

# PERFECTION IN EVERY DETAIL

ZERO-ERROR REJECTION · SUPERIOR HYGIENE ·  
ERS & MESUTRONIC: PERFECT INSPECTION



## Detector Specifications

<b>Model Series</b>	Mesutronic Metron 05 CI
<b>Technology</b>	DSP (Digital Dual-Channel Processing)
<b>Protection Class</b>	IP66 (Standard) / IP69K (Optional)
<b>Suitable Environment</b>	Dry & Standard Wet Areas
<b>Display</b>	LCD Line Display with Keypad
<b>Connectivity</b>	RS232 / RS422, USB, SD Card
<b>Product Memory</b>	Up to 500 Products
<b>Detection Speed</b>	Up to 30 m/s (Head capacity)
<b>Operating Temperature</b>	-10 °C ile +50 °C
<b>Model Series</b>	Mesutronic Metron 07 CI
<b>Technology</b>	DSP (Advanced Automatic Balancing & Filtering)
<b>Protection Class</b>	IP66 (Standard) / IP69K (Optional)
<b>Suitable Environment</b>	Challenging Wet & Washdown Areas
<b>Display</b>	Graphic Color Touchscreen
<b>Connectivity</b>	WiFi, Ethernet, mesuNET, USB
<b>Product Memory</b>	Unlimited (SD Card / Network)
<b>Detection Speed</b>	Up to 30 m/s (Head capacity)
<b>Operating Temperature</b>	-10 °C to +50 °C

## Conveyor System

<b>Frame / Body</b>	AISI 304 Stainless Steel (Hygienic Design)
<b>Roller Material</b>	High-Durability Aluminum
<b>Conveyor Height</b>	350–1100 mm $\pm$ 50 mm
<b>Sliding Bed (Dry)</b>	Phenolic Compact Laminate
<b>Sliding Bed (Wet)</b>	Solid UHMW-PE Plastic (Water-Resistant)
<b>Belt Type</b>	Modular Plastic or PU Belt (FDA Approved)
<b>System Speed</b>	Adjustable (e.g., via VFD, 20–60 m/min)
<b>Reject Mechanism</b>	Pneumatic Pusher, Air Blow, or Flipper Arm
<b>Reject Bin</b>	Lockable Stainless Steel Bin (Secure Storage)
<b>Power Supply</b>	100-240 VAC, 50/60 Hz

## Technical Specifications

This system combines the high-precision metal detection technology of the Mesutronic Metron CI Series with ERS's hygienic conveyor design. Developed for the food and packaging industries, it provides a Check & Reject solution. The system detects ferrous, non-ferrous metals, and stainless-steel contaminants and automatically removes them from the production line without interrupting the process. This ensures full compliance with HACCP, IFS, and BRC standards.

## Key Features

**Reliable Detection:** Mesutronic's Digital Signal Processing (DSP) technology enables metal detection even within conductive products (e.g., meat, fish, etc.). Thanks to Product Effect Compensation, false alarms are significantly reduced.

**Hygienic Conveyor Design:** The open-frame AISI 304 stainless steel structure combined with FDA-approved modular or PU belts ensures maximum hygiene.

**Superior Protection:** Detector heads feature IP66 protection as standard, making them resistant to powerful water jets. This makes the system ideal for hygienic environments and intensive washdown applications.

**Automatic Reject System:** Depending on the product type and weight, the system can operate with different reject mechanisms such as air blow, pneumatic pusher, or flipper.

**Fail-Safe Operation:** The system ensures 100% secure separation with reject verification sensors, air pressure monitoring, and a lockable reject bin. ve killitenebilir red haznesi ile %100 güvenli ayırma sağlar.

**Seamless Integration:** Supports Modbus, RS232, and Ethernet TCP/IP, enabling direct connectivity with ERP / MES systems.

## Compliance & Process Safety

**FDA 21 CFR Part 11:** Maintains tamper-proof records for all actions and user logins, ensuring 100% audit traceability.

**Reject Confirmation:** Cross-check sensors physically verify that contaminated products have been successfully directed into the reject bin.

**Unauthorized Access Protection:** Multi-level password protection and lockable reject bins prevent unauthorized intervention.

