



Case Study

HERTA (NESTLÉ) INVESTS IN METAL DETECTION

Herta, a member of the Nestlé group and the leading manufacturer of smoked sausage and ham products for use in Germany, has recently installed new Loma metal detection equipment to upgrade its comprehensive quality manufacturing system.

The strict procedures have been introduced in line with the Nestlé group's quality standards and in order to comply with HACCP regulations governing food manufacture.

Based in Herten, Herta produces over 300 tonnes of smoked sausage, 350 tonnes of sliced cooked ham and 140 tonnes of liver sausage per week for supply to major supermarkets and food retailers throughout Europe. In accordance with HACCP regulations, metal detectors have been installed at critical control points on the production and packaging lines to ensure contaminants are identified at the earliest point and securely rejected.

Sixteen Loma pipeline metal detectors have been installed on the sausage production lines and eight conveyor-based Loma metal detectors are in use on the sliced ham packing lines.

On the sausage production lines, which produce 250g, 500g and 1000g Jubiläums Fleischwurst sausages, each pipeline metal detector is situated after a Handtmann VF300 meat pump. The Loma machines check the raw sausage meat in the pipeline before it is fed through to a Handtmann PA30-7 portioning machine. Any product containing a metal contaminant is immediately identified by the Loma metal detector and the contaminated product is diverted into a rejection bin. The meat is then pumped through into sausage skins which are clipped by either a Polyclip or Tippertie machine and then transferred by hand to an overhead conveyor for smoking, cooking, cooling and packing.



Introduced specifically to meet the needs of the meat industry, the Loma pipeline metal detectors are particularly compact, having been designed to fit between Handtmann meat pumps and Polyclip machines - or any other combination of meat pump and clipper, linker or other device. They offer total stability and, manufactured to IP66 standards, they can withstand harsh production environments including rigorous washdown procedures.

On the sliced cooked ham packing lines, there are currently eight Loma metal detectors installed. Nestlé Herta plans to upgrade each of the metal detectors to the more sophisticated ISC version in the near future to ensure optimum levels of metal detection.

Particularly suited to the meat industry, the Loma metal detector includes a unique sensitivity control (ISC) feature which provides automatic tracking control of changes in product conductivity - which is especially common in moist products such as meat - to ensure optimum sensitivity at all

Loma Case Study

times. The Loma metal detector also incorporates calibration techniques making it easier to set up and recalibrate.

Situated at the end of line, the Loma conveyor-based metal detectors check 100g and 200g vacuum packs of sliced ham before they are hand packed into carton boxes of 20, sealed and labelled. An integral reject system ensures that any contaminated products are removed from the line.

The ham is checked after slicing and packaging rather than as bulk meat sausages to ensure the highest sensitivity levels are obtained.

Detlef Rachel, Herta's technical engineer says: "We first bought Loma equipment seven years ago because the equipment was the most reliable and the sensitivity levels were the most accurate available. Since then, our quality procedures have become stricter and our customers' expectations have become higher and we recognised the need to ensure even more accurate levels of metal detection.

"Once we decided we needed to upgrade our metal detection capabilities, we trialled machines from all the key quality inspection equipment manufacturers but found the Loma machines by far produced the most accurate and efficient metal detection.

"The Loma machinery has met our requirements very well and we have found the new models even easier to operate. Our forthcoming plans include replacing all our existing Superscan Micro metal detectors with the more advanced Loma metal detectors to ensure efficient, reliable metal detection in line with our strict quality procedures."
