



**Thermo Scientific APEX 500 Rx**  
Pharmaceutical Metal Detector

- Ultra high sensitivity
- Complete, adjustable, mobile system
- AuditCheck verification option

## **high performance heads** and systems for tablet and capsule applications

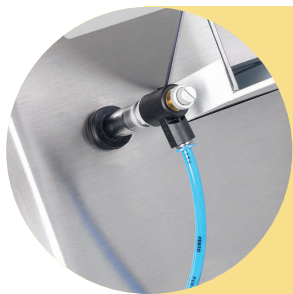
The Thermo Scientific APEX 500 Rx systems offer a complete, highly sensitive and validated solution for end users and OEM pharmaceutical and nutraceutical production.

# Thermo Scientific APEX 500 Rx

## Metal Detector for Pharmaceutical Applications

### Features & Benefits

- Cost-effective solution for tablet presses, capsule filling and deduster applications
- Straight through product flow to prevent product damage
- High sensitivity—can detect pieces of metal as small as 0.3 mm
- Improves productivity with throughput up to 500K tablets or capsules per hour
- Easy to use—features graphical user interface (GUI) that uses a durable touch-sensitive keypad
- Thermo Scientific™ Quality Assurance Test (QAT) and AuditCheck™ features to verify performance
- Assists in compliance with GMPs in 21 CFR part 210 and 211
- Available as a complete system, OEM module or head and control panel only



#### AuditCheck

- Performance verification
- Automatically senses small changes in sensitivity



#### APEX Metal Detector Head

- Multi-coil high sensitivity design
- Low false reject rate, extremely stable
- Variety of aperture heights available
- Operating frequencies up to 900 khz



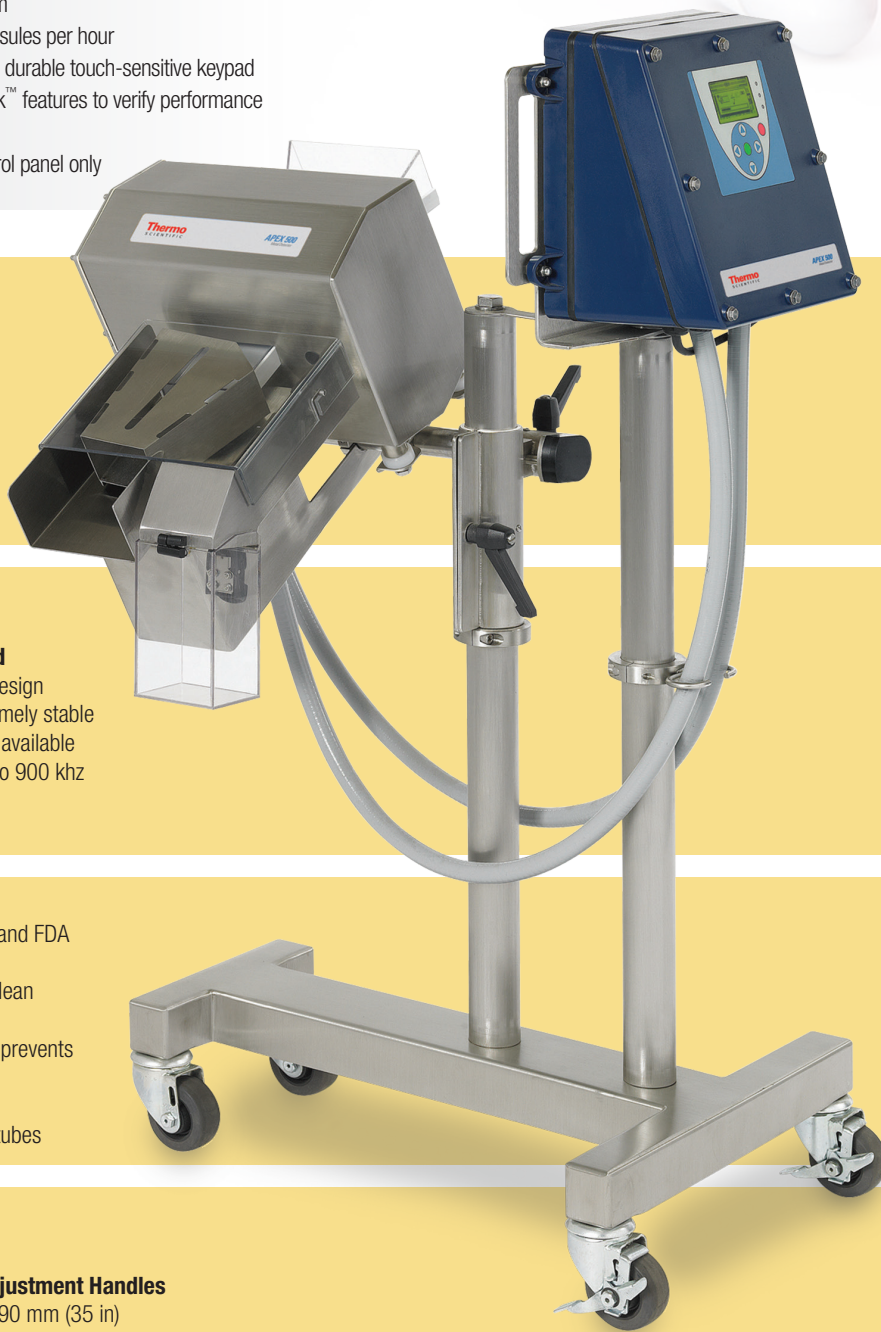
#### Rejecter Assembly

- Made from stainless steel and FDA approved plastic
- Easy to disassemble and clean
- Fail-safe operation
- Straight-flow product path prevents product damage
- Lockable rejecter bin
- Optional round fittings for tubes



#### Easy Height and Angle Adjustment Handles

- Nominal infeed height of 890 mm (35 in)
- Flow angle of 35° ±10°
- Customized infeed chutes available



# metal detector system



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

## Control Panel

- Pharma application software
- Set-up in minutes
- Multi-level password system
- Multilingual help text



## Handles

- Large handles let you quickly and easily move the APEX 500 Rx metal detector
- Stainless steel—easy to clean and designed to last



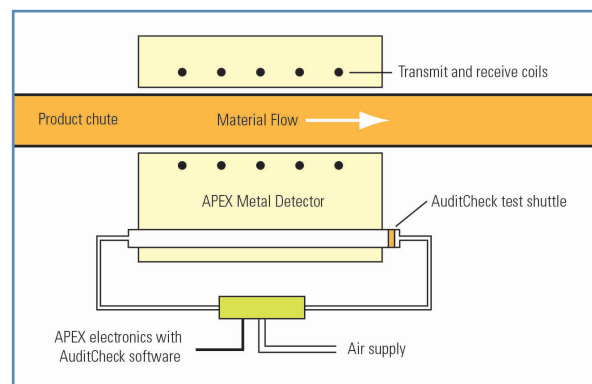
## Highest Level of Brand Protection. Lowest Cost of Ownership.

The APEX 500 Rx metal detector improves productivity while providing the highest level of brand protection available. Available in three aperture sizes so you can match sensitivity to product rate and size. Every system is also 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 the highest sensitivity possible at high flow rates—while preventing product damage. Tablets/capsules flow straight through the system to minimize potential damage.

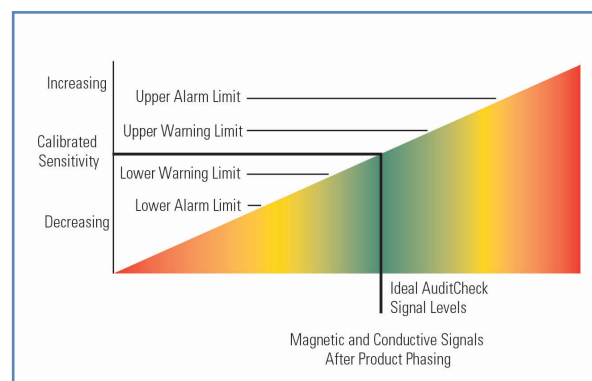
As part of the Thermo Scientific APEX family, this metal detector incorporates a Total Quality Solution (TQS) package featuring Thermo Scientific AuditCheck. This unique system continuously monitors and validates the system's performance to help eliminate costly recall and quarantine. With AuditCheck, you don't need to perform manual testing to ensure high performance.



**AuditCheck diagram**

## Available Options

- High polish finish
- Pneumatic or electronic reject actuation
- AuditCheck Performance Validation System
- IQ/OQ/PQ validation packages (customized if required)
- Modbus Serial and Ethernet communications
- Product outlets designed for open flow or attachment to flexible tubes
- Head only or OEM module configurations for integration into dedusters



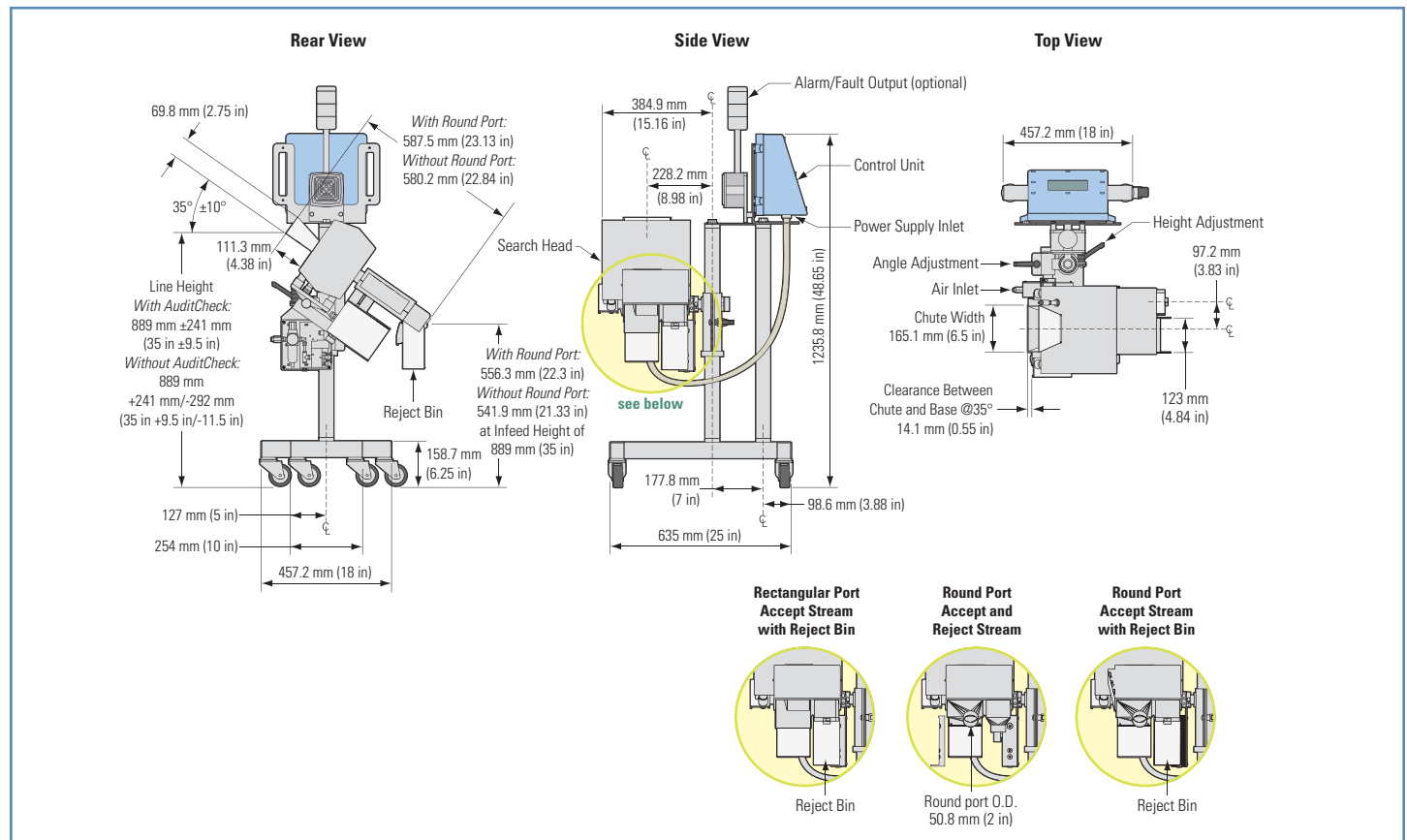
**AuditCheck principle of operation**

# Thermo Scientific APEX 500 Rx

## General Specifications

Construction	Stainless steel 304 straightlined case, high polish optional. All plastics used are FDA approved.
Protection Ratings	Type 3 enclosure, metal detector and control panel only
Operating Temperature	-10°C to +40°C (+14°F to +104°F)
Relative Humidity	20% to 80% non-condensing
Electrical Supply	85 volts to 260 volts AC 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 AuditCheck and/or pneumatic rejector (not required for electronic rejecter)
Product Speed	0.5 m/min (1.7 ft/min) to 100 m/min (330 ft/min) for the system
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)
Inputs	6 Inputs - Active 12v DC+12 volt auxiliary supply for input sensors
Input Allocation	Speed Sensor, Keylock, Product Select 1, Product Select 2, Infeed PEC, Reject Confirmation 1 and Bin Full External Suppression, Reject 1 Complete, Clear All Warnings/Alarms/Faults (selectable via menu), External Alarm, External Reset
Communications	Optional Modbus serial or Ethernet modules
Safety and Export Approvals	cCSAus, CE
Manufacturing Quality	ISO9001 certified
Help-Text, Users Manual Languages	English, Spanish, French, German, Italian, Dutch, Chinese, Czech, Russian, Polish, Thai, Koren and Brazilian Portuguese

## Thermo Scientific APEX 500 Rx Metal Detector System Dimensional Diagram (pneumatic reject system shown)



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