

# THS/MIN

Ferrous-in-foil metal detector  
for quality control



THE THS/MN METAL  
DETECTOR HAS BEEN  
ESPECIALLY DESIGNED  
FOR THE INSPECTION OF  
PRODUCTS IN ALUMINUM  
FOIL TRAYS AND WRAPPINGS

**CALL TOLL-FREE 800 227 5980**

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**HEAT AND CONTROL**

www.heatandcontrol.com



**Very high sensitivity to ferrous and  
to all magnetic metals**

**Best ferrous in foil performances**

**Full compliance with HACCP criteria**

**250 product data memories, selectable by local  
programming, bar code reader or network software**

**Completely housed in AISI 316L stainless steel**

**High level of electronic and mechanical reliability**

**Programmable via local keyboard and display  
or through external network**

# THS/MN Ferrous-in-foil metal detector

www.ceia.net

CEIA THS/MN metal detector **detects ferrous and magnetic metal contaminants** accidentally present on industrial products, with levels of sensitivity, immunity to interference and response speeds **designed to satisfy the strictest quality control requirements.**

This ferrous-in-foil metal detector has been especially designed for the **inspection of products in aluminum foil trays and wrappings.** THS metal detectors' wide bandwidth allows **maximum-sensitivity operation at both high and low transit speeds.**

The THS metal detector electronics unit can either be programmed locally, via a keypad and display of 80 alphanumeric characters, or be controlled from a remote computer via a standard RS-232 serial interface, or be linked into a local computer network through a RS-485 interface.

The THS Report management software (optional) provides statistical data on the actions carried out by the detector, on the periodic tests and on variations in the parameters, **in line with ISO 9001 specifications on traceability data.**



## Technical Specifications

- Very high sensitivity to all magnetic metals
- Extremely high immunity to environmental interference
- Digital signal processing (DSP) with automatic compensation for the "product effect"
- Local or remote programming of operating parameters (product type, transit speed, signal analysis, external activator commands, etc.)
- Easy-to-read alphanumeric display
- 250 set-up memories for different products
- Programming access protected by 5 local and 1 remote password levels
- Audible and visual alarms
- Bar-graph indication of signal level
- Internal self-diagnosis
- Stainless steel construction to IP65 protection level

## Statistical Analysis

- Contaminated product count
- Count of total number of objects inspected (with photocell)
- Product quality control **complies with ISO 9001 standards**

## Operating Modes

- Basic mode with manual reset
- Delay mode, with immediate activation of alarm relay and delayed activation of ejection relay
- Synchronized mode, with immediate activation of alarm and ejection relays synchronized by photocell

## Installation Data

- Power supply: 115/230 VAC, -22 %/+10%, 48-62 Hz; 60 VA
- Operating temperature: from 14°F (-10°C) to 131°F (+55°C)
- Relative humidity: 0 -95% (without condensation)
- RS-232 serial interface
- Possibility of connection to a computer or other control system, e.g. checkweigher
- Input for connection to encoder on conveyor belt for automatic measurement of product speed

- Inputs for alarm signaling of *bin full* and/or *confirm ejection*
- Auxiliary inputs and outputs available for slave devices and external controls

## Accessories / Optionals

- Input for connection to an optional bar code reader
- RS-485 network interface
- Possibility of including an inverter to control the motor (**Conveyor Control System**) in the power supply box
- Test reference samples: ferrous, non-ferrous and stainless steel
- **MD-CAD**: computer aided design for the metal detector installation
- **THS Report**: software for management of statistical data, periodic tests and variations in the parameters
- **MD Scope**: software for oscilloscope simulation and terminal operations on CEIA metal detectors

## Certification and Conformity

- Conforms to current requirements for metal detection systems
- Complies with EC regulations and international standards relating to electrical safety and electromagnetic compatibility

## Applications

- Food industry



MD-CAD, COMPUTER AIDED DESIGN FOR THE METAL DETECTOR INSTALLATION



CONVEYOR BELT INTEGRATED WITH METAL DETECTOR

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