

# Ensure product quality and protect your customers



Thermo Scientific APEX 500 Rx Metal Detectors:  
flexible, easy to use and cost effective inspection



# Thermo Scientific APEX 500 Rx Metal Detector

Metal detection system for tablet and capsule production

## Features & Benefits

- Flexible, cost-effective solution for Oral Solid Dose (OSD) production
- Straight through product flow to prevent product damage
- Can detect metal pieces as small as 0.3 mm, helping ensure contaminant-free product
- Improves productivity with throughput up to 500,000 tablets or capsules per hour
- Graphical user interface (GUI) designed for ease of use and operational simplicity
- Thermo Scientific™ Quality Assurance Test (QAT) and optional AuditCheck features to verify continued performance



### AuditCheck Performance Verification

- Automatically senses small changes in sensitivity
- Reduces need for manual system checks



### APEX Metal Detector head

- Multi-coil design
- Low false reject rate, extremely stable
- Aperture heights of 25, 35 and 50 mm designed for performance across a range of product sizes



### Rejecter assembly

- Stainless steel and FDA-approved plastic for GMP compliance
- Easy to disassemble and clean
- Fail-safe operation and lockable rejecter bin ensure isolation of contaminated product
- Straight-flow product path prevents product damage
- Optional round fittings for tubes
- Electrical or pneumatic reject actuation



### Flexibility to adapt to multiple process needs

- Adjustable infeed height, 890 mm  $\pm$  241 mm
- Adjustable flow angle, 35°  $\pm$  10°



Thermo Scientific™ APEX 500 Rx pharmaceutical metal detection systems provide high levels of brand protection and pharmaceutical industry compliance in the most demanding tablet and capsule production environments. The multi-coil design consistently delivers application sensitivity and stability but isn't impacted by product effect or environmental changes. Manufactured to meet stringent requirements for validated production, only FDA-compliant materials are used in areas of the system that come in contact with the product.



**Control panel**

- Software designed for optimal application performance
- Easy to use: setup in minutes, multilingual help text
- Multi-level password system for system security



**Portability**

- Wheels for quick and easy movement of the system
- Large, easy clean, stainless steel handles allow safe and convenient movement



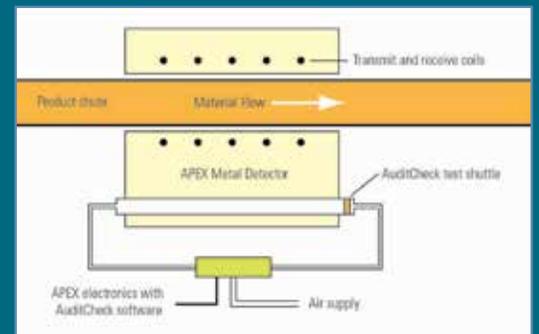
**Brand protection with low cost of ownership**

The APEX 500 Rx metal detector is a cost-effective system which improves productivity and provides high levels of brand protection. Available in three aperture sizes to match sensitivity to product rate and size. Every system is configured for 900 kHz operation for optimal stainless steel detection.

**Total quality solution**

Designed to ensure the absence of even small slivers of metal, the APEX 500 Rx metal detector gives you high sensitivity at high flow rates. The straight through product flow path minimizes the potential for damage to tablet or capsule products as they flow through the system.

As part of the Thermo Scientific APEX family, this metal detector incorporates a Total Quality Solution (TQS) package featuring Thermo Scientific AuditCheck. This unique system continuously monitors and validates the system's performance to help eliminate costly recall and quarantine. With AuditCheck™ you can reduce manual testing, minimizing resource requirements without compromising on performance.



AuditCheck diagram

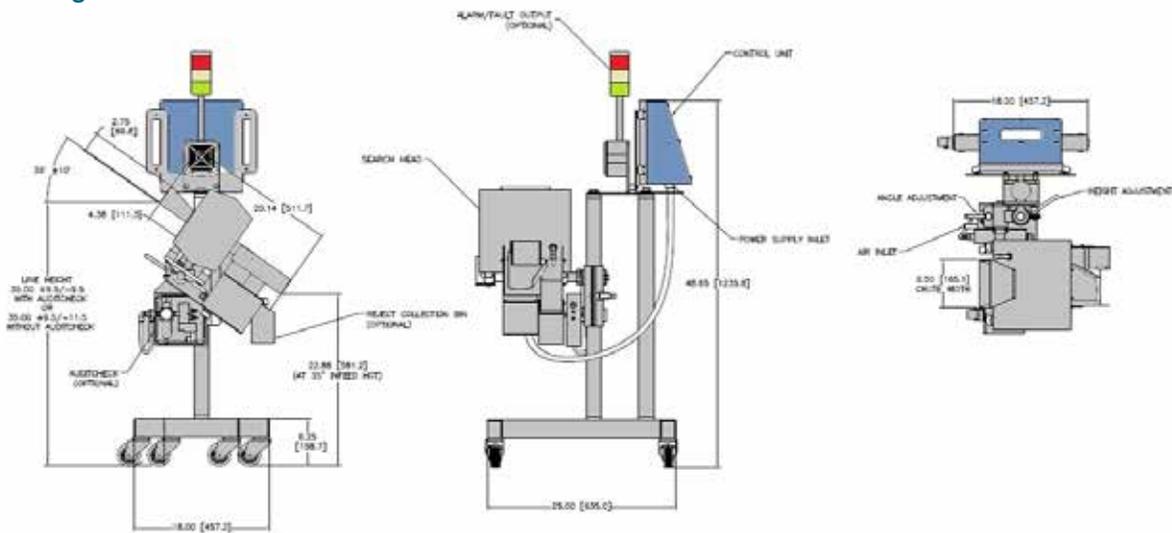


AuditCheck principle of operation

## Thermo Scientific APEX Rx Pharmaceutical Metal Detector

General Specifications	
Construction	Stainless steel straight-lined case, electro-polished finish (optional). FDA-approved plastics.
Operating Temperature	-10°C to +40°C (+14°F to +104°F)
Relative Humidity	20% to 80% non-condensing
Electrical Supply	85 to 260 VAC, single phase plus earth ground; 47 Hz to 65 Hz, 100 watts maximum
Air Supply	5.5 bar (80 psi) nominal, 4 bar (60 psi) minimum, for pneumatic reject and AuditCheck system options only
Product Speed	0.5 m/min (1.7 ft/min) to 1000 m/min (3,300 ft/min)
Outputs	6 Relays outputs; Relays: 250 volt AC 2 amp max. 50 volt DC 1 amp max.
Output Allocation	Reject 1, Reject 2, AuditCheck, Fault, Alarm, Warning, QAT lamp (selectable via menu)
Output Light Stack	Optional, lights for Alarms and Faults
Inputs	6 inputs; Active 12v DC, 12 volt auxiliary supply for input sensors
Input Allocation	Keylock, Product Select 1, Product Select 2, Reject Confirmation 1
Communications	Modbus serial or Ethernet (optional)
Safety & Export Approvals	CE, cCSAus (head & electronics only)
Manufacturing Quality	ISO9001 certified
Help-Text, User Manual Languages	Multiple languages available

### System Drawings:



Find out more at [thermofisher.com/pharmainspection](https://www.thermofisher.com/pharmainspection)

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