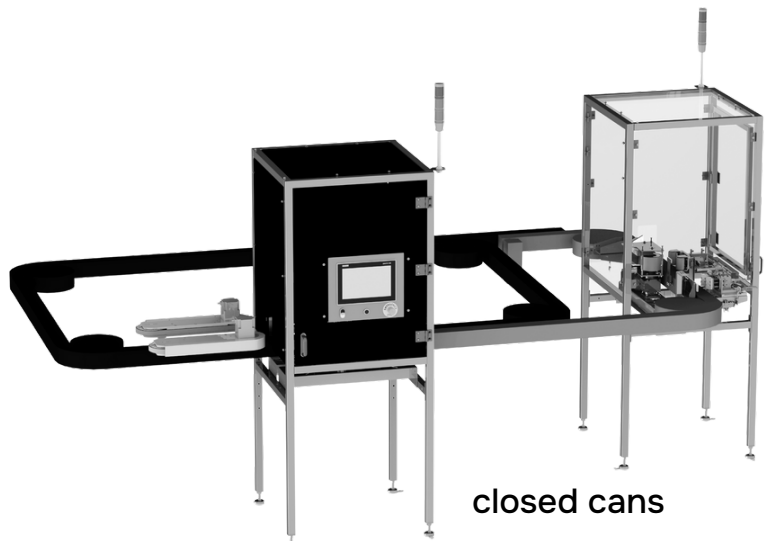
**Turnkey
360° vision
control,
without
dead angles**

KSM Vision assures accuracy and efficiency with stand-alone systems and modules ready to be integrated with your production lines.

Flexibility of systems allows to adapt them to the needs of different types and heights of products, including:



open cans



closed cans

Inspect 360+ DSC is fully prepared for integration with the factory's IT systems, in terms of automatic order setting, including:

IMPRINTS

REPORT GENERATION

The system ensures full inspection of the **can**, including:

- ✓ **open can surface, rim and sidewalls:**
 - **mechanical damage** - dents, bends, microholes, indentations on the rim, flange, sidewall and base, ellipticity, scratches, folds,
 - **color** - dark spots, rust,
 - **contamination** - by foreign bodies or inclusion on the rim, flange, sidewall and base,
 - **ellipticity, diameter errors, deformations**
- ✓ **closed can top** - lock presence, deflection, rim and flange tightness, potential blows or sweating,
- ✓ **(optional) can imprints** - code, BATCH#, Expiry date, logo.

Flexible & reliable system for different can formats

Flexibility of systems allows to adapt them to the needs of different heights of products, including:

- ✓ open and closed
- ✓ 2-piece & 3-piece cans
- ✓ aluminum & steel cans



Open can defects



- rust
- rim indentation
- sidewall dent
- dark spots
- incoding

Closed can defects



- rim/flange tightness
- open/loose cap
- potential sweating
- potential explosion
- top incoding

Open can all-round vision control

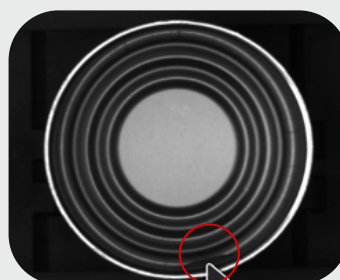
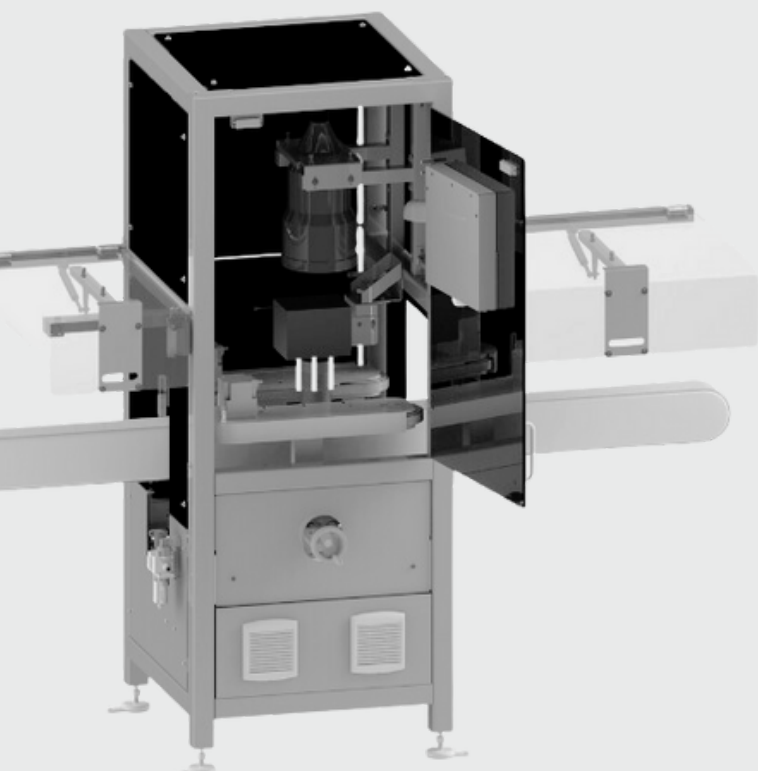
The head with telecentric lens carries out the inspection of the can rim, bottom and sidewalls.

The orthogonal view of the can gets generated, enabling **homogeneous control accuracy of the whole can, without perspective error.**

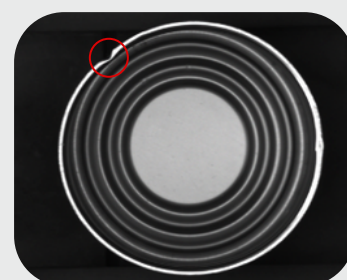


Advantages:

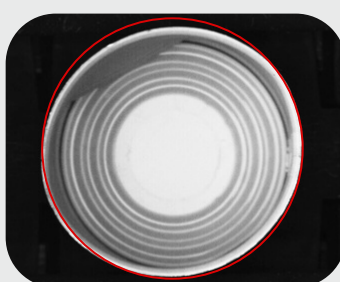
- ✓ smart design of the head taking up less space on your production line (1 camera with telecentric system)
- ✓ homogeneous control accuracy, without perspective error
- ✓ efficiency up to 30 000 containers per hour
- ✓ easy installation on existing belts



dent on the rim



rim indentation

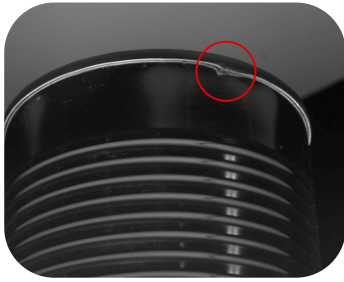


**ellipticity and
sidewall defects**



**foreign body
detected**

Closed can double-inspection



dent on flange



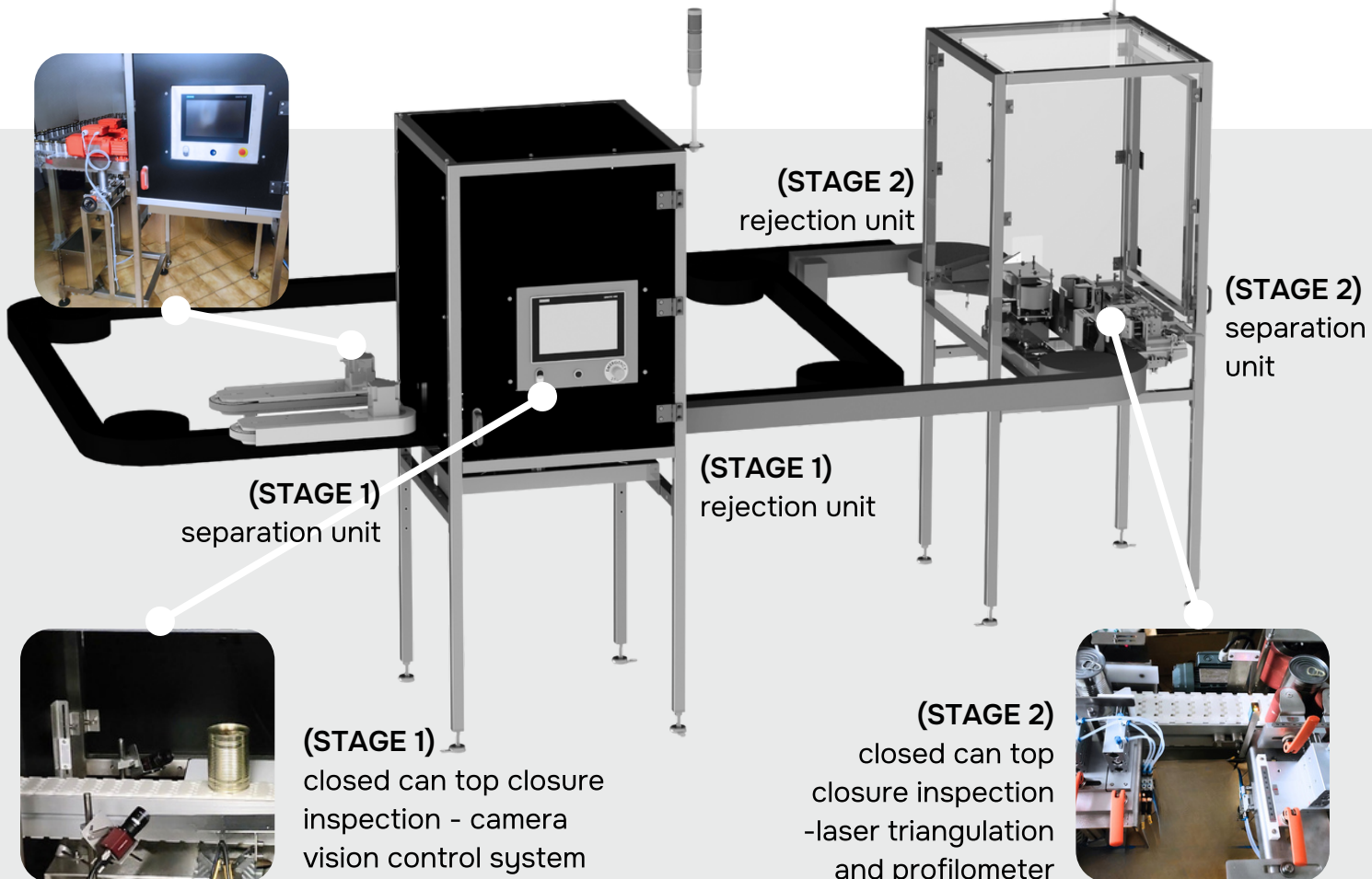
false flange

Advantages:

- ✓ preliminary, quick quality control of closed cans with efficiency up to 30 000 items per hour (STAGE 1)
- ✓ reduction of incorrect rejections of good cans (false positives) by using the second, more accurate inspection station (STAGE 2)
- ✓ blow off function to get rid of water droplets
- ✓ robust and resistant design - easy in installation on existing belts

**STAGE 1: PRELIMINARY,
QUICK QUALITY CONTROL**

**STAGE 2: DETAILED
QUALITY INSPECTION**



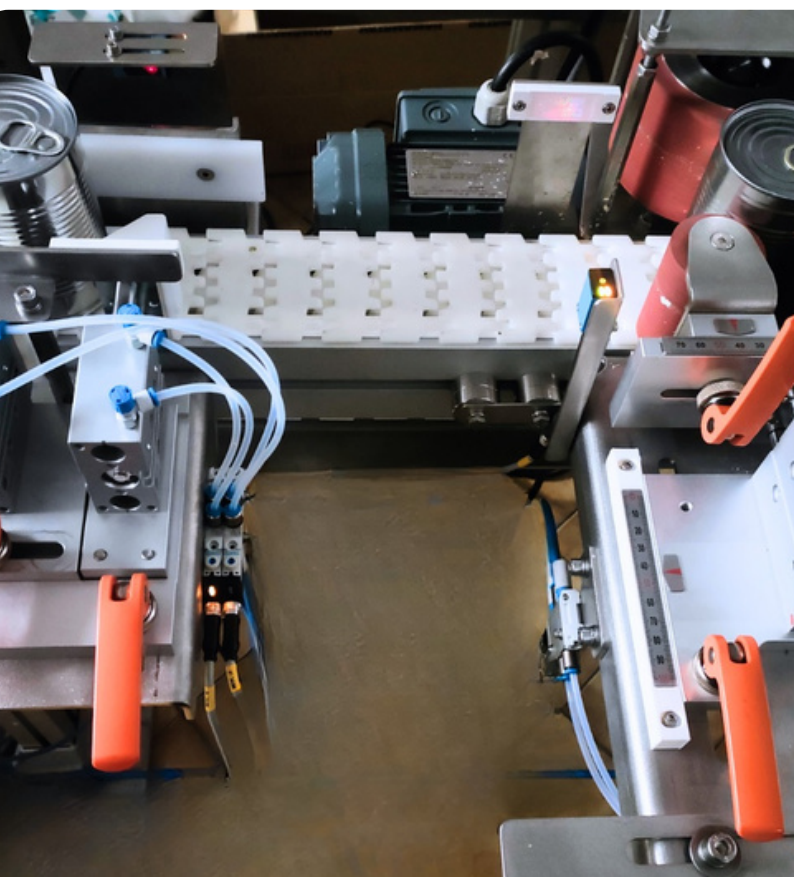
What do you **gain**?



- ✓ Compliance with the food industry hygiene standards GUPH and HACCP's central principles
- ✓ 100% control of production - only flawless products leave your production
- ✓ Guarantee of customer safety
- ✓ Cost savings by minimizing manual inspection & product waste
- ✓ Solution to production labor shortages by transferring by transferring manual inspection to automated machine vision inspection
- ✓ Traceability of all products - extensive statistical functions
- ✓ User-friendly interface enabling quick product adding and creating new order (including reference images)
- ✓ Automated reformatting of the system mechanical components for the new cans
- ✓ Smart design enabling easy integration with your production line

Options:

- ✓ Separation system (wedge conveyor)
- ✓ Soft rejection unit (multi-segment rejector)
- ✓ Can imprints - code, BATCH#, expiry date, logo
- ✓ Automatic reformatting of the measuring head in X,Y axis (open cans)
- ✓ Defined trend values and set alarms
- ✓ Detailed inspection reports providing in-depth information about the delivery quality at any time



Configure Inspect 360+ DSC for adaptation to your production process & line.

With our help customize hardware, software, or analyzed data.

Configurable interface and database

Based on the production specification system interface can be adjusted, including automatic system set-up with data upload by higher-order system (e.g. MES) and additional data upload by line operator. Data collected by the system can be automatically uploaded to higher-order system.

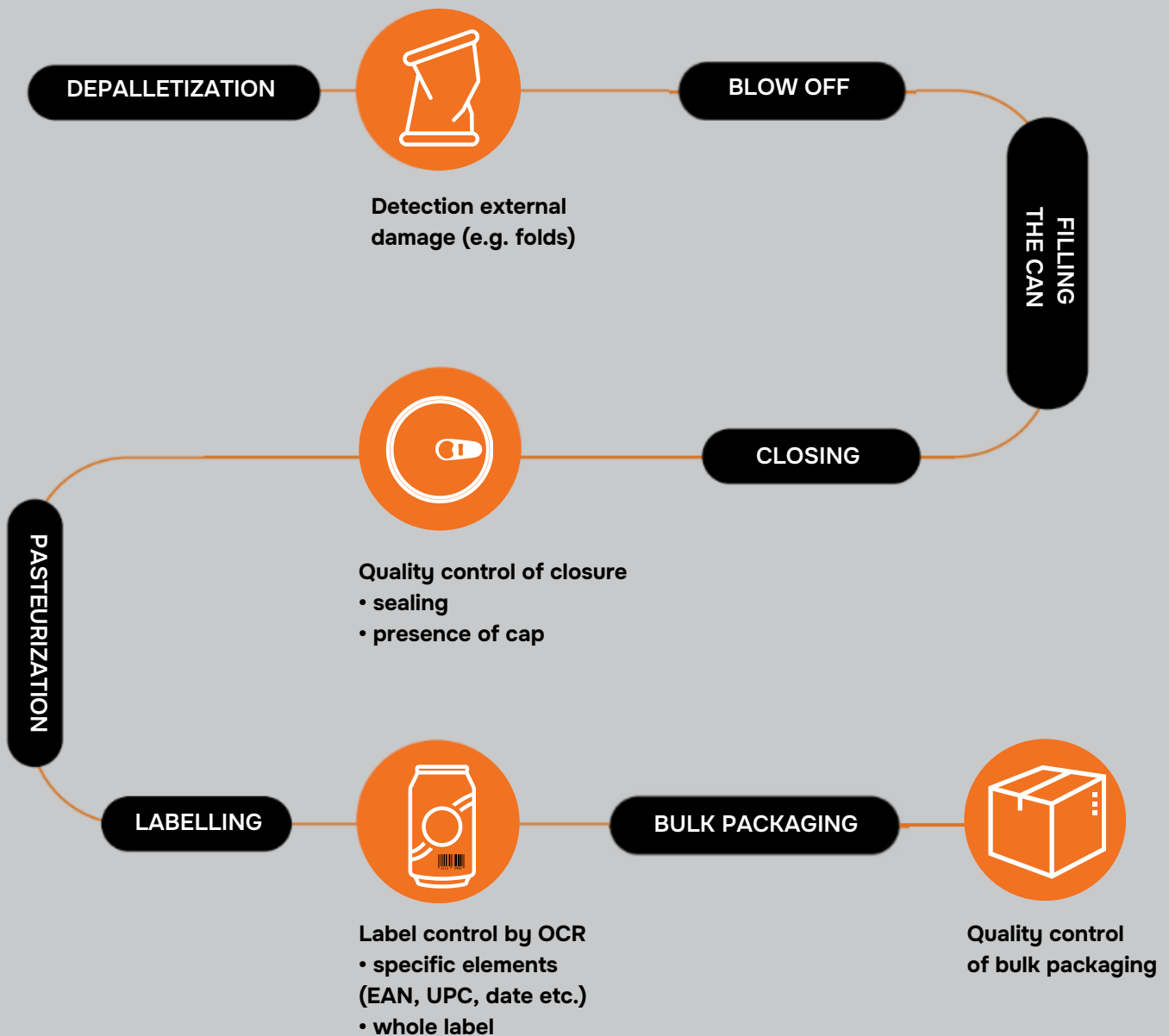
Different products, one software

User-friendly interface enables quick product adding and creating new order (including reference images).

Reformatting is automated with the head height adjustment system, operated via interface.



KSM Vision systems enable all-round vision quality control at every step of your manufacturing process.



At KSM Vision, we've positioned ourselves as a trusted partner of the quality control industry.

Serving a diverse range of sectors – including woodworking, pharmaceuticals, cosmetics, and food – we bring the reliability and precision you need.

By fusing advanced machine learning algorithms with customized hardware, our solution isn't just an alternative to manual inspection; it's a superior approach.

We have made quality inspection systems:

- ✓ compact - easy to implement in limited space and on existing production lines,
- ✓ AI-powered with neural network architecture - enabling adaptations to the changed requirements, or product formats,
- ✓ optimized with real-world data from production lines resulting in better accuracy,
- ✓ hardware-agnostic - offering flexibility in choosing hardware components.

since
2012

Trusted by European EIT Manufacturing and backed by Intel's oneAPI for Startups, our solution is built on a foundation of reliability.

We're ISO9001 compliant, ensuring our standards meet global benchmarks for quality and trust.



Ask for details

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At **KSM** Vision, we strongly believe in the power of connecting scientific minds to run the constant change.

As an official partner of Intel's OneAPI for Startups program we are engaged in the R&D on the neural network potential. In partnership with EIT Food - Europe's leading food innovation initiative - we are co-making the food industry more sustainable, healthy and trusted, involving the quality inspection tools.



Co-funded by the
European Union

