



## **KRONES** Checkmat Pack Monitoring Systems

# Multi-Functional Monitoring Technology



Providing the Checkmat pack monitoring systems, KRONES offers the possibility to inspect full packs for their correct content and empty packs. These systems for securing your product's quality standard are of modular design and can therefore be ideally configured for each inspection task. By means of the different inspection methods, it is possible to check not only open cartons and crates but also the content of closed cartons.

All systems have in common a very reliable analysis system KRONES DART (Distributed Architecture for Real Time) which is well proven in numerous applications in the field. The comfortable and ergonomic operation is via touch-screen. On the display of this screen, you can switch back and forth between different languages. It offers easy and secure password-protected access to the system. Its network compatibility

allows for connection to company-own production data acquisition or line data storage systems. This system is complete with the option of performing maintenance, training and parameterisation via teleservice. Thanks to many optional inspection possibilities, the individual systems can be adjusted precisely to your special requirements.

# KRONES Checkmat VKK



## Full Pack Monitoring System

Checkmat VKK checks

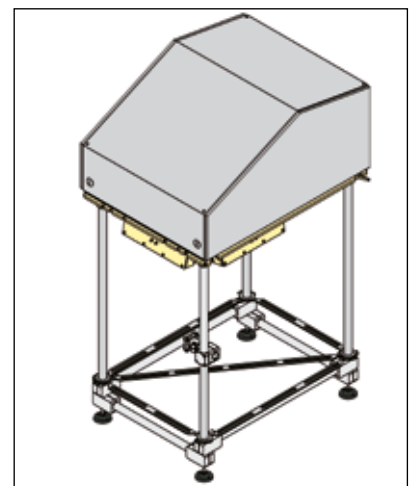
- the containers in crates and in open cartons for completeness
- the edge of the pack for correct dimensions and proper condition
- the container caps for presence and correct logo
- the use of the correct pack type

The inspection is done via matrix camera with reflection method and it provides absolutely reliable results. This method is absolutely harmless for persons and the environment.

## Optional Inspection/Detection

Features:

- Pack colour
- Connection of analogue and digital sensors
- Connection of up to six camera systems possible for checking:
  - Logo/label
  - Bar code
  - Coding/dating
  - Surface quality



# KRONES Checkmat VKX



## Full Pack Monitoring System

Checkmat VKX checks

- the content of open or closed packs of carton or plastic for their completeness
- packs with PET containers to determine if the set-point fill level has significantly fallen below

## Optional Inspection/Detection

Features:

- Open carton lid
- Pack colour
- Pack length
- Connection of up to six camera systems possible for checking:
  - Logo/label
  - Bar code
  - Coding/dating
  - Carton quality

The x-ray inspection technology leads to excellent results, especially with closed packs

# KRONES Checkmat LKK

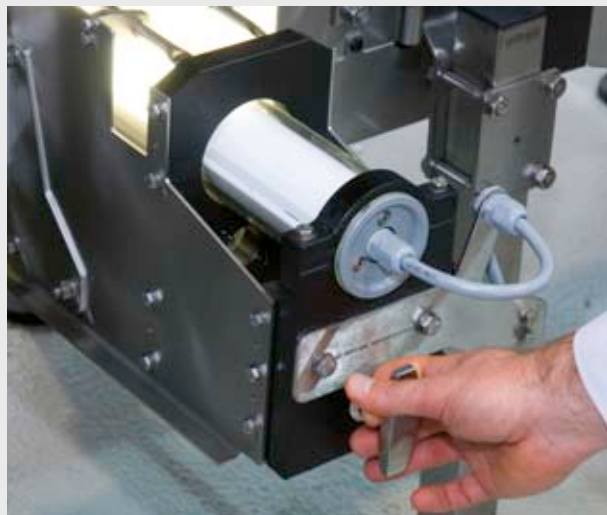


## Empty Pack Monitoring System

Checkmat LKK checks empty plastic crates for

- foreign objects
- broken dividers
- protruding or bent handles
- deviations from the optimum crate dimensions

The inspection is via a line camera working by the transmitted light method. Automatic cleaning of the lighting unit is optionally available.



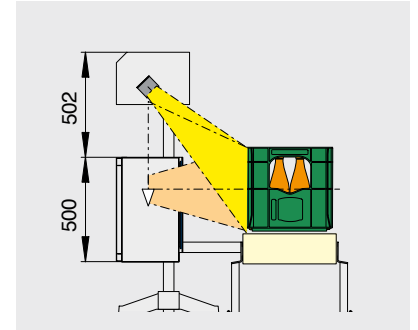
# KRONES Checkmat KLK

## Pack Logo Monitoring System

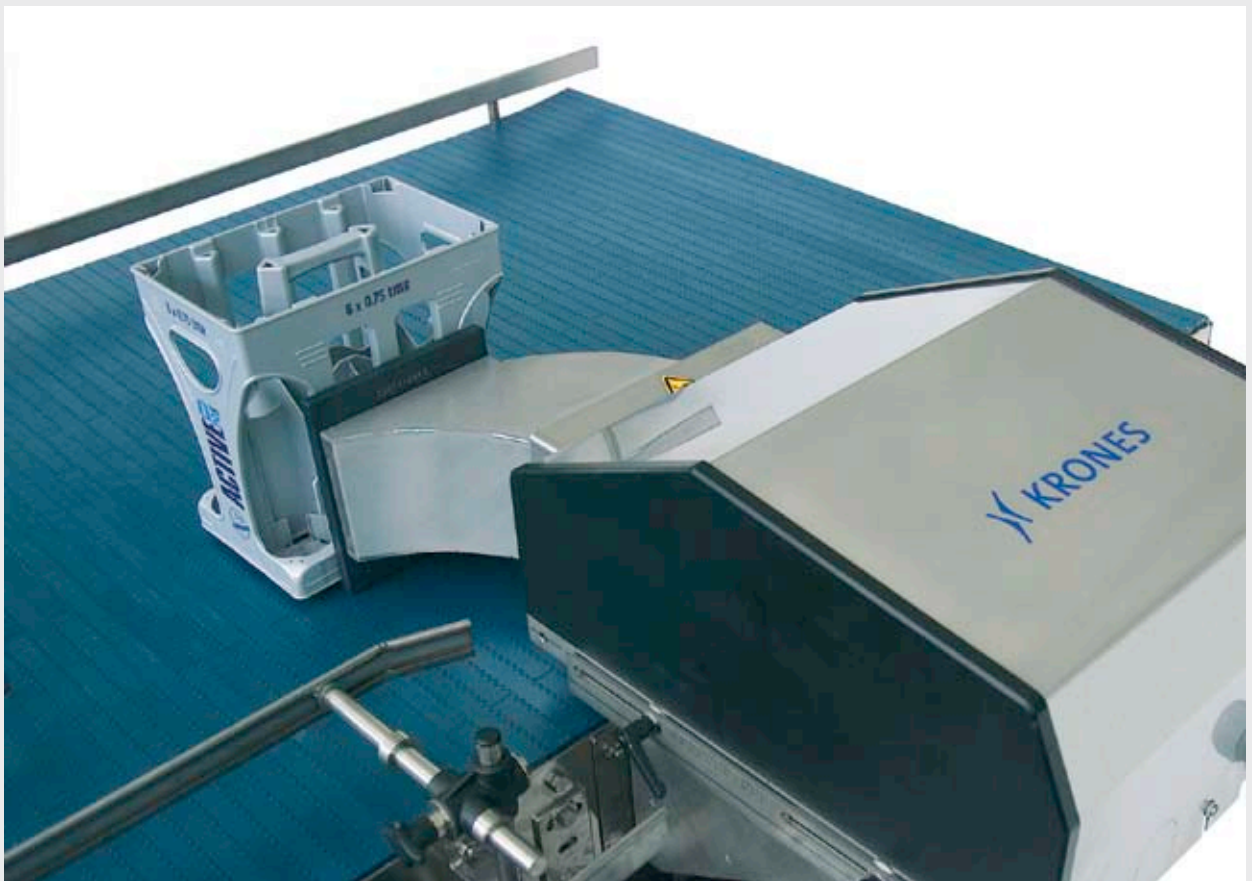
Checkmat KLK checks empty or full packs for

- correct logo
- pack colour
- length and height
- pack material quality

Several pack types can be handled simultaneously. The inspection is via a matrix camera working with the reflection method.



## Common Features



### Rejection of Packs

Any non-conforming packs must be automatically rejected from the pack flow or routed into sorting channels. For this purpose, KRONES provides the following options:

- Pack pusher, e.g. Variopush
- Plate distributor
- Existing rejection systems
- Conveyor stop possible with faulty detections



### Teleservice

- Dial-in via modem/telephone line or Internet/VPN to the KRONES network by an authorised person with a PC which is installed above the Checkmat
- Modem installed by standard
- Monitoring and operation of the inspector via teleservice, display of all parameters and camera images
- Optimisation of the detection units, parameterisation of new container types
- Quick fault diagnostics
- Reduced downtimes and less onsite service tasks due to availability of teleservice with 24-hour hotline
- Practical training possible via teleservice

### Service

KRONES worldwide network of sales and service offices provides optimum support even after the start-up of your inspection system. When needed, our specially trained service technicians for inspection systems will be at your site within very short time and perform all maintenance tasks quickly and reliably. Our modern storage system allows us to supply the required spare parts immediately.