

# CEIA THS 21

## THS/FBB AND THS/MBB CONVEYOR INSPECTION SYSTEMS



STRUCTURE AND COMPONENTS  
IN AISI 304 STAINLESS STEEL  
AND FOOD-COMPATIBLE PLASTIC  
PARTS (FDA, USDA COMPLIANT)

SUPERMARKET  
SPECIFICATIONS  
COMPLIANT

- Conveyor belt integrated with Metal Detector and ejection system
- Full compliance with HACCP criteria
- Digitally-adjustable belt speed
- High immunity to environmental interference
- Very high sensitivity to all magnetic and non-magnetic metals, including stainless steel
- Multi-spectrum technology available for extreme compensation of the product effect
- Maximum flexibility: all components are reversible
- Automatic learning & tracking of product effect
- Easy to clean and inspect
- 500 product data memories, selectable by local programming or network software
- Up to 40 definable users with username and password

## CEIA THS 21 CONVEYOR INSPECTION SYSTEMS

**CEIA THS 21 Conveyor Inspection Systems satisfy the most stringent requirements for functionality, compact construction, accuracy and reliability of response in dealing with accidental contamination in food products**

CEIA is a Market Leader that has been designing and manufacturing Metal Detectors for industrial applications for over 40 years. The line of Quality Control Detectors includes the **Conveyor Inspection Systems**, featuring **state-of-the-art performance and full compliance with industrial sector regulations**.

CEIA offers a complete range of solutions for inspecting food products, both bulk and packaged. In particular, the THS 21 conveyor satisfies the most stringent requirements for functionality, compact construction, accuracy and reliability of response in dealing with accidental contamination in food products.

THS 21 Conveyor Inspection Systems offer **total integration between CEIA's high-performance THS 21 Metal Detector** and a hygienic structure in stainless steel, equipped with digital control of the speed and of the stages of ejection of non-conforming products.

**CEIA's THS 21 are available in a wide range of sizes** covering the different application requirements.

The supporting structure, the Metal Detector and the belt control box are in stainless steel. The conveyor belt is **certified fully compatible with food product handling (FDA/USDA compliant)** requirements, as is the protective cover of the ejection area and the container for rejected products.

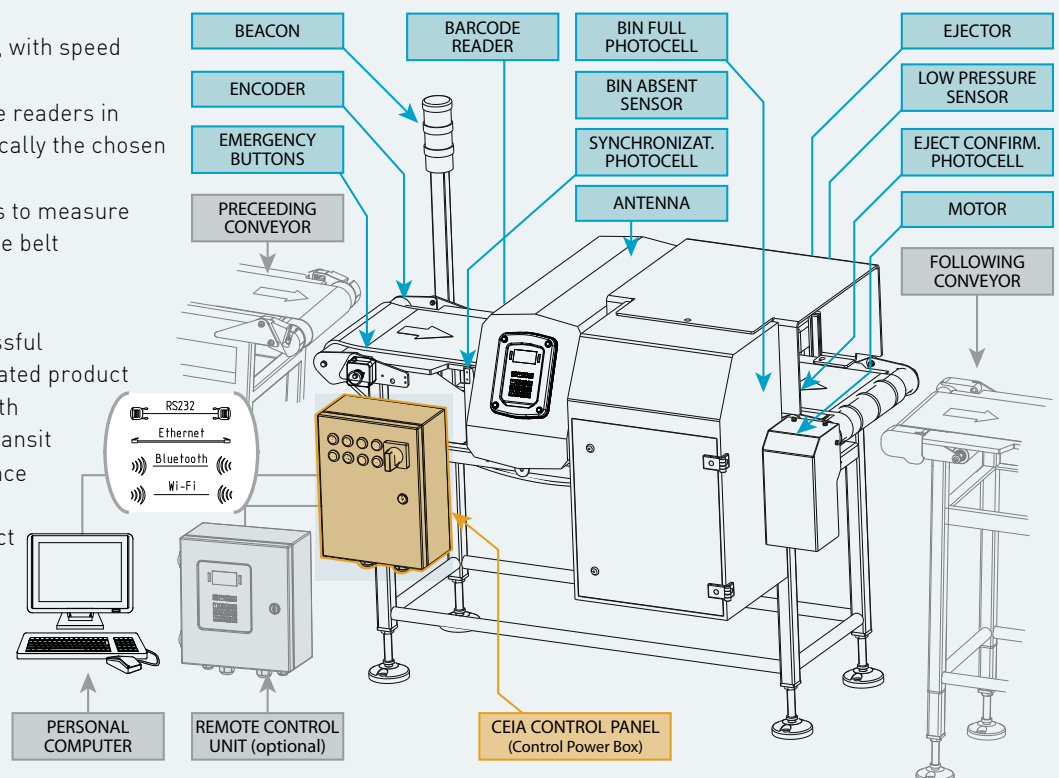


**MULTI-SPECTRUM TECHNOLOGY AVAILABLE FOR EXTREME COMPENSATION OF THE PRODUCT EFFECT**

## Control Power Box: unequalled integrated connectivity performance

**CEIA THS 21 Metal Detectors Series has been designed to manage all the functions required by the transport systems**

- Control of the belt motor, with speed adjustment
- Interfacing with bar-code readers in order to select automatically the chosen product in real time
- Management of encoders to measure precisely the speed of the belt
- Checking the availability of compressed air
- Verification of the successful ejection of the contaminated product
- Ejection management with synchronization of the transit
- Verification of the presence and occupied volume of the contaminated product container
- Synchronization with adjacent transport systems





CEIA THS 21 Conveyor Inspection Systems are available in a wide range of sizes covering different application requirements. The following tables provide a list of the standard available dimensions



THS/FBB Flat Conveyor Belt System



MODERN, RUGGED AND USER FRIENDLY INTERFACE



EASY TO CLEAN AND INSPECT: THE CONVEYOR BELT CAN BE REMOVED WITHOUT ANY TOOLS



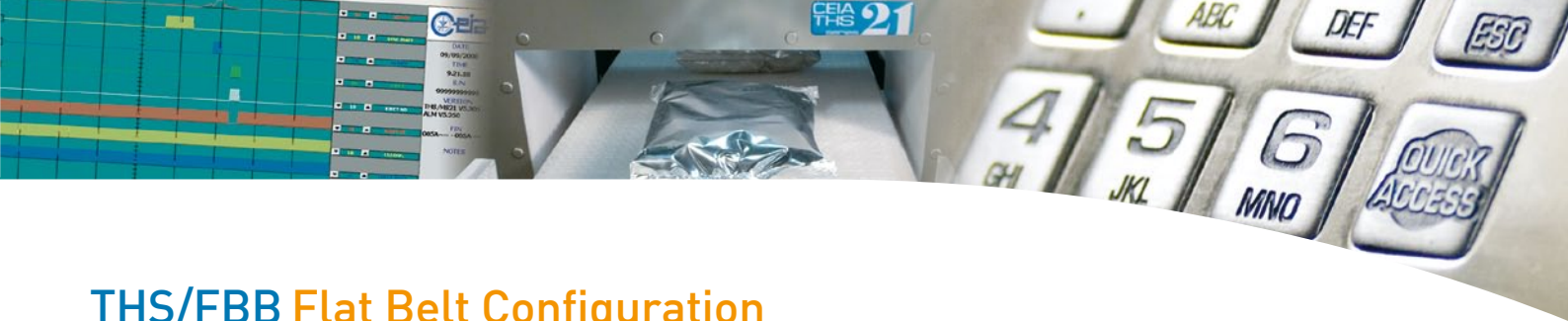
THS/MBB Modular Conveyor Belt System



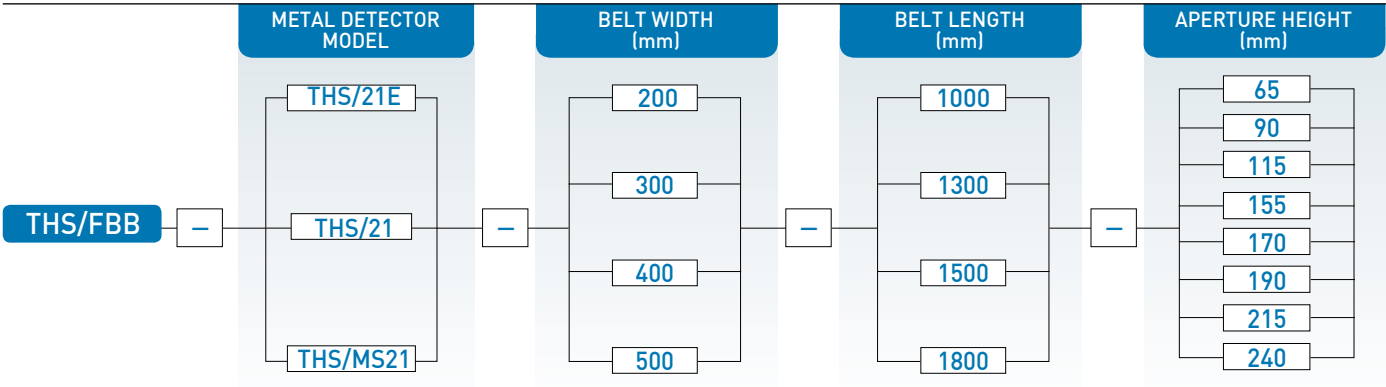
VERY HIGH SENSITIVITY TO ALL MAGNETIC AND NON-MAGNETIC METALS, INCLUDING STAINLESS STEEL

Pictures for reference only: all components are reversible





# THS/FBB Flat Belt Configuration



		THS/FBB-X-X-1000-X	THS/FBB-X-X-1300-X	THS/FBB-X-X-1500-X	THS/FBB-X-X-1800-X
OPTICAL SIGNALLING DEVICE	RED: DETECTION & FAULT	●	●	●	●
	ORANGE: DETECTION ALARM AND BUZZER	○	○	○	○
	BLUE: TEST REQUEST	○	○	○	○
BELT STOP IN CASE OF ALARM		●	●	●	●
SYNCHRONIZATION PHOTOCELL		●	●	●	●
VARIABLE SPEED		●	●	●	●
TYPE OF STAND	FEET	●	●	●	●
	CASTORS	○	○	○	○
PUSHER RAM REJECT		-	○ <sup>(1)</sup>	○	○
AIR BLAST REJECT		-	○ <sup>(1)</sup>	○	○
STANDARD BIN		○	○	○	○
LARGE BIN		-	-	-	○
SIDE PANELS FOR PRODUCT CONTAINMENT		○	○	○	○
EJECTION CONFIRMATION		-	○	○	○
EJECTION CONFIRMATION / BIN FULL ALARM/ LOW PRESSURE ALARM		-	○	○	○
TEST KIT FOR EJECTION CONFIRMATION / BIN FULL ALARM		-	○	○	○



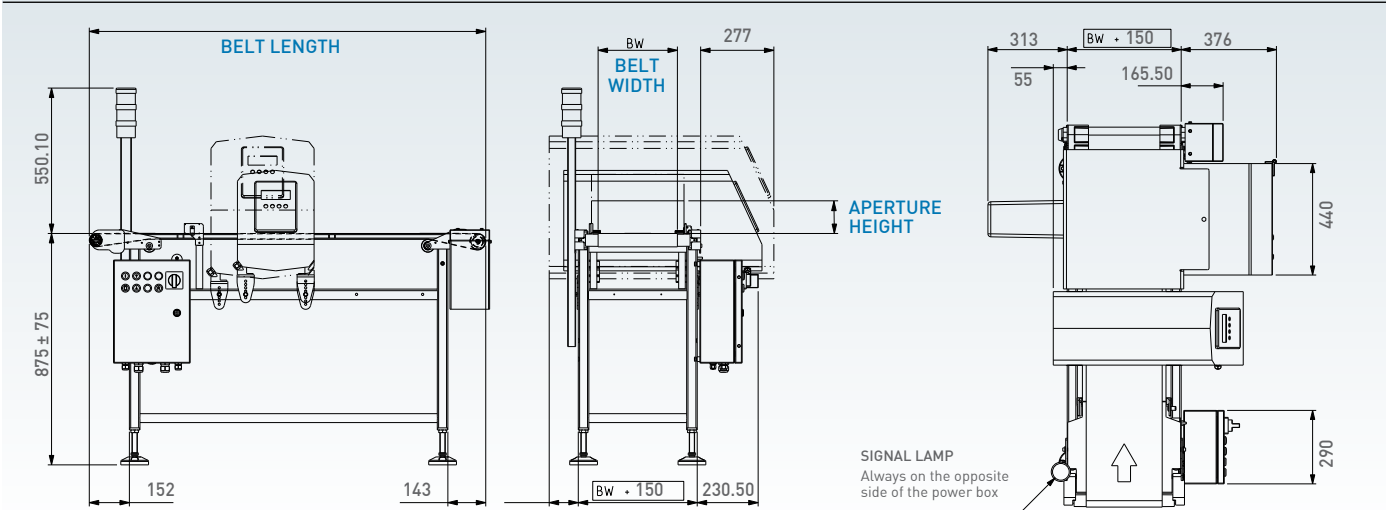
AIRBLAST EJECTION SYSTEM



CONVEYOR CASTORS

● STANDARD ○ ACCESSORIES / OPTIONALS (1) Available with opening height ≤ 145 mm

## Dimensions (mm)





# CEIA THS 21 CONVEYOR INSPECTION SYSTEMS

## Specifications

### GENERAL FEATURES



Conveyor belt integrated with Metal Detector and ejection system
Full compliance with HACCP criteria
Structure and components in stainless steel and food-compatible plastic parts (FDA, USDA compliant)
Control Panels listed according to UL 508A and CSA-C22.2 No. 14-05 available
Digitally-adjustable belt speed
High immunity to environmental interference
Easy to clean and inspect
Very high sensitivity to all magnetic and non-magnetic metals, including stainless steel
Multi-spectrum technology for extreme compensation of the product effect
Automatic learning & tracking of product effect
High reliability motor driver with stainless steel protection cover and high pull capability
Easy belt alignment
Designed to meet the highest safety Standards
500 product data memories, selectable by local programming or network software
Up to 40 definable users with username and password



### DATA MANAGEMENT

Electronic Records and Signatures Management compliant with 21 CFR Part 11: Data Security, Data Integrity, Data Traceability

### BELT CONTROL

Digitally-controlled variable speed from 10m/min to 50m/min  
other speeds available on request

### EJECTION SYSTEMS

Belt stop and alarm  
Air blast reject  
Pusher ram reject

### POWER SUPPLY

100-120 VAC or 200-240 VAC, single phase - 50-60 Hz - 11.4A max  
Compressed air (600-1000 kPa)  
Flow: 50 liters/min (pusher ram reject)  
600 liters/min (airblow ejector)

### CONTROL INPUTS

Downstream and upstream belt authorization

### ENVIRONMENTAL CONDITIONS

Operating temperature: 0°C to +50°C  
Relative humidity: 5 to 90% (without condensation)

### DEGREE OF PROTECTION

Control Power Box certified: Type 4X-12 (UL 50) available  
Conveyor System: IP65 (IEC 529)

### SIGNALS

System completely monitored by self-diagnosis  
Optical/acoustic signal for faults and alarms

### INTERFACE

RS-232 Serial interface  
Bluetooth  
Ethernet interface (on request)  
Wi-Fi (on request)

### MANAGEMENT SOFTWARE

THS Production software for statistical and operational management of networked THS systems  
MD-SCOPE for local maintenance and programming operations

## CERTIFICATION AND CONFORMITY

- Conforms to current Regulations for Industrial Metal Detection Systems.
- Complies with EC Regulations and International Standards relating to Electrical Safety and Electromagnetic Compatibility.

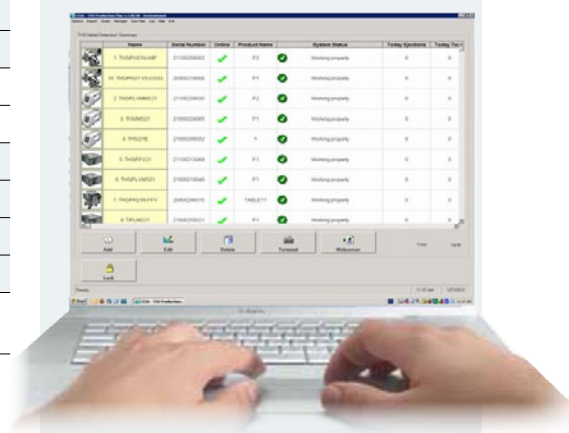
## QUALITY CONTROL TEST SAMPLES

- CEIA Test Samples box: CEIA supplies metrological samples certified for diameter and electromagnetic signal issued by LACE, CEIA's Electromagnetic Compatibility Laboratory



## THS Production +

THS PRODUCTION SOFTWARE FOR STATISTICAL AND OPERATIONAL MANAGEMENT OF NETWORKED THS SYSTEMS



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DP002K0006V2000UK-54008