

# Increased food safety, reduced false rejection rate Metal detection with Artificial Intelligence



# Metal detection with Artificial Intelligence







Food with a high product effect (intrinsic conductivity) makes metal detection in food more difficult. With THiNK – the new software for metal detectors based on Artificial Intelligence – these "interfering signals" can be faded out much better than with conventional metal detectors.



- Increased food safety less risk for product recalls
- Less food waste
- Higher profitability
- Inspection of products in metallized packaging



# Challenging applications in metal detection

The detection of metal contamination is often made difficult by the high intrinsic conductivity of the products being inspected. This phenomenon is called product effect and occurs for example with protein products (meat, fish, dairy products), with products in metallized packaging or with high salt and moisture content (e.g. with brine).



### Consequences

- · Food safety requirements cannot be met
- The risk of expensive product recalls is increasing
- Frequent false rejections reduce productivity

#### Your benefits in detail

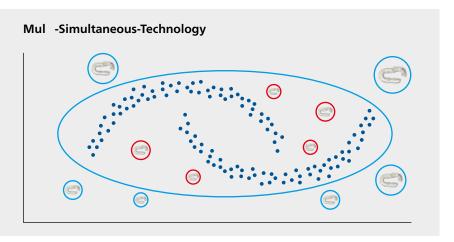
THiNK helps food manufacturers and processors to reliably detect even the smallest metal contaminations, especially in demanding applications with high or fluctuating product effects

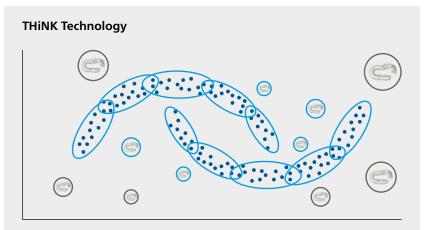
### Increased food safety – less product recalls

With the help of artificial intelligence, THiNK detects significantly smaller metal foreign bodies than conventional metal detectors, even when the product effect is high. This greatly reduces the risk of unwanted product recalls, saves costs and protects your brand image.



# Less food waste







THINK can virtually eliminate product effects and thus actively reduces false rejections due to excessive intrinsic conductivity. This reduces food waste and saves costs



## Inspection of products in metallized packaging

Products that are packed in metallized film have been difficult to inspect with metal detectors until now. X-ray inspection equipment is often necessary for this purpose.

With THINK even this is now possible. The intelligent software simply masks out the metal signal from the packaging and only detects the actual metal contamination.

### **Applications and features**

- THiNK is a software package developed for the metal detector MSF and can therefore also be retrofitted to existing devices.
- THiNK works on the basis of artificial intelligence. This enables the software to draw conclusions from very large amounts of data that go far beyond if-
- Virtually creates a digital fingerprint of the product effect to nearly mask it out completely.





Learn more about metal detection with Artificial Intelligence here **www.bizerba.com/en/products** 



For consultation and quotations, please feel free to contact us.

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