



# techmews

ENGLISH LANGUAGE VERSION // HEUFT SYSTEMTECHNIK GMBH // NEWSLETTER // interpack 2014

# MORE RELIABILITY, LESS EFFORT!

HEUFT SYSTEMTECHNIK GMBH is showcasing innovative solutions for increased precision and operational reliability during the in-line inspection of food and pharmaceutical products at the interpack 2014 exhibition in Düsseldorf. The highlights: the unique, pulsed X-ray technology for a wide range of applications and a new highly automated device platform which makes the user's life simply easy.

All in all six devices can be experienced in action when HEUFT makes its appearance at the interpack exhibition. You can gain an impression of their performance for yourself. The main emphasis is on our X-ray systems which work with unrivalled care and precision. Their application scope ranges from checking unpackaged raw products and inspecting empty containers exactly to identifying foreign objects reliably in the ready packaged final product. In addition we will be showing the HEUFT SPECTRUM " at



interpack 2014 – the new generation of highly automated, self explanatory inspection systems. Almost 30 years after the premiere of HEUFT SPECTRUM at the interpack exhibition 1987 the reliable operation of modular HEUFT devices will therefore also be sustainably guaranteed for the future.



24/7 SERVICE
IN-LINE INSPECTION

FOOD, PHARMACEUTICAL AND BEVERAGE SECTORS

MORE THAN 1000 EMPLOYEES WORLDWIDE 35 YEARS
PRODUCT SAFETY 15 LOCATIONS INNOVATIVE HEUFT IS SYSTEMTECHNIK

# THE NEXT STEP

The HEUFT SPECTRUM" has arrived! The new generation of modular systems heralds the start of the fourth industrial revolution for in-line inspections in a self-explanatory, highly automated and even more precise manner.

The HEUFT SPECTRUM platform has revolutionised quality assurance for filling and packaging lines sustainably since its premiere at the interpack 1987 exhibition: a consistent modular system for a wide range of tasks made customised equipment for HEUFT systems possible for the first time. Furthermore continuous product tracking and operating via a monitor set new standards.

We have constantly further developed the concept of a universal control unit oriented to future needs from the outset and, among other things, extended it for remote maintenance and production data acquisition using network functions.

The next revolution has arrived with the premiere of the HEUFT SPECTRUM" at interpack 2014: the number of characteristics which can be examined in a given period of time has increased and with this the precision regarding monitoring, inspecting and rejecting due to new hardware and software. It is now possible to define precisely where which product happens to be with an accuracy of 0.5 millimetres even at an output of 72,000 containers per hour and more. In addition the optimised resolution and our new real-time image processing reduce the false rejection rate.

Industry 4.0 has become an integral part of in-line quality assurance due to a considerably increased degree of automation. Thus all the detections adapt themselves automatically to



each brand being processed. Manual intervention is no longer required! The HEUFT ISI bus minimises the amount of wiring required and therefore simplifies assembly and retrofitting considerably. As usual it is possible to rely on a cross-device spare parts compatibility of 70 per cent and a component availability of at least twelve years. In addition our own operating system ensures long-term

software stability and does not provide an attack surface for viruses & co. Furthermore the self-explanatory, audiovisual HEUFT NaVi user guidance is revolutionary. It takes the user by the hand and makes his life simply easy: the human machine interface (HMI) turns into a machine human interface (MHI) and the operator into a user!

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# **SIMPLY EASY!**

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# **NOT OVERLOOKING ANYTHING ANYMORE!**

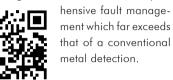
The **HEUFT eXaminer XB** finds significantly more than a metal detector when checking the integrity of flow packs. composite packaging and solid food products. Not only foreign objects made of metal but also many other types of contamination such as glass splinters or stones are made visible using unique X-ray strobes. In addition the compact top-down inspector identifies damaged as well as incomplete products and

The HEUFT reflexx2 real-time image pro-

cessing system also increases the detection accuracy and reduces the share of incorrectly rejected products considerably even at high production outputs of up to 1,000 products per minute. Varied monitoring, documenting and



archiving functions achieve a compre-





# Unrivalled care and precision

Case example: X-ray scanners continuously emit radiation for 60 minutes when inspecting 36,000 products per hour whereas the X-ray strobes from HEUFT only do this for 36 seconds. There is no emission during 99 per cent of this period! HEUFT systems neither have to be switched off nor cleared if the line has stopped.

X-RAY FLASH INSTEAD OF A PERMANENT

The pulsed inspection technol-

ogy in particular makes the

HEUFT X-ray systems stand out

from conventional devices: they

only emit radiation when there is

really a product to be inspected

in the detection area - namely as

an X-ray flash which only lasts a

thousandth of a second. As a

result the radiation intensity is one

hundred times lower on average.

Furthermore the unique, pulsed X-ray technology with minimum wear and tear has a positive effect on the detection performance: the extremely short exposure time prevents motion blurs. Therefore maximum detection accuracy is guaranteed even along highspeed lines.



## SIMPLY SEEING MORE PRECISELY!

HEUFT sets standards with respect to the all-ground inspection of empty contain ers The latest example: the **HEUFT** SPECTRUM " IXS. It combines proven optical and electronic detection procedures with the advantages of the powerful HEUFT SPECTRUM " platform and pulsed X-ray technology. Therefore the identification of shell-shaped fractures, chips or alass splinters on the container base is easier and more precise than ever before.

In addition the empty container inspector detects, among other things, residual liquid as well as cracks and faults in the sidewall and in the finish area.

Every individual container is optimally aligned at all the inspection units in each case so that the examination covers the whole container volume completely. The result: simply more detection



accuracy!



# INSPECTING COMPLETELY, REJECTING SPECIFICALLY



Glass splinters, metal fragments or stones have no place in filled jars and cans! The **HEUFT eXaminer XAC** with its hygiene-optimised HEUFT CleanDesign finds them reliably.

X-ray strobes, which can be positioned flexibly, carry out a careful and precise inspection which covers the whole container completely. Minute foreign objects as well as a variety of packaging defects are also safely identified there where the full container inspectors of other manufacturers reach their limits:

in the case of oversized containers. Blind areas are therefore a thing of the

The dynamic HEUFT nbx filter technol-

ogy clearly differentiates between real and supposed faults. Therefore only those full containers are rejected which are really no longer marketable.

containers which are filled quite differ-

ently are each rejected exactly the same



# Whether sauces, jams, spread cheese packaging!

A THOROUGH LOOK INTO THE PIPE

or lyophilized products: the **HEUFT** eXaminer XT checks the safety of a liquid, paste-like or spreadable product mass even before

The unique, pulsed X-ray technology of the pipeline inspector ensures that foreign objects made of different materials are detected even at high throughput rates. Furthermore

the use of two X-ray strobes makes a 3D reconfirmation of the inspection result possible. This makes the detection even more thorough!



# FINDING FAULTS AND **UNCOVERING THE CAUSES**

Detecting the quality defects of freshly filled food, pharmaceutical and beverage containers and pinpointing the causes at an early stage: this is even more precise and straightforward with the **HEUFT SPECTRUM " VX!** The system checks the fill level, the closures and the labels of up to 140,000 containers per hour. Permanently monitoring the filler valves and the closer heads protects against high reject rates: error sources are uncovered before they go into production and impair the line efficiency. The personalised and self-explanatory HEUFT NaVi user guidance greatly reduces the need for manual actions. The fill management system of the new HEUFT SPECTRUM " generation makes error-free operation possible without any previous knowledge

# **REJECTING RELIABLY** WITHOUT ANY **COMPRESSED AIR**

It is the ideal solution for hygienically sensitive pharmaceutical or asentic lines and wherever the installation of a pneumatic container rejector is not economical. The new **HEUFT e-mono** manages completely without expensive compressed air! Driven by an in-house developed electric motor it practically only uses energy during the rejection procedure. The advance force adapts flexibly to the weight of the respective package in the course of this. Therefore faulty

distance – even at high speeds of up to 180,000 containers per hour. The rejection system is extremely quiet and de facto free of wear and maintenance



The HEUFT e-mono is very compact and easy to install since frequency converters do not have to be inte-









# INSPECTING VIALS AND **AMPOULES LINEARLY**

Heavy particles on the base, inclusions, cracks and delamination on the wall, contamination and defects in the head and closure area... Identifying parenteral containers with such faults is also possible without a container carousel or innumerable change parts: the compact **HEUFT** spotter **PH** deals with this carefully and precisely in linear

A servo-controlled helt drive sends up

to 700 vials or ampoules per minute in a straight line past optical detection modules and aligns them in the course of this so that the inspection covers their complete volume. The HEUFT reflexx<sup>2</sup> image processing system reduces the share of rejected good containers to values well below 0.1 per cent.

Brand changes are carried out without any mechanical changeover work: the specific program data, the height and

width of the belt drive as well as the positions of the detection modules adapt themselves automatically. The HELIET spotter PH with its extensive monitoring and validation functions meets the requirements of GAMP 5 and 21 CFR Part 11.



# SIMPLY EASY!



# THIS IS SELF-**EXPLANATORY!**

The high degree of automation of the new HEUFT SPECTRUM " platform reduces the need for intervention by the user. However if something has to be done the **HEUFT** NaVi makes the work simply easy for him.

Personalised and focussing on what is essential the menu structure of the araphical touchscreen user interface is extremely flat, organised and selfexplanatory. Contextual messages, tools and assistants inform the user step by step what has to be done when, where and in which order. Consequently he can find his way around intuitively without any special previous

The HEUFT NaVi even speaks to the user: Amanda, the Chief Navigator, guides him through all the relevant device functions in a target-oriented manner using clear and simple words! In addition HEUFT checkPoints simplify



the specific identification of components which require manual adjustments e.g. during brand changes: the coloured tags not only flash on the display in this case but also exactly there where intervention is needed

The audiovisual HEUFT NaVi user



guidance makes the reliable operation of the inspection systems of the new HEUFT SPECTRUM " generation simply easy.

# **A RIGOROUS ENLIGHTENMENT**

What do modern inspection systems have to achieve? Learn how to differentiate between empty promises and objective facts: not only is a high level of detection and operational reliability important but also its responsible validation and documentation for a comprehensive quality management which, for example, has to be produced for certification in accordance with the IFS. Our free of charge specialist knowledge seminar "Detecting/Validating/Documenting" in German on Monday 26 May 2014 at 10 am in the HEUFT Customer Center in Burgbrohl will provide a rigorous enlightenment regarding the possibilities



and limitations. It is Simply send an email to training@heuft.com in order to do so.



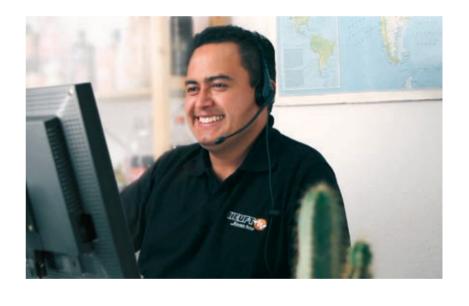
# **ALWAYS AVAILABLE** WHEREVER YOU NEED US!

HEUFT systems are well-known for their long-term operational reliability. Malfunctions only occur rarely. And even then you do not have to be afraid of serious production losses. Integrated tutorials and assistants provide valuable help for self-help. Our 24/7 services are available all over the world and offer even more support: the HEUFT TeleService, HEUFT PhoneService and HEUFT DirectService!

Whether online remote diagnosis and maintenance, competent advice or on-site visits: technicians with field experience are on standby around the clock in order to find and solve the



respective problem. Therefore the reliable operation of your HEUFT system is always guaranteed.



### **GET IN TOUCH!**

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