

# CASSEL Advantage

## Outstanding Sensitivity & Stability

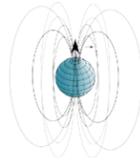
New “recipes” or changes to current data are easily programmed. Digital noise filters eliminate any undesired signals, while multichannel technology provides optimum detection of ferrous, nonferrous or stainless steel contaminants. The integrated sensor is built to withstand the rigors of a harsh production settings. Key internal electronics are fully protected and reliably perform in even the most challenging wet or dry environments.

## HACCP and IFS Compliance

Per HACCP principles, Metal Detectors are considered a critical control point and continuous checking is required to meet standards. Cassel Metal Detectors can be programmed to automatically remind the operator to test equipment performance at pre-set intervals. Metal contaminant detections, changes in parameter settings, etc., are logged with both date and time. The log can be viewed on screen or downloaded via a serial port. To fulfill HACCP and IFS standards, data can be downloaded to a Windows-based PC.

## Powerful Electromagnetic Field

Cassel’s electromagnetic field is much stronger than needed, eliminating “noise” disturbances from outside forces which can hamper equipment effectiveness. A powerful electromagnetic field provides excellent signal-to-noise ratio.



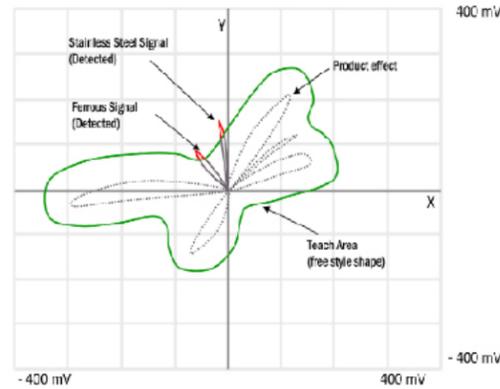
## Intuitive Operation

The display panel shows only the information needed to operate the detector. Easy-to-use software and a simple teaching menu allows set up and use by non-technical personnel. Over 120 products can be stored and recalled. Password protection ensures that only authorized users operate equipment.

## High-Speed Digital Signal Processor

Highly effective high-speed processors support digital filters to provide:

- More efficient product-effect-compensation (needed in the food industry)
- More effective noise reduction, allowing identification of even the smallest metal particles



## No Maintenance Electronics

Automatic balance and calibration of electronics ensures many years of reliable performance. After initial set up, no further adjustment of electronics is needed.

## Extremely Durable Electronic Systems

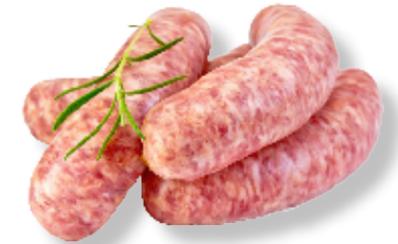
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**CASSEL**



## Hi-S Service Packages

Hi-S service programs are constructed with the customer in mind. Each package is designed to address all major points of concern when maintaining metal control equipment. Hi-S offers package options for facilities that are magnet only, electronic inspection only, and those that utilize both. Hi-S has an option for every customer need, requirement, and budget to make protecting your metal control investment affordable and attainable.



24/7 Service Support  
**800.544.5930**

\*Specifications subject to change

Metal Detectors for Meat, Poultry and Seafood Version 2.0 © MPI

**MPI**

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MPI offers a complete line of next-generation Metal Detectors featuring exclusive “Four-Quadrant” technology. Four-Quadrant technology allows Cassel equipment to readily adjust settings to detect metals in even the most difficult products such as fresh meat or high salt content foods. To ensure maximum performance, users are taken through a series of easy-to-follow, step-by-step, high-graphic screens to set standards for product testing. By finding even the smallest particles of ferrous, nonferrous and stainless steel contaminants, Cassel Metal Detectors assist food processors to meet HACCP, IFS, BRC and GMP safety standards.

# Metal Detectors for Meat, Poultry & Seafood



A Metal Detector identifies contaminants that have a conductive quality (electrical conductivity or electrical signal) differing from that of the product being processed. A Metal Detector reads the "signature" electronic signal of conductivity of a product as it flows through a process. Each product is cataloged as a specific "recipe" of components. If the Metal Detector senses something that falls outside of its programmed recipe, an alarm is triggered. This tells the operator that a foreign object is contained in that product. The contaminated product can then be removed and investigated.



## In-Meat Detector Sausage Processing



Cassel's "IN MEAT" compact Metal Detector is designed for sausage stuffers and is easily transportable via its wheeled-base. An integrated gas spring provides for quick height adjustment (33.5" - 47.2"), allowing installation between the stuffer and clip machines. Links and adapters are available for nearly every type of stuffer and clip machine. A variety of reject systems are offered.

### Features & Benefits:

**HACCP and IFS compliance:** Per HACCP principles, Metal Detectors are classified as critical control points and continuous checking is required to meet standards. If requested, Cassel can add a performance validation system (PVS) which automatically prompts the operator to test Metal Detector performance at pre-set intervals.

**Operational History:** Metal contaminant event or history, metal report, changes in parameter settings and other events are recorded with the date and time. Users can view the list of "incidents" on the control panel or export the log via a serial port.

**SHARKNET® Software Ready:** To comply with HACCP and IFS standards, SHARKNET® enables automatic downloading of data documentation to a Windows-based PC.

**LPW Option for Low Pressure Wash-Down (IP67):** To obtain the IP67 rating, the METAL SHARK® controller can be housed in a double thick stainless steel enclosure. This upgrade allow for wash down with a pressure hose.

**HPW Option for High Pressure Wash-Down (IP69k):** To obtain the IP69k rating, the aperture can be specially sealed to prevent leaks and the METAL SHARK® controller can be housed in a double thick stainless steel enclosure. Daily wash-ups with a steam hose at a maximum pressure of 60 bar/900 psi can be conducted. Sausage processors as well as other manufacturers who conduct frequent wash-ups have found this feature very beneficial.

**Sturdy Frame:** The hygienic design is easy to clean. All rods are completely welded on all sides. Due to an integrated gas spring, height adjustment is easy to handle for one operator. Four casters make it comfortable to move the metal detector.

**Plug in & Ready to Use:** The external device cables are plugged in between the filling and the clipping machine. Plug and socket are provided compatible with the type of filling machine.

**Easy Cleaning:** Due to the hygienic design the metal detector can easily be disassembled for daily rinsing with water or steam hose cleaning. The construction proved its worth in sausage productions with several wash-ups a day.



## Typical Applications

### Conveyor-Style Metal Detector- METAL SHARK® BD

The Cassel's METAL SHARK® BD Metal Detector is often used to detect contaminants in meat, poultry and seafood. Typically integrated onto a conveyor belt, the METAL SHARK® BD readily adjusts settings to ensure extreme equipment sensitivity, stability and reliability. A variety of reject mechanisms (pusher, belt stop and alarm, etc.) are available to alert operators of a "find" or to divert contaminated product. The conveyor belt, framing and controls are available in sanitary design for food grade process applications. Cassel Metal Detectors can be easily adjusted to accommodate multi-system processing and environmental product effect changes.



### Incoming Raw Material Inspection



As raw materials arrive in the processing area, they must be examined for metal contaminants (5 -10 mm) such as knife blades, metal gloves, meat etc. Typically, a metal detection system comprised of a conveyor-style metal detector with an upgraded HW conveyor, and LPW or HPW option would be selected. The HW conveyor features an open stainless frame without dirt traps, a waterproof stainless drum motor, fully encapsulated sensor head and an FDA/USDA-approved transfer belt.

### Processed Meats

A Conveyor-style Metal Detector with upgraded high-pressure wash down conveyor would generally be installed after product passes through the roll stock machine. Cassel offers a special flapping roller table that moves contaminated product to a specified area without shutting down production.



### Packaged Meats



A Conveyor-style Metal Detector with upgraded HW conveyor would generally be installed on the production line after product passes through the roll stock machine. Cassel offers a special flapping roller table that moves contaminated product to a specified area without shutting down the Metal Detector.

### Special Applications

Cassel offers a variety of customized solutions for special applications such as an oversized Metal Detector designed for shredding large pieces of pork. Cassel can also provide automatic product selection to adjust for product height. This is especially useful for fresh meat packaged in styrofoam trays which traditionally requires that the Metal Detector be set to accommodate the largest package. The Cassel option allows the Metal Detector to adjust to various product sizes, which means that sensitivity remains consistent.

