



HACCP+ : safety plus efficiency

Incorruptible inspection technologies are a basic component of an effective HACCP concept in order to ensure the safety of food. Only they make the specific and continuous monitoring of critical control points possible. At the same time the principle always applies for HEUFT that each individual container as well as the inspection device itself have to prove their correctness. This is achieved by means of consistent container tracking, analysing and documenting all the inspection results as well as regular self-testing.



Whether a residual liquid detection, foreign object inspection, bottle burst detection, finish inspection or closure detection: the burden of proof rests with the defendant. In principle all the HEUFT inspection modules assume first of all that the container to be inspected is faulty. It has to convince them of the opposite point by point. For this it passes a trigger before the actual inspection area first. This generates a virtual, individually assigned data sheet on which all the container

areas to be checked are marked as faulty. It is rejected if it confirms this assumption during the inspection. Otherwise the respective fault marking is removed and it continues its journey until the next detection where it has to

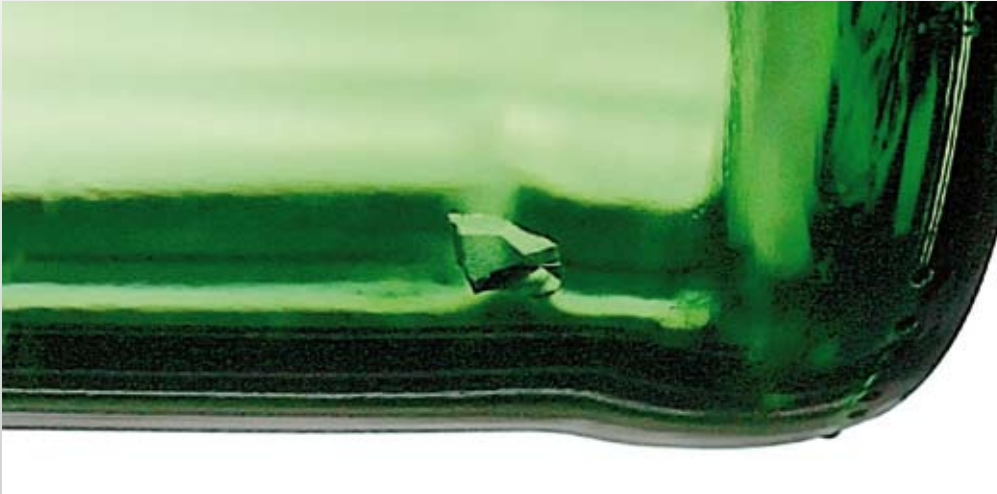


prove its flawlessness again. It is only cleared when all the assumed faults have not been confirmed.

Exact monitoring by means of container tracking

Further photocells and the so-called shifting register for tracking the conveyor movement ensure exact monitoring on the way: information regarding the precise position of the container in the system and the inspections which still have to be carried out are avail-

able at any time. Containers which represent a potential risk with regard to product safety are tracked until their rejection - and even further: in addition the reject verification checks that they have actually been rejected. A warning message and a warning light signal or conveyor stop signal are emitted if this is not the case. Furthermore the malfunction as well as all the inspection results are documented and saved irrevocably and permanently in the logbook file of the HEUFT PILOT



graphical user interface. Therefore this important information can be retrieved at any time from the inspection device itself as well as from each office PC connected to the network.

Self-tests with test bottle programs

However an effective HACCP concept demands more from the inspection devices than “only” continuously monitoring and documenting critical control points and making the correction

possibilities available in the case of threatening deviations. In addition it is necessary to check whether the system itself is capable of guarantee-



ing the desired food safety. HEUFT devices accomplish this self-monitoring using test programs: they request containers prepared with typical faults

in regular, freely configurable intervals in order to check their own detection performance. Reflective tape, magnets or even RFID chips ensure that these test containers are always marked as such. Identifying the specific faults without exception speaks in favour of the full operability of the respective detection. All the results of these programs can be individually processed and permanently saved to protocols which are accessible at any time.



Production data acquisition (PDA) for increased line efficiency

Even more is provided when HEUFT and foreign devices are connected on-line to the HEUFT *PROFILER*, a PDA system which complies with Weihenstephan und OMAC standards, than is normally required by an HACCP concept. Because it transfers its control concept to the efficiency of the complete filling line. For example if the empty bottle inspector records an abnormally high rejection rate of soiled

bottles at 10 a.m. the cause of this can be simply traced on the basis of the production data which has been collected - such as the reduction in the concentration of the lye in the bottle washer a quarter of an hour before. Consequently unwanted losses in line efficiency can be quickly remedied. This saves cash.

Continuous monitoring of critical control points

HEUFT systems are ideally suitable

for the continual monitoring of critical control points within the extent of an HACCP concept because they assume that all the containers to be checked are faulty in general, regularly check their own functionality and not only collect data but also deduce the corresponding consequences from this. This guarantees the maximum amount of food safety and efficiency.