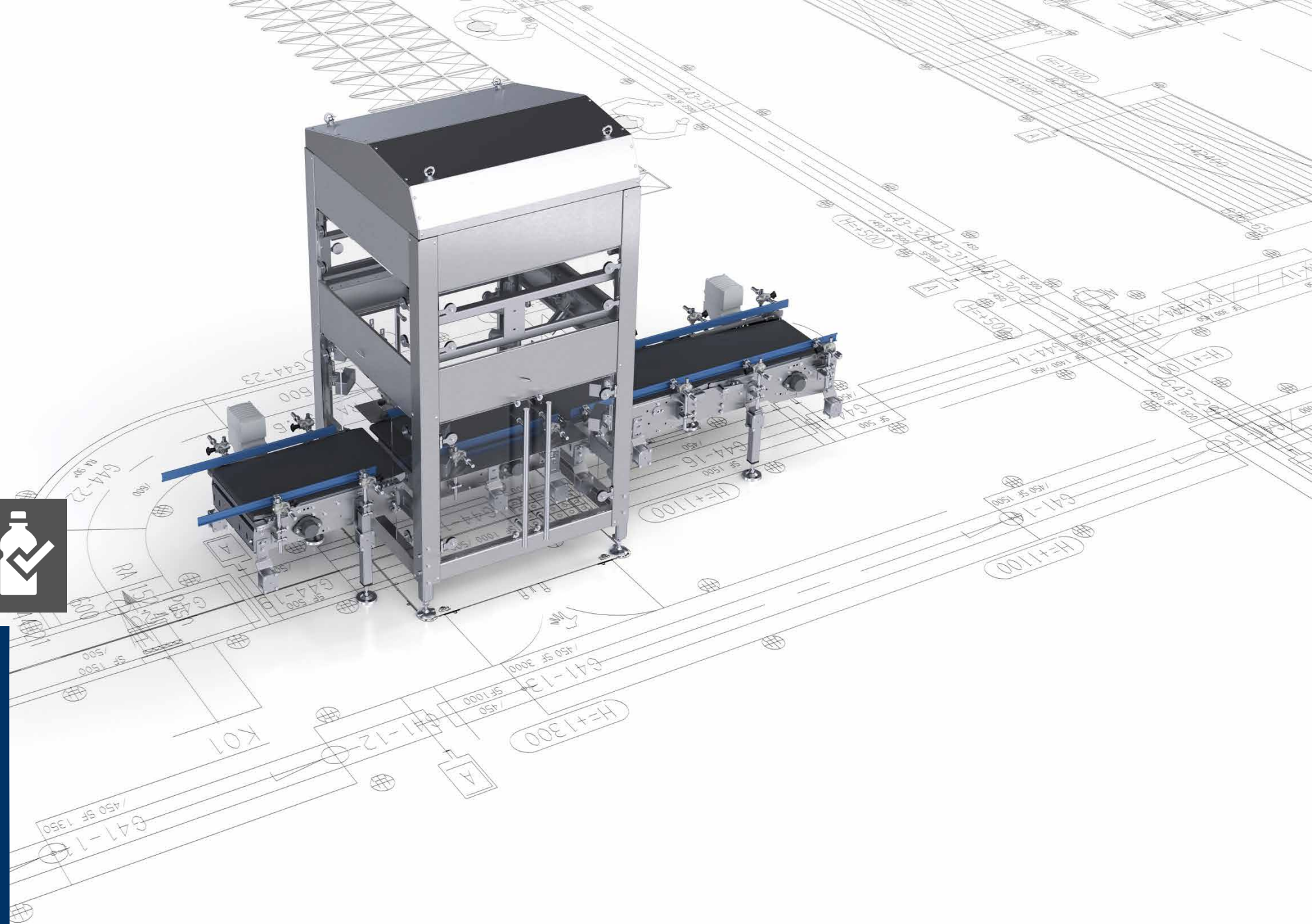




Checkmat

Inspection systems for the dry section





All-around check for maximum safety and performance

Are the right bottles in the pack? Are there no foreign objects in it? And can it be re-used without any problems?

The Checkmat inspection systems give you a clear answer to all of these questions. Depending on the task, they can be integrated in all kinds of different spots of a line and equipped with custom-fit inspection technology.

At a glance

Suitable systems for all process steps:

- In front of the unpacker
- After the unpacker
- In front of the packer
- After the packer
- In front of the palletiser

Benefits to you

- Maximum product quality and safety thanks to consistent inspection of the full and empty packs
- Increased line efficiency thanks to automatic detection and rejection of faulty material
- Protection of the packers against faults such as damaged gripper cups
- No adjustments required*

* With camera-based systems



Overview of all options

Inspection of the crates for	Unit with sensor	Unit with camera and LED lighting unit
Unpackability: Inspection of all dividers	✓	
Condition and quality of the empty pack		✓
Identity: based on colour, logo, bar code, date/code		✓
Completeness	✓	✓
Height	✓	

Output: up to 5,000 packs/h each



Pack inspection in front of the unpacker

Technical features

- Sensor measuring bridge
- Height adjustment for each type

Pack inspection for

- Unpackability (foreign objects in the crate)
- Height





Empty pack inspection after the unpacker

Technical features

- 1 or 2 lateral cameras
- Height adjustment for each type

Inspection of the crates for

- Colour





Empty pack inspection after the unpacker

Technical features

- 1 or 2 lateral cameras
- LED lighting unit

Inspection of the crates for

- Colour
- Logo
- Dimensions (height, length, handle shape)





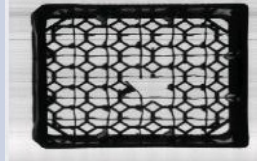
Empty pack inspection after the unpicker

Technical features

- 1 camera with transmitted light method
- LED lighting unit

Inspection of the crates for

- Damaged dividers:
bars and bases



- Foreign objects in the dividers



- Divider and crate dimensions

- Clearly visible bent crate edges





Empty pack inspection after the unpacker

Technical features

- 1 to 5 cameras
- Inspection in the direction of operation possible
- LED lighting unit

Inspection of the crates for

- Identity based on colour and logo



- Damage



- Dirt



- Broken parts sticking from edges and corners
- Defective handles





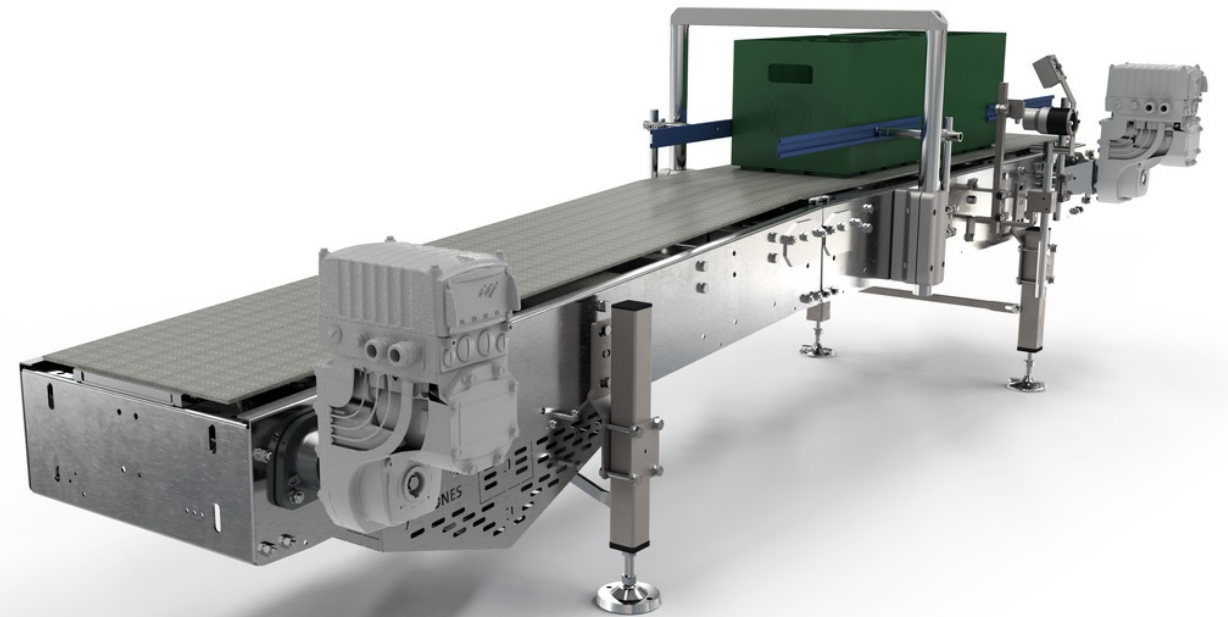
Pack inspection in front of the packer

Technical features

- 1 or 2 lateral cameras
- Height adjustment for each type

Inspection of the crates for

- Colour





Full-pack inspection after the packer

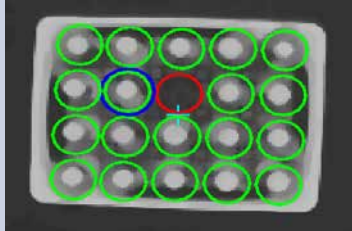
Technical features

- 3D sensor and sensor
- LED lighting unit



Benefits to you

- No adjustment of the 3D sensor required

Inspection of the crates for	3D sensor
<ul style="list-style-type: none"> – Complete number of containers 	
Inspection of the crates for	Sensor
<ul style="list-style-type: none"> – Height 	Min. 15 mm, manually adjustable





Full-pack inspection after the packer

Technical features

- 1 colour camera and sensor
- LED lighting unit

Benefits to you

- No adjustments required

Inspection of the crates for	Colour camera
– Complete number of containers	
– Colour of plastic caps	

Inspection of the crates for	Sensor
– Height	





Full-pack inspection after the packer

Technical features

- X-ray technology
- Height adjustment for each type

Range of applications

Suitable for the following packs:

- Open and closed packs
- Of carton and plastic with dividers

Inspection of the crates for

- Completeness
(at glass max. 4 containers; with PET max. 5 containers)
- Fill level of the containers in the pack*
- Protruding cartons/height

**rough fill level; only suitable for PET containers*





Full-pack inspection in front of the palletiser

Technical features

- 1 to 2 cameras
- LED lighting unit

Inspection of the crates for

- Logo
- Bar code
- Date/code (OCR/OCV)
- Colour





Everything from a single source

Training sessions at the KRONES Academy – trained personnel increases your line efficiency

The versatile training offer ranges from operation, servicing and maintenance to management training. We will gladly also establish your individual training programme.

KRONES Lifecycle Service – partner for performance

Also after having purchased a new machine, KRONES will take care of your line; the LCS experts are always ready to consult you and translate your goals and wishes into optimal LCS solutions.





Digitalisation



Process
technology



Bottling and
packaging equipment



Intralogistics



Lifecycle
Service

We do more.

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