



For AZO systems Sesotec metal separators are a must



**AZO GmbH + Co.
KG
(Germany)**

Product:

GF 4000 and
PRM

Compliance with HACCP programme requires mandatory metal separation in the food industry

AZO GmbH + Co. KG, Osterburken Germany, design, develop, manufacture and sell equipment, machinery, and systems designed for fully automated production process. Conveying systems transport raw materials for production. AZO equipment and automation systems guarantee consistent product quality in compliance with DIN EN ISO 9001: 2008.

AZO provides food processors, who are legally required to take effective safety measures against contaminants, with high-quality machinery and systems which help ensure that their products comply with the relevant standards.

Inspection begins with bulk material delivery prior to the bulk silos to remove contaminants as early as possible. The latest metal detectors and separators offer a range of functions other than basic metal detection and are, nowadays, fully integrated quality assurance instruments. Sesotec supplies AZO with metal separation equipment that specifically meet the high demands for bulk material handling in the food industry.



Sesotec GF 4000 integrated into a pneumatic conveying line.

AZO uses two types of metal separators: 1) Magnetic systems to remove ferrous contaminants, and 2) conventional metal separators to remove all other types of metal contamination. Both types of units can be installed in free-fall and pneumatic conveyor applications and offer several pipelines. Metal separators, both magnetic and inductive, offer significant advantages:

1. Machine damage and downtime expense is minimised.
2. Product quality is guaranteed and there are fewer customer complaints.
3. The installation of these systems offers a rapid pay back of the initial investment.

All control points are monitored and documented by central process control and data recording again ensuring that legal requirements are fulfilled throughout the complete process.

Inline magnet systems

AZO uses Sesotec inline high strength magnet systems to remove fine ferrous contaminants and magnetised stainless steel particles from bulk materials prone to bridging and caking. The integral magnetic rods are electrically driven preventing clogging and ensuring optimal product/magnet contact. The system utilises neodymium magnets with a field strength of in excess of 13,500 Gauss for highly efficient separation. Constructed from polished, rust-free stainless steel, which is highly corrosion and wear resistant and, particularly important for ATEX applications, is ignition resistant. Control is by PLC and cleaning is performed automatically using compressed-air to drive the pulses magnetic cores within their stainless steel casings to the cleaning area.

Quality inspection in the food industry

Integrated in the pneumatic conveying system for bulk material the GF 4000 metal separation unit detects and removes magnetic and non-magnetic metal

contaminants. They can be set up for different conveying speeds, and contaminants are separated with minimum loss of good material by a fast-acting reject flap ("Quick-Flap-System"). All components are designed to meet stringent hygiene demands, HACCP etc.. The reject mechanism has no edges or intrusions, such that the formation of material deposits is virtually impossible. Crusting and even mould formation are effectively prevented. For processes where combustible dust may be a hazard GF 4000 systems are certified to ATEX zone 20 levels.



Sesotec inline magnet installed in a pressure conveying line.

AZO is very satisfied with Sesotec inline magnets and metal separators which function both reliably, effectively and are very easy to clean. The total food industry package is unbeatable and each Sesotec unit provides the capability for integration with process quality assurance and data managements system to guarantee continuous traceability and documentation in the event of a customer complaint or quality problem.

Sesotec - an overview

The Sesotec group is one of the leading manufacturers of machines and systems for contaminant detection and material sorting. Product sales primarily focus on the food, plastics, and recycling industries. Sesotec's global presence includes subsidiaries in Great Britain, Singapore, China, USA, France, Italy (2), India, Canada, Thailand, a representative office in Turkey, and more than 60 partners all over the world.

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