Metal Detection

Zero Metal Free Zone(ZMFZ)
Product Inspection System

User Friendly Interface

The washdown rated control panel is easily understood and was designed to simplify operations.The unit can be mounted remotely in a convent location.

Limited Space

Minimal installation space requirement. The ZMFZ can be install between a weigher and the vertical packaging machine.

Safeline Zero Metal Free Zone (ZMFZ): Product inspection for processing & packaging lines.
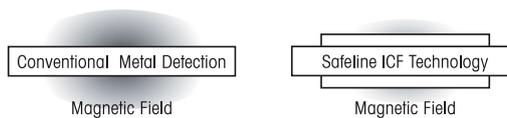
For optimum performance in limited space such as Vertical Form, Fill, Seal (VFFS) Machines, Safeline's ZMFZ is the answer.

Safeline's Zero Metal Free Zone (ZMFZ) Detectors are designed to meet the ultimate inspection standards for food processors. Safeline's patented Internal Cancellation Field (ICF) technology eliminates interference from nearby metal structures, ensuring highest frequency and maximum stability in reduced spaces. In addition, this innovative technology shields the detector from signals created by metallized film or aluminum foil.

METTLER TOLEDO

• Designed for Installation With Limited Space
• Choose Powerphase Protection for Ultimate Sensitivity
• Vibration Immunity

Internal Cancellation Field (ICF) Technology for Highest Sensitivity

ICF is a special technique, patented by Safeline, that enables significantly higher operational sensitivity settings to be used in close proximity to metal structures, such as weigh hoppers, metal chutes and forming shoulders. This innovative technology enables the detector to locate small pieces of non-magnetic grade stainless steel often used in food processing equipment. The detector internally generates a secondary magnetic field that is opposed to the primary magnetic field produced by the detector. This technology prevents leakage of the primary magnetic field outside the detector, effectively suppressing interference from any nearby source including metallized film or aluminum foil.

Conventional Metal Detection

Magnetic Field

Safeline ICF Technology

Magnetic Field

Multiple Reject Options

On detection of contaminant, the metal detector will immediately signal the packaging machine to stop or make a double bag. Or, if desired, an automatic reject device may be positioned down the line. The metal detector electronics will memorize the pack position until the contaminant is rejected.

Easy-to-Use Control Center

The washdown rated control panel is easily understood and was designed to simplify operations. All operating parameters may be set and reviewed from the control panel and access codes may be used to prevent unauthorized adjustment. The control center may be mounted with the detector or remotely in a convent location. Additionally, the optional **Explorer** software allows users to network all detectors to a central computer for comprehensive information management.

Performance Validation

Required by Vendor Certification Programs, Performance Validation confirms that the detector has been tested by qualified personnel at approved standards and agreed time intervals. The detector automatically calls for performance checks when required and issues a "Test Overdue" warning if the test is not promptly completed. Once the test is successfully completed, the detector reverts to normal operation.

Easily Mounted Between Bagger and Weigher

Placed under the bagger and above the vertical packaging machine, the detector inspects products in-flight as they enter the bag. No conveyor is needed and valuable space is saved.

Specifications

A wide range of aperture sizes from 50mm to 400mm diameter are available. Examples of insertion space and sensitivity in millimeters:

Aperture Diameter	Insertion Space	Sensitivity Ferrous	Sensitivity Non-magnetic Stainless
150mm	190mm	0.6mm	0.8mm
175mm	220mm	0.65mm	0.9mm
200mm	250mm	0.9mm	1.2mm