

# Metal Detection

**SAFELINE**

Metal Detection & X-ray Inspection



**Signature 300**  
**Signature Touch**

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Increasing Productivity

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Reducing Costs

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Improving Competitiveness

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Proven Technology and Features



## High Performance Metal Detection

Delivering Efficiency and Reliability

**METTLER TOLEDO**

# Increasing Productivity, Reducing Costs

## Proven On-Line Metal Detection

**Inspection of your products utilizing Signature 300 and Signature Touch metal detectors from METTLER TOLEDO Safeline can benefit your business delivering robust, reliable, proven on-line metal detection technology.**

With an array of features to enhance your product inspection, Signature 300 and Signature Touch detectors are modular in design and have intuitive, easy to use interfaces.

The Signature detector is fitted with a durable 20 user language membrane key panel interface and has options for connectivity via Ethernet and Printer ports. The Signature Touch detector offers the user a full color touch screen and 26 user languages. Connectivity is also improved by the use of USB port option, while the Condition Monitoring feature and flexible software options allows users to maximize the performance of their metal detector solutions.



Signature 300 detector  
in painted white finish (IP65)

Signature Touch detector  
in bead blast Stainless Steel (304) finish (IP69K)

# Enhanced Benefits For Your Business

## Increasing Productivity, Reducing Costs

**Maximized product quality, enhanced manufacturing efficiency and protection of a brand are delivered by Signature 300 and Signature Touch detectors. Harnessing these benefits builds protection around your business enabling increased productivity, reduction of overall manufacturing costs and an improvement in competitiveness to be achieved.**

### ● Increased Productivity

Signature 300 and Signature Touch detectors ensure uptime is maximized and costly downtime minimized. This is realized through:-

#### Signature 300 & Signature Touch

- IP65 & IP66 S/S
- RS232 port
- Ethernet & Printer Connectivity Option
- ProdX Compatible with Ethernet Adapter

#### Signature Touch only

- IP65 & IP69K S/S Options
- RS232 & RS422 ports
- USB Connectivity Option
- On-board Condition Monitoring
- 7 User Selectable Running Screens
- HACCP Performance Validation Audit Alarm
- Single Pass Set Up mode

### ● Reduced Manufacturing Costs

Signature 300 and Signature Touch detectors offer greater time savings across detection procedures. This is realized through:-

#### Signature 300 & Signature Touch

- User Replaceable Control Module
- Performance Validation Routine

#### Signature Touch only

- Automatic Product Clustering
- Intelligent Performance Validation Routine

### ● Improved Competitiveness

Signature 300 and Signature Touch combines an increase in productivity, a reduction in costs of production to allow a business to grow profitably and deliver against retailer standards. This is realized through:-

#### Signature 300 & Signature Touch

- 21 Product Memory
- Product Name Reference
- Tuned Frequency
- Automatic Balance Control
- Enhanced Vibration Immunity & Enhanced Noise Immunity
- 5 Operational Password Levels
- IPac Documentation Provided as Standard

#### Signature Touch only

- 100 Product Memory
- Product Names (with Batch and Code Date)
- Optimized Vector and Noise Control
- Dual Boost Software Algorithm
- 32 User Accounts (language specific)
- Advanced Reject confirmation software



# Integrated Metal Detection For Processing & Packaging

**Designed for easy integration into food production lines, Signature 300 and Signature Touch metal detectors deliver high performance on-line metal detection. When combined with material handling systems, product inspection is fully automated.**

The use of dual frequency operation allows for the inspection of numerous product types irrespective of moisture content or packaging materials. Superior levels of detection sensitivity are achieved through the sophisticated yet easy to use Signature 300 and Signature Touch electronics platforms. Even difficult to detect non-magnetic stainless steels and non-spherical wire contaminants can be readily detected.

## Maximizing Sensitivity and Stability

Maximizing sensitivity across a wide range of applications, the use of Safeline's high frequency advanced detection coil technology delivers the highest levels of on-line sensitivity. Exceptionally stable, Signature 300 and Signature Touch based technologies remove the potential of good product being rejected from the production process saving time and money.

## Easy to Use

Signature 300 and Signature Touch Detectors are suitable for the inspection of multiple products with different product signals without the need for adjustment or program changes. In addition the Signature Touch offers automatic product clustering allowing numerous products to be inspected on one common setting.

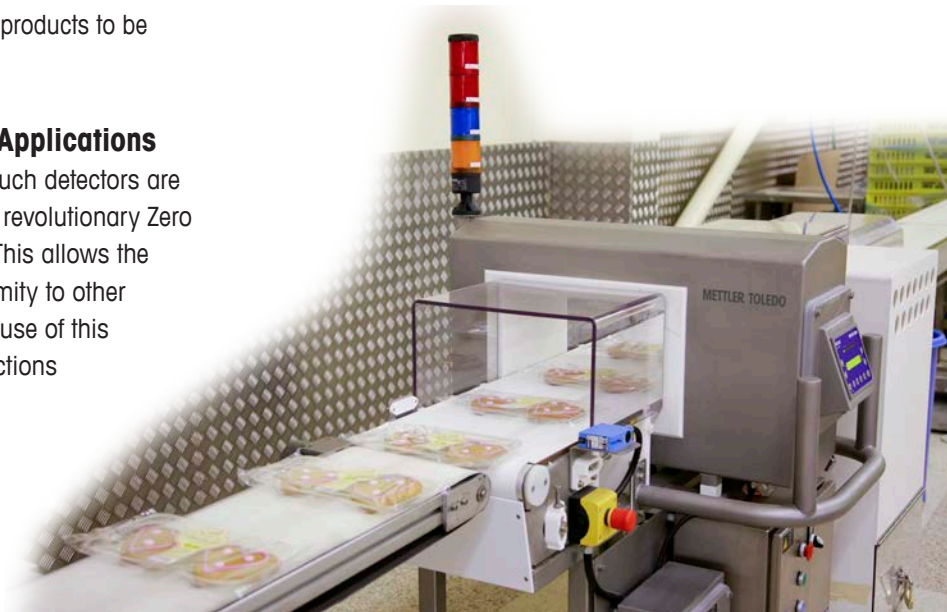
## Suitable for Restricted Space Applications

Both Signature 300 and Signature Touch detectors are configurable to incorporate Safeline's revolutionary Zero Metal Free Zone (ZMFZ) technology. This allows the detector to be installed in close proximity to other metal structures and equipment. The use of this technology results in significant reductions in process and packaging line length and the space required for the insertion of the detector.

## Choice of Sealing Standards and Finishes

Signature 300 and Signature Touch detectors are available in a range of sealing standards and finishes to suit all manufacturing environments.

Sealing standards available for Signature detectors is IP65 for dry, non-aggressive plant conditions through to IP66+ for challenging wash down environments. Signature Touch benefits from IP69K sealing and can be used in wet, harsh and aggressive applications. Both models benefit from robust construction and finishes include bead blasted stainless steel and white painted aluminium.



# Proven Technology To Support Your Business

With a proven range of features Signature 300 metal detectors support your business providing a firm platform for greater levels of metal detection. A stable and sensitive machine, easy to operate, maintain and integrate into your food production line, Signature metal detectors will reduce operating costs, increase productivity and improve competitiveness.

## Easy to Operate, Maintain and Integrate

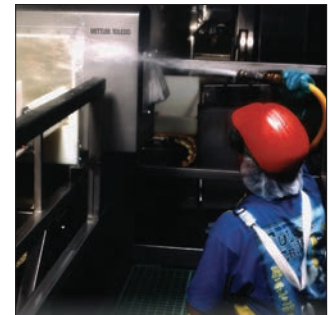
Built on the proven Signature software platform, operation is quick and easy through a membrane key panel. Signature Detectors can be integrated with a wide range of standard or custom conveyor systems enabling automated on-line inspection to take place. Designed to perform and be maintained in a variety of food manufacturing environments, Signature Detectors are available in a variety of sizes, finishes and sealing standards.



Membrane Key Panel Interface



Easy Conveyor Integration



Suitable for harsh environments



## Performance Validation Routine (PVR)

A sophisticated, yet simple set-up routine allows end users to configure PVR testing to their own needs. Users can choose to test on a time base only. The operational display will change to the PVR screen automatically when the testing is due or overdue. Operating in conjunction with a reject confirmation unit (RCU) the system provides the security and reliability to meet all GFSI standards including BRC, IFS, SQF and FSSC 22000.

## Optional Reject Confirmation Software

The Signature 300 includes the option of reject confirmation software to allow increased due diligence by monitoring and confirming rejection of all contaminated products.

# Delivering Total Control

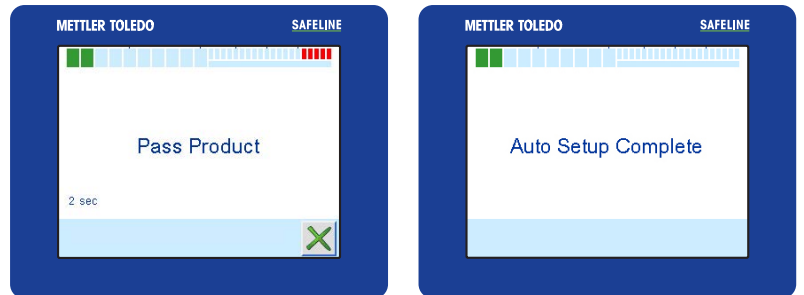
## Protected Operating Parameters

With an enhanced range of features from Single-Pass Set-up to High Security Password Access, Performance Verification to Condition Monitoring, Signature Touch metal detectors can immediately deliver improvements within a production process.

### Single-Pass Set-up Reduces Downtime

Auto set-up routines reduce downtime enabling the detector to be set rapidly with minimal requirements for operator training. Typically, only one pass of the product is required during set-up.

The needs of users wishing to have separate product settings with individual parameters is addressed through a product library with an built-in memory which enables up to 100 different settings to be defined and stored for future recall.



Single-pass product setup reduces downtime dramatically



### High Security Password Access Ensures Settings are Protected

All detector settings can be password protected to ensure unauthorized personnel do not inadvertently adjust important preset parameters.

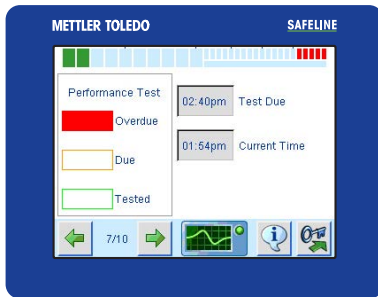
Individual operators can be assigned personal log-in password details with their own user profile which can display information in a choice 25 languages. This feature can be used to restrict unauthorized access within the operating system.

### Reject Confirmation Software

The Signature Touch includes reject confirmation software as standard to allow increased due diligence by monitoring and confirming rejection of all contaminated products.

# Enhanced Compliance

## Verification, Validation and Monitoring



### Ensuring Scheduled Performance Verification Tests are Not Missed

Missed performance validation tests can compromise quality standards and lead to non-compliance in food standards audits. Signature Touch detectors advise when test routines need to be performed and advise when testing is overdue via highly visible screen messages. These messages can be distributed to key personnel within your business via a range of communication methods to ensure corrective action is taken.



### Saving Time - Making Testing Easier

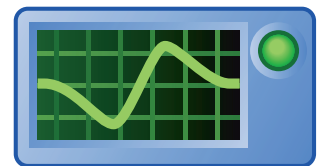
Built-in Performance Validation software provides intuitive, step-by-step guidance for quality assurance testing. Test routines can be configured to ensure that system performance is validated and results are captured in order to meet internal procedures and external industry standards or regulations.

### Condition Monitoring - Addressing Issues Before They Occur

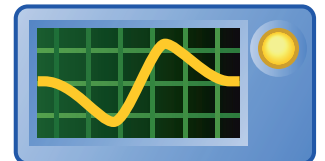
The costs associated with a line stoppage due to inspection system failure can have a serious impact on business performance. Being forewarned of potential line-stopping issues before they happen enables you to make contingency plans to avert costly unscheduled downtime.



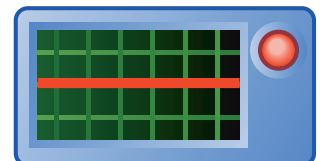
Signature Touch detectors can be fitted with optional condition monitoring technology enabling key parameters to be constantly analysed. Adverse trends are identified and highlighted as an early warning of a potential problem in advance of actual failure. This enables production to continue uninterrupted until there is a convenient break in the manufacturing process when the issue can be addressed.



System Healthy



Early Warning



Fault Condition

# Staying in Control of Your Processes

## Collecting Important Process Data

### Unrivalled Communications - Delivering Information Where You Need it

METTLER TOLEDO Safeline's Signature 300 and Signature Touch metal detectors fitted with an optional the Ethernet adapter can be configured with a range of data collection facilities to support informed decision making and due diligence needs. Options available include the connection of external printer devices through to full Ethernet network connectivity.

### Improving Methods of Data Collection

Signature Touch metal detectors can in addition be configured to incorporate a USB port to enable data to be collected via memory sticks.



### **Factory Management System Integration**

OPC DA is one of the world's established standards for the exchange of process control data. Signature 300 and Signature Touch detectors can be configured to communicate with a host of SCADA based systems and factory management software solutions.



### **ProdX** The Integrated Product Inspection Data Collection Software Solution

Signature 300 and Signature Touch metal detectors can be fully integrated with METTLER TOLEDO's **ProdX** software solution which provides data collection for all Product Inspection equipment.

► [www.mt.com/prodx](http://www.mt.com/prodx)

See separate **ProdX** and Data Collection brochures for more details.

[www.mt.com/pi](http://www.mt.com/pi)

For more information

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