Metal Detection Capabilities for the Food Industry

**Goring Kerr DSP 3
Metal Detector Systems**

Thermo
ELECTRON CORPORATION
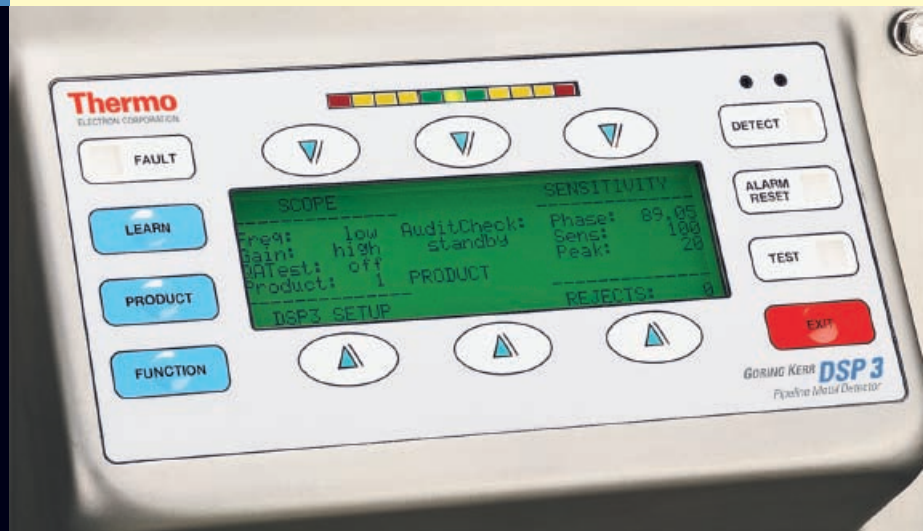
The Goring Kerr DSP 3 metal detector systems offer a high performance,

cost-effective solution for process and package inspection. Every model

provides the ideal QA means to implement your HACCP plans and incorporates

the hygienic standards required in the food industry. Backed with more than

50 years experience, Thermo's Goring Kerr metal detector systems will

assure your product to be metal contaminant free and protect your brand.

Maximize your performance, quality, and productivity

Thermo Electron Corporation's products, services, and applications expertise are designed to maximize the performance, quality, and productivity of critical processes in the food industry. The Goring Kerr line of DSP 3 metal detector systems sets the industry standard for achievable detection sensitivity covering all possible applications. A wide range of automatic reject devices is available to meet customer application requirements.

The full range of Thermo's metal detector systems is available from our offices and manufacturing sites around the world. Thermo provides the multi-national customer with a consistent, high quality product and readily available spare parts, with support from its international facilities.

The Goring Kerr DSP 3 metal detector systems are available in the following configurations:

Pipeline Metal Detector

The Goring Kerr Pipeline Metal Detector system has been developed to inspect pumped products through a pipe such as meat emulsions, poultry filet, jam, sauces, or dairy products. The system's compact design with superior sensitivity and stability is implemented using FDA approved materials. It is designed to work well on high pressure and/or high temperature pipes and is easily disassembled for sanitary cleaning, reducing cleanup costs. The system can be ceiling suspended or floor mounted, and the control panel can be mounted to the frame or to a remote location. Pipe diameters up to 200 mm can be accommodated. These flexible installation options provide the optimum solution for all process locations.

The high-speed reject valve not only ensures that any contaminant is correctly rejected, but at the same time reduces the amount of rejected material, resulting in increased line efficiencies. A comprehensive reject validation option guarantees the correct operation of the valve.

Until now, testing pipeline systems was a notoriously difficult task. Thermo simplifies this process with its globally patented AuditCheck. This self-validation system automatically checks the performance of the system at periodical intervals without interruption to production. AuditCheck benefits the user with considerable cost savings and greater QA integrity.

- **Easy disassembly for sanitary cleaning**
- **Quick acting three-way valve**
- **All IP66 enclosure including the reject solenoid**
- **Compact design with superior sensitivity and stability**

Gravity Feed Metal Detector

The Goring Kerr Gravity Feed Metal Detector system is designed to inspect free-flowing ingredients such as flour, grain, powder, and flavouring. The compact design and straight through flow, with fast acting rejecter, allow for easy installation on almost any application. The design ensures that throughput is not compromised and that maximum line efficiencies are achieved. Systems requiring larger apertures can be accommodated.

Thermo's patented AuditCheck self-validation system will automatically check the performance of the system at periodic intervals. AuditCheck benefits the user with considerable cost savings and greater QA integrity. The reject validation option continuously monitors the position of the reject gate ensuring that it is in the correct position at all times, which also enhances QA integrity. A multi-level password security system insures maximum performance by reducing access to critical settings by unauthorized personnel.

- **Fast-acting electronics**
- **Comprehensive self diagnostic system**
- **Automatic noise compensation**
- **Separate surface for clean flow and contaminant flow**
- **Straight through flow design (no crevices or traps)**

Conveyor Metal Detector

The Goring Kerr Concept Conveyor Metal Detector systems are constructed from stainless steel to meet the strict, modern hygienic standards of the food and consumer industries. Space is often at a premium and Thermo's concept conveyor design is able to provide solutions with minimum line lengths. Fixed and variable speed solutions are available to meet the application requirement.

Correct product rejection is critical for a successful conveyor solution and Thermo provides the widest range of reject devices including: air blast, pusher, reject gate, retracting band, drop flap, etc. The operation of the reject mechanism can be monitored by the reject validation option for the highest QA standard performance.

Correct operation of the total system can be achieved with Thermo's patented AuditCheck self-validation option. AuditCheck will periodically check the detection performance of the metal detector head and test the reject device ensuring maximum QA integrity while reducing operating costs.

- **Large 40 x 80 character display**
- **Fully automatic set-up**
- **Unique case design**
- **Multi product library**
- **Detection in metallic and non-metallic packaging**

Vertical Form Fill Seal Metal Detector

The Goring Kerr Vertical Form Fill Seal Metal Detector is a superior metal detection system designed specifically for use in Vertical Form Fill and Seal applications where space is very limited. This compact design can easily be installed in existing plants between a combination scale and bagger. With its special design, the system offers excellent performance while inspecting products in a free fall operation. Accurate reject timing ensures that the correct reject bag is formed with the minimum of wasted product.

Thermo continues to set the pace by designing systems that require minimal space and drastically reduced metal-free zone requirements. Much like the pipeline systems, testing VFFS systems is a notoriously difficult task. Thermo's globally patented AuditCheck self-validation system will automatically check the performance of the system at periodic intervals without interruption to production. AuditCheck benefits the user with considerable cost savings and greater QA integrity.

- **Easy-to-use menu driven software**
- **Remote mounted controls**
- **Exceptionally high levels of sensitivity**
- **Auto Learn for quick and easy set-up**
- **Ultra thin profile requires minimal space**

Available Options on All Models

- AuditCheck
- Painted Aluminum Construction
- Remote Control Panel
- Local or Remote 80-column printer
- Menus available in English, Italian, Spanish, French, Dutch, German, Polish, Finnish, and Czech
- AFS Dual Frequency
- Reject Verification

- Bin Full on Conveyor Systems
- Certified Test Spheres
- Communications port: RS232C/RS485
- DSPnet Network Software
- ATEX zone 22 certification
- SCADA protocols
- Modbus RTU (RS485)
- Modbus TCP/IP (Ethernet)

For more detailed information on any of the Goring Kerr DSP 3 Metal Detector models
please contact your local Thermo sales representative or contact any of the offices listed below

Argentina
+54 (0) 11 4 334 3827
+54 (0) 11 4 334 9159 fax

Australia
+61 (0) 8 8150-5300
+61 (0) 8 8234-5882 fax

Chile
+56 (0) 2-335-3388
+56 (0) 2-335-1590 fax

China
+86 (0) 21 5465 7588
+86 (0) 21 6445 7909 fax

France
+33 (0) 1 60 92 48 00
+33 (0) 1 60 92 49 00 fax

Germany
+49 (0) 208-824930
+49 (0) 208-852310 fax

India
+91 (0) 20-56011245
+91 (0) 20-26125739 fax

Italy
+39 0521 78861
+39 0521 272914 fax

Malaysia
+60 (0) 3 2300 1626
+60 (0) 3 2300 1636 fax

Netherlands
+31 (0) 33-454-9000
+31 (0) 33-454-9009 fax

Poland
+48 (0) 22848 3708
+48 (0) 22848 3708 fax

South Africa
+27 (0) 11-609-3101
+27 (0) 11-609-3110 fax

Spain
+34 91-484-5954
+34 91-661-5572 fax

United Kingdom
+44 (0) 1788-820300
+44 (0) 1788-820301 fax

www.thermo.com/food

Thermo
ELECTRON CORPORATION