



**LEAKAGE CHECK**

**HEUFT *pakCheck***



## No chance for leaks!



Particularly sensitive products such as dairy products and fruit juices are often filled in carton packages. A thorough quality control of such carton packages is indispensable so that they do not spoil and present a danger to the health of the consumer.

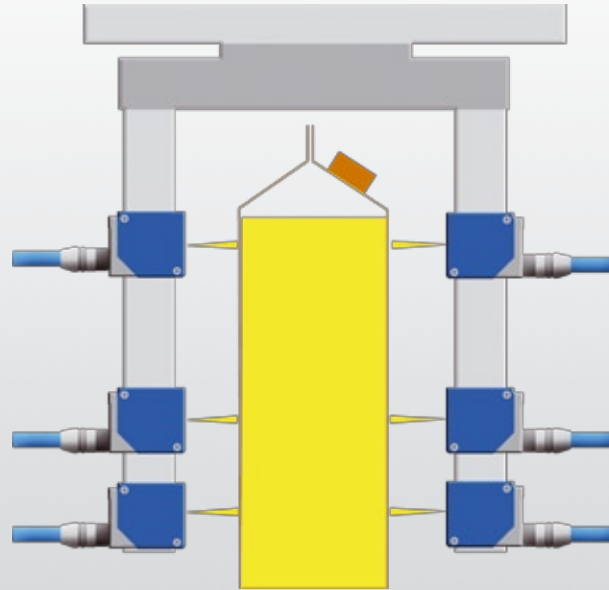
The HEUFT *pakCheck*, an innovative inspection technology, sets completely

new standards in this case: it detects leaks reliably and efficiently without touching the sensitive containers. And on top of that it ensures that the closures are present and have been correctly applied.

In this way the HEUFT *pakCheck* protects the consumer from damaging his health and at the same the producer

from high personnel and cleaning costs as well as expensive product recalls.

The device detects leaks as well as missing or misplaced closures on carton packages reliably and correctly. Faulty containers are rejected directly and only perfectly filled and tightly closed containers get through.



## Exact measurements check the tightness

The HEUFT *pakCheck* measures carton containers whilst passing on the conveyor by means of several optical sensors in order to check them for leaks. Because leaking containers draw air and as a result change their dimensions measurably.

The device determines the respective fill height of the drink in the package by

means of a radiometric inspection during the same work process. Because meaningful findings about the tightness of the package which is being examined are only possible by comparing this with the dimensions of the container.

The different measuring results are combined and calculated together. The results then allow exact conclusions

regarding the tightness: whilst leaking carton packages already change their shape after a very short time this is not the case with perfectly filled and packed containers. The device automatically rejects those carton packages the dimensions of which are not correct.



## Code reading at top speed

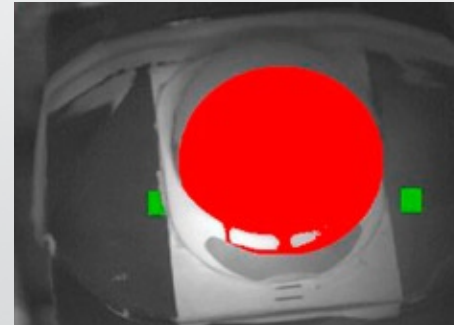
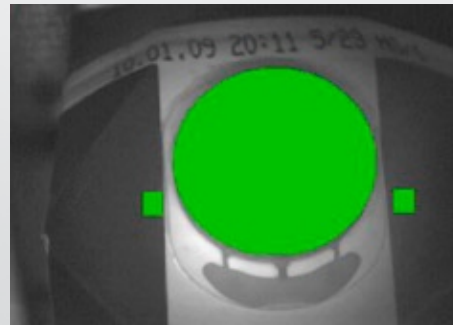


The HEUFT *pakCheck* does not only check the tightness of carton packages reliably. It ensures during the same work process that the consumer can correctly assess how long the product will keep.

A detection for code reading specially developed by HEUFT checks and validates at top speed that the printed

best-before date (BBD) on each single container is properly positioned, printed without errors and that its contents are correct.

Packages which are not perfect regarding this are rejected. The HEUFT *reflex* technology guarantees this - a specially developed image processing system for high-speed pictures.



## Optimal quality assurance by means of integrated closure inspection



The HEUFT *pakCheck* has even more to offer as regards quality assurance apart from a leakage check and a BBD code reading system. At the same time the device checks whether the cap of the respective carton package is present using a camera.

However checking the mere presence is not sufficient alone. The correct position of the closure is just as important:

it has to be exactly above the opening of the package - often protected by foil. Because only then can the milk or fruit juice product contained in it be easily removed without making a mess.

Therefore the device examines exactly whether the package closure is in the correct position on the carton package. With that the device kills two birds with one stone: only perfect carton

packages which do not leak and the closures of which are correctly positioned reach the market.



## Specifications



### Detection accuracy

The HEUFT *pakCheck* achieves the following specification values when inspecting the tightness, closure and BBD of standard carton packages:

- the HEUFT *pakCheck* even detects small leaks of 0.09 mm<sup>2</sup> in the upper seam of the closure or in the closure area reliably
- deviations in the fill height of 2 mm are recorded with a reliability of more than 99%
- the device even identifies small deviations of 2 mm in the closure position in the x/y direction with a reliability of 99%
- missing dating is detected with a reliability of 99.9% and the detection rate is similar for incorrect BBD coding

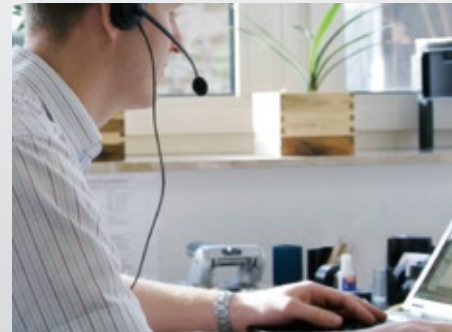


## Your cost advantages with HEUFT



We do everything in order to combine the very highest quality with fair prices:

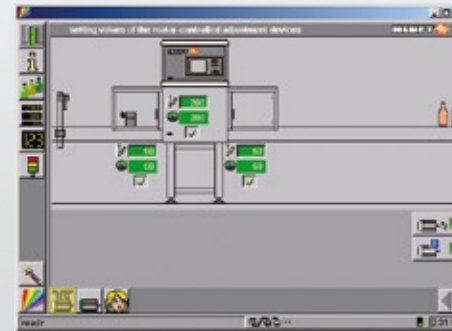
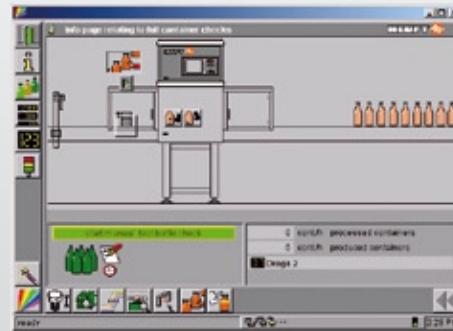
- highest product quality due to exact HEUFT *FinalView FX* technology
- the early detection of leaks prevents high and labour intensive cleaning costs
- an investment is considerably less than the costs involved due to expensive recalls or loss of image caused by faulty products
- HEUFT devices are optimally geared to the task
- series production due to the modular design of the HEUFT *SPECTRUM* series
- easy integration into existing lines
- cost minimisation due to short standstill times
- short changeover and maintenance times
- fast trouble shooting
- advantageous spare parts storage
- robust, stable and wear-resistant components
- cost savings due to the HEUFT *TeleService*: service technicians do not need to be specially called out



## Networking



- integrated Ethernet interfaces as well as TCP/IP access to all networks
- connection capability to a pre-configured DDE interface and SQL database
- the HEUFT *PILOT* graphical user surface with a comprehensible menu structure for easy operating
- operation possible either via jog shuttle or touchscreen on the TFT screen at the device or via a network
- automatic transfer of counter readings or fault messages by SMS to a mobile phone or by e-mail if required
- firewall protected connection to the remote service by Ethernet – the HEUFT *TeleService* can access the line directly and rectify faults at short notice by means of remote diagnosis if the customer wishes



## Device operation and the HEUFT PILOT



- multilingual, simply arranged, comprehensible menu structure with extensive help boxes and complete on-line user's manual - the operating surface can be supplied in any language / graphic characters if required
- password-protected operator levels which can be freely adjusted to suit the tasks of the operating staff, the quality assurance department etc.
- easy identification of spare parts with online and offline spare parts list with photographs and exploded views - the order can be sent from the device either to an internal purchasing department or directly to HEUFT
- the operator receives all the information during a brand changeover regarding the necessary steps in order to exclude possible operating errors
- clear fault messages with service notes and support in order to avoid downtimes
- single button operation via jog shuttle with the most advanced TFT display



The HEUFT *mono*



The HEUFT *DELTA-FW*

## The HEUFT *rejector*

The following rejection systems can be integrated into the HEUFT *pakCheck* leakage check:

### The HEUFT *mono*

- rejection into a bin at production speeds of up to 72,000 bph
- competitive, multifunctional system

### The HEUFT *DELTA-FW*

- upright rejection of containers or rejection into a bin at production speeds of up to 72,000 bph
- lying containers on the conveyor can be cleared away
- virtual follow-on multi-segment rejection curve





The HEUFT *squeezer QA*



The HEUFT *FinalView FX*



The HEUFT *VX*

## Other HEUFT products

The following products can be used alternatively for similar tasks:

### The HEUFT *squeezer QA*

- a leakage and closure inspection specially for plastic containers
- internal container pressure measurement
- overfill and underfill check

### The HEUFT *FinalView FX*

- fill level measurement with high frequency, gamma, X-ray, camera or infrared technology
- optical all around check of the finished product
- up to 72,000 containers per hour

### The HEUFT *VX*

- overfill and underfill check
- closure detection
- filler valve monitoring
- residual air detection in beer bottles
- bottle burst management
- monitoring of high pressure fobbing
- serial fault detection which emits a switch-off pulse





## CONTACT DETAILS

### HEUFT SYSTEMTECHNIK GMBH

Burgbrohl, GERMANY  
Phone: +49 2636 56 0  
info@heuft.com

### HEUFT LTD.

Tamworth, GREAT BRITAIN  
Phone: +44 1 827 25 5800  
uk@heuft.com

### HEUFT HISPANIA, S.A.

Madrid, SPAIN  
Phone: +34 91 6667 300  
spain@heuft.com

### HEUFT QUALIPLUS B.V.

Deventer, NETHERLANDS  
Phone: + 31 570 6617 00  
netherlands@heuft.com

### HEUFT FRANCE S.A.

Brumath, FRANCE  
Phone: +33 388 59 3000  
france@heuft.com

### HEUFT ITALIA s.r.l.

Vigevano, ITALY  
Phone: +39 0381 290411  
italy@heuft.com

### HEUFT SCAN Aps

Gilleleje, DENMARK  
Phone: +45 4836 5070  
scandinavia@heuft.com

### HEUFT USA Inc.

Downers Grove, USA  
Phone: +1 630 968 9011  
usa@heuft.com

### HEUFT DO BRASIL Ltda.

Alphaville-Barueri-SP-BRASIL  
Phone: +55 11 4195 7671  
brasil@heuft.com

### HEUFT S.A.

Beccar, ARGENTINA  
Phone: +54 11 4707 0936  
argentina@heuft.com

### HEUFT MEXICO S.A. de C.V.

Naucalpan de Juárez, MEXICO  
Phone: +52 55 5374 3280  
mexico@heuft.com

### HEUFT Systems Technology Co., Ltd.

Shanghai, CHINA  
Phone: +86 21 6434 3911  
china@heuft.com

### HEUFT ASIA LTD

Hong Kong, CHINA  
Phone: +86 21 6434 3911  
asia@heuft.com

### HEUFT AUSTRIA GMBH

Leobersdorf, AUSTRIA  
Phone: +43 2256 65556 0  
austria@heuft.com

### OOO HEUFT EURASIA

Moscow, RUSSIA  
Phone: +7-495-935-8704  
eurasia@heuft.com

### INTERNET:

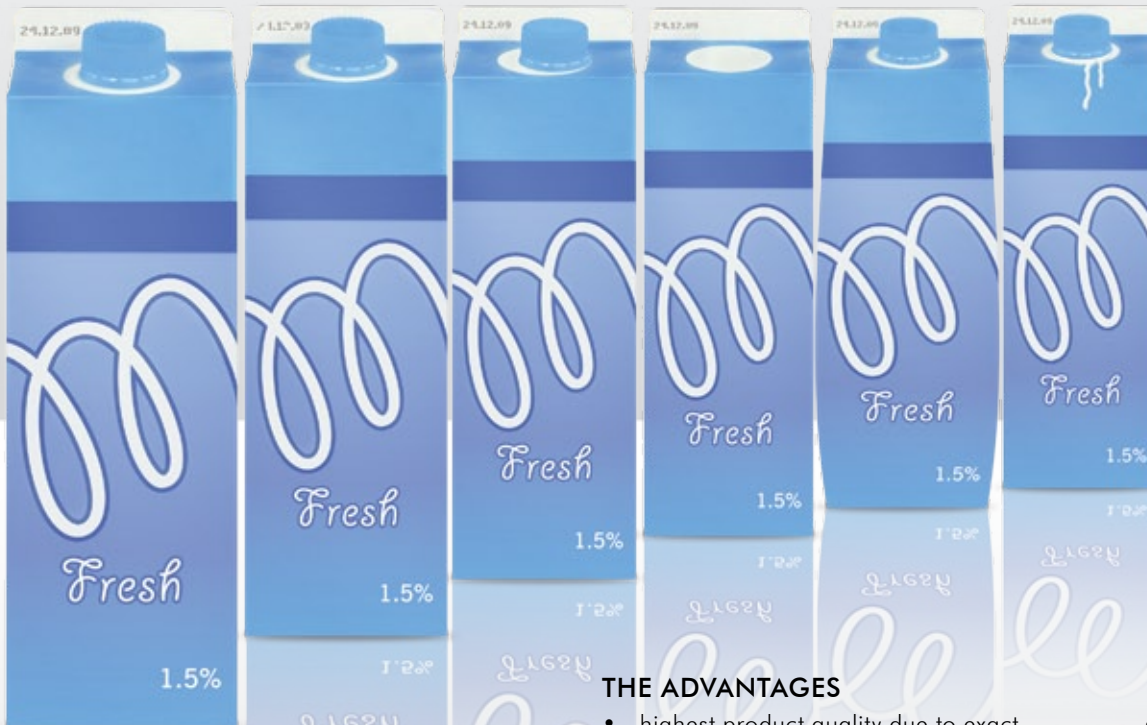
www.heuft.com

### E-MAIL:

info@heuft.com

# The HEUFT *pakCheck* leakage check

for carton packages



## FUNCTIONS

- high-precision container measurement and X-ray fill level detection for evaluating the tightness
  - integrated closure detection
  - code reading for checking the best-before date
  - optional closure colour detection
  - optional barcode verification
- [more]\*

## THE ADVANTAGES

- highest product quality due to exact HEUFT *FinalView FX* technology
- non-contact container measurement and fill level check on the conveyor
- high tolerance towards the respective alignment of the containers to be inspected
- direct rejection of damaged containers

- minimum amount of space required and good convertibility due to the modular design and compatibility with the total HEUFT product line
  - easy operation and low maintenance costs
- [more]\*

\* [more] Detailed information on [www.heuft.com/pa](http://www.heuft.com/pa)

