

Thermo Scientific APEX™ Upgrade Program



APEX Upgrade Installed on a DSP3



Upgrade kit includes electronics, mounting plate, complete documentation and test sticks

APEX Upgrade Advantages

Reduced Cost of Ownership

- Protect your investment by extending the usable life of Thermo Scientific Goring Kerr DSP2, DSP3 and Metal Eliminator metal detectors
- Upgrade all production lines to a common platform simplifying training, maintenance and reducing spares

Leading-Edge Performance

- Meet new, more stringent quality standards by detecting metal that is 5-10% smaller in diameter
- Utilize improved sensitivity to reduce rework and scrap caused by occasional false rejects
- Eliminate the need for setup adjustments by employing a new phase-tracking function

Simplified, More Reliable Design

- A new electronic design simplifies installation and service
- The food-grade ABS control panel easily handles shock, vibration, water and various cleaning solutions
- An innovative, touch-panel keypad has no moving parts improving long-term reliability

Upgrade DSP2, DSP3 and Metal Eliminator Metal Detectors to New APEX Features and Performance

The DSP2, DSP3 and Metal Eliminator metal detectors were designed to provide many years of reliable service. No metal detector lasts forever, though, so we have created this upgrade kit to extend the operational life of your metal detector and save you money and time. The APEX Upgrade kit enables you to migrate to the latest technology, performance and ease of use. It offers many of the advantages of the next-generation APEX metal detector via a simple field or factory upgrade.

Field Upgrade: DSP3 or Metal Eliminator

This upgrade includes the following:

- On-site installation of the APEX Upgrade by a Thermo Fisher Scientific field service professional
- Preventive maintenance and certification of the upgraded metal detector
- Technician and operator training
- All new Users Guide and Quickstart
- New test sticks selected for your application
- A six-month preventive maintenance and recertification visit
- A one-year, all-inclusive on-site warranty

Return-to-Factory Upgrade: DSP2, DSP3 or Metal Eliminator

This upgrade includes the following (field installation available upon request):

- Factory installation of the APEX Upgrade including new oscillator/receiver electronics for all DSP2 metal detectors
- Preventive maintenance and certification of the upgraded metal detector
- All new Users Guide and Quickstart
- New test sticks selected for your application
- A one-year, all-inclusive return-to-factory warranty

Important Upgrade Notes

- This offer includes all DSP-based products/applications (conveyors, drop throughs, pipelines, MiniTeks) except the DSP Rx, DSP IP Plus and DSP1
- The DSP2 cannot be upgraded in the field due to the necessary upgrade and calibration of the oscillator/receiver electronics
- Return-to-factory upgrades will typically be completed within 2-4 weeks of receipt of your DSP2, DSP3 or Metal Eliminator metal detector in our facility. Please clean all food residue from the old metal detector before shipping it to the factory.
- The above upgrades do NOT include any repair work due to moisture ingress, physical damage or general abuse
- A 5-10% improvement in sensitivity can typically be achieved with the APEX upgrade, but is dependent on your application and installation

APEX Upgrade Metal Detector

General Specifications

Construction	ABS plastic control panel
Protection Ratings	IP 66, NEMA 4X, ATEX zone 22, hazardous location Class II Division 2 Groups F&G
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 (for AuditCheck)	5.5 bar (80 psi)
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 (selectable via menu)	Reject 1, Reject 2, AuditCheck, Fault, Alarm, Warning, QA lamp
Inputs	6 Inputs - Active 12v DC+12 volt auxiliary supply for input sensors
Input Allocation (selectable via menu)	Speed Sensor, Keylock, Product Select 1, Product Select 2, Infeed PEC, Reject Confirmation 1 (bin full), Reject Confirmation 2, External Suppression
Communications	Optional AnyBus modules
Safety and Export Approvals	cCSAus, CE, ATEX zone 22
Manufacturing Quality	ISO9001 certified
Help-Text, Users Manual Languages	English, Spanish, French, German, Italian, Dutch, Chinese, Czech, Russian

Other Aftermarket Services Available

A full range of aftermarket services are available worldwide to support the Thermo Scientific APEX throughout its lifetime. This includes application evaluation, installation, training and preventive maintenance. To ensure maximum operational efficiency, on-site maintenance contracts and a full spare-parts service is available too. Finally, we offer a complete Product Inspection Service to get quarantined products fully inspected and quickly dispatched to your customers.

To upgrade your metal detector to a Thermo Scientific APEX, please contact us at one of the following locations:

Argentina +54 (0) 11 4334 3827 +54 (0) 11 4334 9159 fax	Chile +56 (0) 2-335-3388 +56 (0) 2-335-1590 fax	Germany +49 (0) 208-824930 +49 (0) 208-852310 fax	Malaysia +60 (0) 3 6203 1957 +60 (0) 3 6203 1963 fax	Poland +48 (0) 22 651 75 30 +48 (0) 22 651 75 35 fax	United Kingdom +44 (0) 1788-820300 +44 (0) 1788-820301 fax
Australia +61 (0) 8 8150-5300 +61 (0) 8 8234-5882 fax	China +86 (0) 21 6865 4588 +86 (0) 21 6445 1101 fax	India +91 (20) 6626 7000 +91 (20) 6626 7001 fax	Mexico +52 (01) 55 5638 0237 +52 (01) 55 5639 2227 fax	South Africa +27 (0) 11-609-3101 +27 (0) 11-609-3110 fax	United States +1 (800) 227-8891 +1 (763) 783-2525 fax +1 (763) 783-2500 direct
Canada +1 (905) 888-8808 +1 (905) 888-8828 fax	France +33 (0) 160 92 48 00 +33 (0) 160 92 49 00 fax	Italy +39 05 217886-1 +39 05 212729-14 fax	Netherlands +31 (0) 76-579-5555 +31 (0) 76-571-4958 fax	Spain +34 91-484-5954 +34 91-661-5572 fax	

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