

tech*news*

Occupying over 1,000 employees worldwide, the HEUFT SYSTEMTECHNIK GMBH sets the standards regarding innovative quality control and inspection technology for the beverage, food and pharmaceutical industry.

## LIFE CYCLE PARTNERSHIP

Anyone who chooses HEUFT, receives more than innovative systems, which ensure product quality and line efficiency. With HEUFT you have a strong partner at your side supporting you from the very beginning.

We introduce our full **expertise** even before the implementation of turnkey solutions. We provide proactive **support** at all times after commissioning. We simply always offer competent **enlightenment** regarding the possibilities and limits of an in-line quality inspection. The result: a trustworthy partnership which already begins prior to the purchase, extends over the entire life cycle of your HEUFT systems and ensures their full **performance** sustainably.

This minimises the total costs of ownership (TCO) and simply generates more value, competitiveness and productivity with the highest level of quality.



ADVISING  
PROJECTING  
IMPROVING



INSPECTING  
AUTOMATING  
BENEFITTING



ASSISTING  
MAINTAINING  
SAFEGUARDING



UNDERSTANDING  
INFORMING  
UNCOVERING

## SIMPLY MORE PERFORMANCE!

Its outstanding performance regarding in-line quality assurance is what distinguishes the HEUFT solutions. This applies to the highly automated systems of the HEUFT *SPECTRUM II* generation more than ever before. Smart inspection devices which are based on the new platform are constantly being added. The latest example: the HEUFT *squeezer II QS* for simply more performance regarding the leakage check of filled plastic bottles.

More computing power, real-time data transmission and maximum automation: the HEUFT *SPECTRUM II* systems achieve an unprecedented dimension in performance and precision during the continuous tracking

process, comprehensive quality inspection and reliable rejection of beverage bottles. Its machine human interface with the audiovisual HEUFT *NaVi* user guidance and targeted HEUFT *checkPoints* (see page 9)

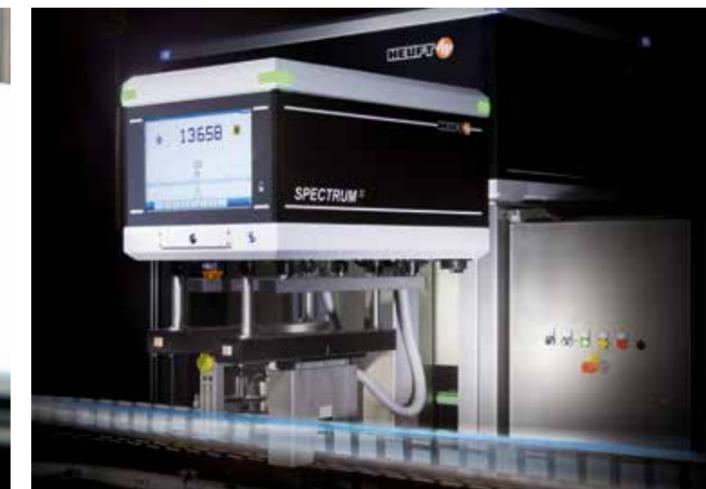
makes reliable operation simply easy. This also applies to the HEUFT *squeezer II QS*, the latest system of the HEUFT *SPECTRUM II* generation, in addition to numerous other useful innovations: The system reaches an unprecedented dimension in precision and performance when detecting microleaks and leaks in bottles consisting of plastics like PET or HDPE (see page 7).

USER GUIDANCE | PRECISION | HIGH-SPEED | MULTI-PROCESSING | REAL-TIME  
SMART DEVICES | INDUSTRY 4.0 | HIGH DEGREE OF AUTOMATION | SELF-EXPLANATORY

INSPECTING  
AUTOMATING  
BENEFITTING



PERFORMANCE





## HEUFT *SPECTRUM II VX* FILL MANAGEMENT BASED ON THE HEUFT *SPECTRUM II* SERIES.

Underfills, overfills and closure faults: the HEUFT *SPECTRUM II VX* provides the necessary performance for not only exposing such faults in good time but also their causes.

### HEUFT *NaVi*: No more making mistakes!

Operating a HEUFT *SPECTRUM II* system reliably? Anyone can do that! The high level of automation makes the need for intervention by the user an exception. Even during brand changes the transport and detection units adapt themselves to the altered container shape. The new audiovisual HEUFT *NaVi* user guidance will explain to the user what has to be done should he nevertheless have to intervene. It will instruct him and accompany him through his tasks step by step. Intuitive, understandable tutorials and assistants even make complex processes without previous

The accuracy of the fill level and closure detection reaches a new dimension with the highly automated system of the HEUFT *SPECTRUM II* generation. The easily integrable roll-on inspection even examines the profile depth of the thread turns of screw closures very precisely. The continuous real-time monitoring of the

knowledge controllable.

You practically cannot make any mistakes any more.

The reliable operation of HEUFT *SPECTRUM II* systems is thanks to the HEUFT *NaVi* simply easy!

filler valves and closure heads uncovers the malfunction sources before they turn into serial faults which thwart the productivity of the complete line. Thus the self-explanatory fill management tool makes the preventive maintenance of filler and closer simply easy!



## HEUFT *squeezer II QS* THE NEW LEAKAGE CHECK BASED ON THE HEUFT *SPECTRUM II* SERIES.

Microleaks, cracks and closure faults: the HEUFT *squeezer II QS* provides the necessary performance for identifying leaking plastic bottles reliably and rejecting them precisely.

Increased detection reliability and reduced false rejection rate: the self-explanatory system achieves simply more during the in-line leakage check solely due to the highly automated HEUFT *SPECTRUM II* device platform. But this is not the only innovation:

the flexible belt drive which guides, rotates and presses the bottles together by applying the right amount of pressure is extra long and therefore also the inspection path available. This increases the precision of the comparative fill level detection in a compressed and non-compressed condition. The sensor technology for the exact internal pressure measurement has

also been perfected.

The all-around closure inspection of the HEUFT *squeezer II QS* goes far beyond a mere presence check. Incorrectly positioned, defect and non-brand closures are also identified reliably using specific lighting technologies, cleverly positioned high-performance cameras and the HEUFT *reflexx<sup>2</sup>* real-time image processing system. Brand and program changeovers are carried out fully automatically: the position of all the detection modules as well as the height and passage width of the servo-controlled belt drive adapt to the changed container format by themselves.

The ergonomic construction with the

hygiene-optimised HEUFT *CleanDesign* makes operating and cleaning the HEUFT *squeezer II QS* easy and convenient. For example the individually adjustable goose-neck panel creates more flexibility. Therefore the user always has an eye on the clearly arranged touchscreen with the audiovisual HEUFT *NaVi* user interface. Thus the precise leakage inspection of bottles consisting of PET or HDPE becomes simply easy!





## HEUFT *InLine II IXS* X-RAY ASSISTED EMPTY BOTTLE INSPECTOR BASED ON THE HEUFT *SPECTRUM II* SERIES.

Shell-shaped fractures, base chips and tiny glass splinters: the HEUFT *InLine II IXS* provides the necessary performance for detecting such faults.

The detection and rejection reliability reaches a new dimension using the highly automated system of the HEUFT *SPECTRUM II*



generation. Furthermore it is not only equipped with high-performance cameras but also with unique X-ray strobes. They generate very clear pictures of the complete bottle base using a minimum amount of radiation. These are combined and evaluated by the HEUFT *reflexx<sup>2</sup>* image processing system in real time. Even such faults are made visible which were not detectable in the past. Thus the self-explanatory device makes a highly precise empty bottle inspection simply easy.



## HEUFT *eXaminer II XOS* FULL CONTAINER INSPECTOR BASED ON THE HEUFT *SPECTRUM II* SERIES.

Glass splinters, small pieces of metal and film: the HEUFT *eXaminer II XOS* provides the necessary performance for identifying solid foreign objects as well as low density contamination reliably.

### HEUFT *checkPoints*: No intensive searches!

Where is the problem? Only one look at the touchscreen is enough to localise it: the HEUFT *NaVi* audiovisual user guidance shows it clearly. But that is not all. At the same time an orange HEUFT *checkPoint* flashes at the device component in question. That is eye-catching! The user no longer needs to search intensively. He immediately sees what has to be done in order to establish the complete detection and operational reliability of the HEUFT *SPECTRUM II* systems. The risk of confusion is excluded. This saves time and money.

The detection and rejection reliability during a full container inspection reaches a new dimension using the highly automated system of the new HEUFT *SPECTRUM II* generation. Unique X-ray strobes make minute foreign objects consisting of solid materials, such as glass or metal, on the bottle base visible by emitting a minimum amount of radiation. Tiny objects with a low density such as mould and transparent foil are identified using sophisticated optical methods. In doing so the HEUFT *reflexx<sup>2</sup>* real-time image processing system capable

of learning ensures maximum selectivity. Thus the self-explanatory device makes the highly precise identification and rejection of contaminated full bottles simply easy.



## HEUFT *TORNADO W flex*

### HIGHLY PRECISE WET-GLUE LABELLING WITHIN A CONFINED AREA.

There is a new version of the HEUFT *TORNADO W flex* especially for the medium performance range. The considerably more compact labelling machine achieves even more precision during the fine adjustment of the bottles for an especially accurate labelling application.

Fine embossing on PET bottles is difficult to detect by camera. The HEUFT *TORNADO W flex* is able to achieve this – it uses this as

alignment marks for the servo-controlled alignment of every single container. That way the wet-glue labels are placed with millimetre precision. The labelling stations and the carousel have been optimised for a performance range of up to 40,000 bottles per hour. In comparison to the high-speed version of the HEUFT *TORNADO W flex* the new version takes up a good 35 per cent less room. It therefore fits perfectly in a filling line with confined space.



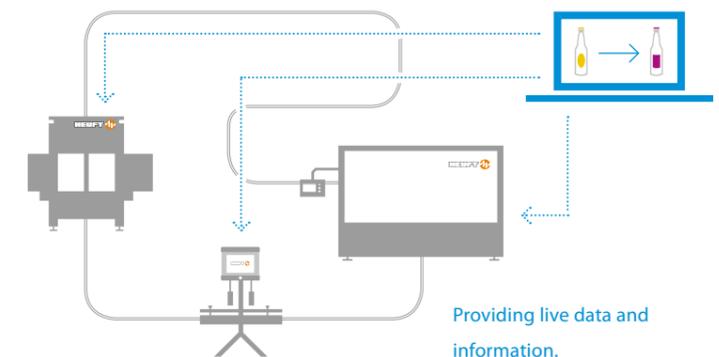
## HEUFT *RECIPER*

### BRAND AND RECIPE MANAGEMENT

### CHANGING CENTRALLY, MODIFYING SIMPLY!

Sustainably increasing product quality, overall efficiency and output. This is simply easy using the HEUFT IT solutions! The HEUFT *PROFILER* implements a production data acquisition in real time for line analysis and optimisation. Our latest server-based IT product does it completely the other way around: the HEUFT *RECIPER* provides live data and information as a brand and recipe management system.

It supplies all the HEUFT devices along the line centrally with numerous parameters which they need in order to fulfil their tasks optimally. It is not only networked to the



Weihenstephan interface but also connected to the comprehensive manufacturing execution system (MES). Therefore a central brand changeover is achieved: when the MES initiates a program change, the HEUFT *RECIPER* passes the recipes to the other devices. Whether bottle shape and contents, fill level, closure type and colour or amount, position, language and design details of the labels: they immediately recognize the specific characteristics of the individual finished article and adjust themselves to those. That way the devices detect deviations with high-precision. The commissioning of new brands as well as the adaptation of existing recipes works as

easily and quickly as brand changeovers: if, for example, among 40 products only one detail such as the closure colour changes, then it is not necessary to re-enter the existing parameters an exhausting 40 times. The new feature is taken over for all the selected brands at the same time. Therefore short-term marketing campaigns such as seasonal extras can be implemented quickly and simply. The HEUFT *STRATEGY II basic* server provides the other devices with information. It offers a full USB data back-up for simple plug&play auto configuration for high availability.



## HEUFT *LGX*

ENSURING UNPACKING SUITABILITY  
AND ESTABLISHING BRAND PURITY!

Returnable crate containing  
non-brand bottles.



They cause obstructions in the unpacker if they are out of shape, defective, dirty or the incorrect brand. The efficiency and productivity of complete filling lines are also affected if they contain too many non-brand bottles: therefore it is necessary that returned returnable bottle crates with such faults are detected and sorted out in good time – with the HEUFT *LGX*! It examines their dimensions and complete insides optically

and by means of sensors. Crates which cannot be reused are identified reliably in this way. This also applies to empty bottles which are non-brand, lying, too high or still sealed and foreign objects in the crate. This ensures a supply of empty crates and bottles which are of the correct type and therefore keeps the production quality and the efficiency of complete returnable lines high.

## REJECTION SYSTEM WITH A CURVED BELT BASED ON THE HEUFT *DELTA-K*

REJECTING UPRIGHT WHERE SPACE IS LIMITED.

HEUFT has developed a slim alternative to conventional rejectors with bulky rejection tables especially for high-speed lines. It even rejects unstable PET bottles upright in curved conveyor areas – even at line speeds of up to 90,000 products per hour! The extremely compact system based on the proven HEUFT *DELTA-K* was especially adapted to this. The individual rejection segments only touch the bottles very quickly and gently. The

complete contour which is formed by these minimises container resistance. This ensures a stable, gentle rejection in curves without the bottles wobbling or falling over. The bottles are transported out of the production flow very carefully. They do not land on a bulky rejection table but on a slim conveyor. Therefore even wobbly containers can be rejected at high speed in confined spaces.



# SIMPLY MORE EXPERTISE – SIMPLY ALWAYS THE BEST SOLUTION!

An optimal solution requires clever research and development, detailed analysis and planning, as well as competent project planning and implementation. HEUFT offers you all of these from a single source: we incorporate our whole expertise prior to the investment in turnkey solutions. In co-operation with you we plan and develop

the result which is best suited for you, your plant and your portfolio. Not only do we attach great value to a maximum of product quality and safety. Maximal efficiency and productivity is at least just as important to us! In order to achieve this we analyse your filling line and specifically detect weak-

nesses. With intensive consultation and the right know-how we find the best solution for a sustainable quality assurance and line optimisation. Extending to the realisation of turnkey solutions (and far beyond these) we will be at your side as your partner. The result: maximum product quality and line efficiency for simply more value!

TURNKEY SOLUTIONS | LINE ANALYSIS | CONSULTANCE | LINE PLANNING | R&D  
CALIBRATION | RETROFITTING



## SIMPLY MORE SERVICE – SIMPLY ALWAYS THERE FOR YOU!

Real support thrives on constant availability, short reaction times and competent contact partners. In order to ensure this at all times and everywhere HEUFT offers a worldwide 24/7 service:

you can reach competent, field experienced service technicians who reliably identify and sustainably solve problems around the clock seven days a week. The HEUFT *TeleService* for online remote diagnosis and maintenance, the HEUFT *PhoneService* for help to self-help by telephone and the

HEUFT *DirectService* for prompt on-site visits from competent experts offer effective first level support.

You would also like to benefit from particularly attractive conditions? Then you should consider the HEUFT After Sales Support contract with customised service packages!

In addition the new HEUFT *DeviceSupport* online customer portal is an ideal instrument for preventive maintenance and the quick, efficient supply of spare parts. It is always

up-to-date and provides you with a complete overview of the status of all the HEUFT systems installed at your premises.

You have direct access to technical documents and the integrated service toolbox. It offers 3D spare parts lists and a direct connection to the HEUFT *TeleService* besides tools for easy device administration, back-up functions and the latest firmware updates.

The result: maximum availability for simply more competitiveness!

ONLINE SUPPORT | REMOTE MAINTENANCE | ON-SITE SERVICE | 24/7 WORLDWIDE  
SERVICE-HOTLINE | SPARE PARTS | AFTER SALES SUPPORT | PREVENTIVE MAINTENANCE

ASSISTING  
MAINTAINING  
SAFEGUARDING



SUPPORT



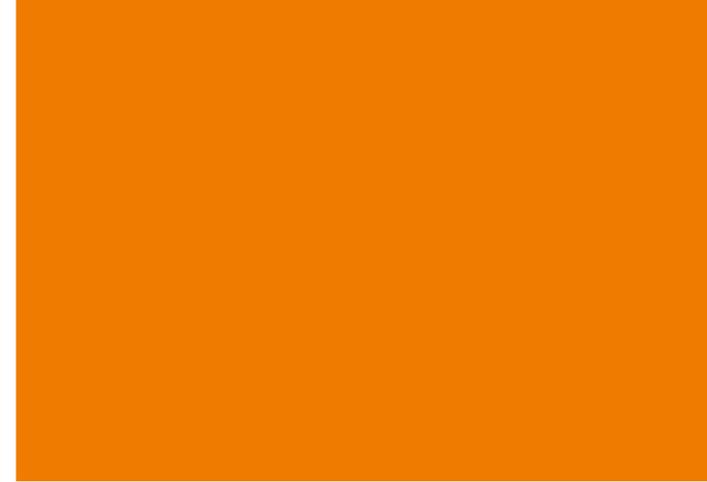
## SIMPLY MORE ENLIGHTENMENT – SIMPLY MORE INSIGHTS!

An effective quality and efficiency management thrives on reliable information and profound understanding. All of this is imparted competently and honestly by HEUFT before as well as after the purchase: comprehensive specialist knowledge seminars, presentations and case studies offer objective facts about the opportunities and limits of the quality inspection and output increase when filling drinks.

Experienced trainers show the users in a target-oriented and customer-specific way how to always achieve a maximum of detection and operational reliability using our modular systems. Whether at your premises or in the modern HEUFT Training Center: besides solid theoretical knowledge such as product liability, HACCP and certification, our qualified training courses and workshops offer a strong practical content.

You and your colleagues will learn directly on the device how to keep the detection accuracy high and the false rejection rate low. Furthermore we will enlighten you on how to implement an efficient, continuous bottle flow without any jams or blockages for optimum plant efficiency. The result: maximal understanding for simply more safety and productivity!

SEMINARS | WORKSHOPS | EXHIBITIONS | CONGRESSES | SHOWROOM | TRAINING COURSES | CASE STUDIES | ON-SITE TRAININGS | BEST PRACTICE | EDITORIALS



ENLIGHTENMENT





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