

# THS/3F

## Multi-frequency Metal Detector for Quality Control

COMPLETELY HOUSED IN AISI 316L



FULL COMPLIANCE WITH HACCP CRITERIA



Your Local Distributor :

*JOTAM*

Telp: 021 4513089

Fax : 021 451 5743

Email: [jotam@cbn.net.id](mailto:jotam@cbn.net.id)

- **Very High Sensitivity** to all magnetic and non-magnetic metals, including stainless steel
- **Multi-frequency Technology** for maximum sensitivity to Product Effect variations
- **Autolearn and automatic tracking** of the Product Effect
- **250 Product Data Memories**, selectable by local programming, bar-code reader or network software
- **High level of electronic and mechanical reliability**

# THS/3F Multi-frequency Metal Detector



The THS/3F Metal Detector is **recommended for use on multi-product lines, where the individual products have very different conductivity characteristics**. Under these circumstances, the THS/3F allows maximum sensitivity for detection of contaminating metals, both magnetic and non-magnetic and including high-resistivity stainless steels, to be maintained. The automatic frequency selection function allows the THS/3F to choose the **optimum frequency for the product in transit during the autolearn phase**.

The **automatic tracking function** eliminates any further variations due to the "Product Effect". The wide pass band of the THS/3F detector allows operation at maximum sensitivity at both slow and fast speeds. The digital analysis of the signal provided by the antenna (**D.S.P.**) allows the user to achieve **extremely high sensitivity, immunity to interference and operational stability**.

The THS/3F Metal Detector is **also available in Slim Line version (THS/SL-3F)**, which allows installation in environments with limited space and complete integration with other systems such as checkweigher and price labelling machines.



## Technical Characteristics



## THS/SL-3F



THS/3F SLIM LINE METAL DETECTOR FOR APPLICATIONS IN LIMITED SPACE

### MAIN FEATURES

Very high sensitivity to all magnetic and non-magnetic metals, including stainless steel

Extremely high immunity to environmental interference

Automatic balancing

Digital signal processing (D.S.P.) with automatic compensation for the "product effect"

Quartz-controlled operating frequencies

Local or remote programming of operating parameters (product type, transit speed, signal analysis, external activator commands etc.)

Easy-to-read alphanumeric display

Memory holds 250 different products

Autolearn of product effect

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 (IP66-IP69K available on request)

### 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

Synchronised mode, with immediate activation of alarm and ejection relays synchronised by photocell

### INSTALLATION DATA

**Power supply:** 115/230 V<sub>AC</sub>, -22 %/+10%, 48-62 Hz; 60 VA

**Operating temperature:** -10 ÷ +55 °C

**Relative humidity:** 0 -95% (without condensation)

RS-232 serial interface

Possibility of connection to a computer or other control system, e.g. check-weigher

Input for connection to encoder on conveyor belt for automatic measurement of product transit speed

Inputs for alarm signalling of bin full and/or confirm ejection

Auxiliary inputs and outputs available for slave devices and external controls

### ACCESSORIES / OPTIONALS

Input for connection to a 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 Production:** for statistical and operational management of networked THS systems

**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 and Chemical Industries, Pharmaceutical

[www.ceia.net](http://www.ceia.net)

Your Local Distributor :

JOTAM

Telp: 021 4513089

Fax : 021 451 5743

Email: [jotam@cbn.net.id](mailto:jotam@cbn.net.id)