



Product Purity.

**Optimal contaminant detection
in the food industry**

- Metal Detectors/Separators
- X-Ray Systems
- Magnet Separators



Systematic metal and contaminant separation.

Solutions for all process stages and conveying types

pure.



Consumer protection in the food industry: S+S is a global leader in the development and manufacturing of detection and separation systems with significant expertise in a wide spectrum of technology and a product range that is almost unrivalled in versatility and quality.

S+S supplies systems for all process stages, product types, and conveying types, as well as for all the critical control points of the production process from one source: Magnet Systems, inductive Metal Detectors and Separators and X-Ray Scanners.

S+S systems combine exceptional ease of operation with the highest reliability. S+S contaminant detectors and separators meet all the requirements concerning full traceability and complete documentation of all quality-relevant data.

Effective and reliable detection and removal of

- magnetic metals
- non-magnetic metals (copper, brass, stainless steel etc)
- contaminants (glass, stones, ...)
- faulty products

Highest benefit

- consumer protection
- quality assurance

Seamless integration

- into every stage of the process
- into every type of conveying system
- plug and play board replacement
- customised design

Highly developed technology

- product effect compensation
- digital signal processing
- automatic teach-in
- multi-product memory
- simple to operate

Total project support

- project consultation and analysis
- product trials and test machinery
- training and seminars
- worldwide after-sales service



For bulk materials

Systems with eject flap or swivel funnel are used for the separation of metal contaminants from bulk materials in free fall. Using easily available standard connections such systems can be easily integrated into existing pipes. Our sophisticated design prevents backjamming, clogging, the formation of material deposits, allows thorough and time-saving inside cleaning. All the system components are designed to meet the stringent hygiene requirements in the food industry.

Metal separators for bulk materials also can be integrated in horizontal, vertical, or inclined vacuum and pressure conveyor pipes. These separators are fully automatic in operation, and remove any magnetic and non-magnetic metal particles from bulk materials such as granulate, powder, or flour. With their modular design these metal separators can be adapted to the respective conveying conditions.

For the separation of ferrous metals from bulk materials S+S provides magnet separators that are designed for the high requirements in the food industry. The exceptional ease of integration in the production line (e.g. pipes, free-fall sections, or material funnels) and easy cleaning are a matter of course.

RAPID 4000

Metal separator for low hygiene free-fall applications. Metal contaminants are separated by way of an eject flap ("Quick Flap System") without interrupting the flow of conveyed material.



RAPID 5000

Metal separator for high hygiene free-fall applications with reject flap ("Quick Flap System"). This separation principle has proved to be especially suitable for powdery and fine-grained bulk materials.



GF 4000

GF 4000 metal separator for pneumatically conveyed bulk materials, e.g. granulate, powder, or flour, with eject flap ("Quick Flap System"), suitable for high conveying speeds.



MAGBOX FOOD

The MAGBOX pipe magnet for free-fall applications primarily is used in the food industry, the pharmaceutical industry, and in similar sensitive applications.



RAPID 6000 and RAPID 8000

Metal separators for free-fall applications with swivel funnel. This separation principle has proved to be especially suitable for coarse-grained, flaky, light, fibrous, brittle, and moist bulk materials. RAPID 8000 series is designed for very high throughput rates.



For individually packed materials

Metal detectors that are integrated in conveyor belt lines primarily are used for the incoming and outgoing inspection of packaged bulk materials and of individually packed materials. They can be combined with many types of customer-specific separating units (air blast nozzles, pusher, separating slides, ...). Complete systems – comprising conveyor belt, metal detector, and separating unit – guarantee highest operating reliability and detection accuracy.



ECOLINE D
Metal detection system
with conveyor belt for
dry areas.



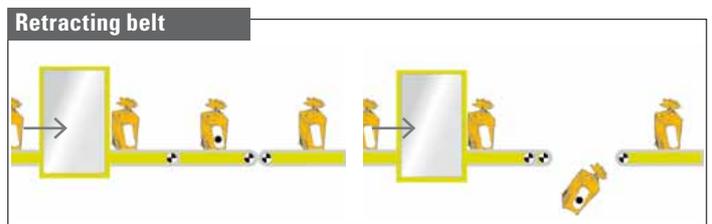
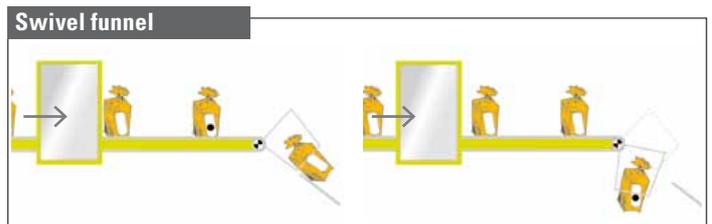
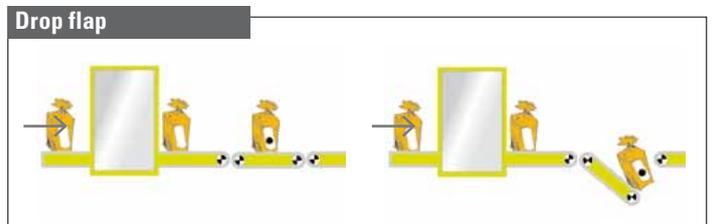
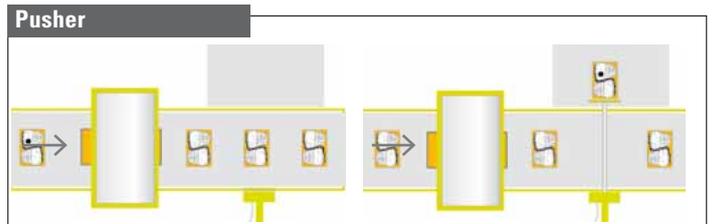
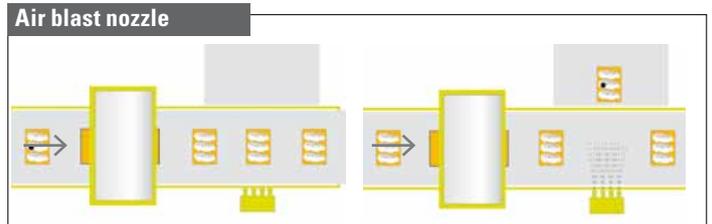
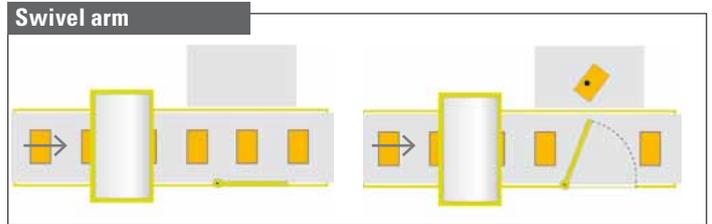
VARICON and UNICON
Metal detection systems with
conveyor belt for dry and wet
areas. VARICON can be loaded
with individually packed
materials weighing up to 30 kg,
and UNICON with individually
packed materials weighing up
to 130 kg.

S+S RAYCON X-ray product inspection system provides highly accurate inline detection of contaminants (magnetic and non-magnetic metals, glass, ceramics, stones, raw bones, PVC, and rubber). Other product defects such as broken, malformed, or missing products, clumping, and trapped air can also be detected.

The system also detects a possible underweight or overweight of products. Reliable detection is even guaranteed in metallic or metallised packaging materials. For separating purposes standard and customer-specific separating units can be integrated.



RAYCON
In addition to the detection of various kinds of contamination the RAYCON product inspection system allows the detection of other product defects or faults at the same time.



Separating systems

To avoid the necessity of manual operator action in case of metal detection, the detectors can be combined with automatic separating systems. Since the design of such separating systems must consider a

great variety of parameters (product distance, shape, size, nature, conveying speed, minimum ejection, function monitoring, etc.) S+S offers separating systems in various design versions.

For liquid and pasty products



Metal separators for the inspection of liquid and pasty products such as soups, sauces, sausage meat, or jam, can be easily integrated in existing pipes by way of standardised thread systems. Optimally matched to the respective product properties, arc valves, piston valves, or ball valves are used for the separation of metal particles.

The metal separator LIQUISCAN VF+ is suitable for vacuum fillers manufactured by Handtmann, Vemag, Rex and Frey and so on. Models with linking gear box for manual linking systems are available.

For the separation of ferrous metals from liquid and pasty products S+S provides the magnet separators of the LIQUIMAG series that are designed for the high requirements of the food industry. The exceptional ease of integration in the production line (e.g. pipes) and easy cleaning are a matter of course.



LIQUIMAG

Filter magnets of type LIQUIMAG were specifically developed and designed for the purpose of reliably separating the finest magnetic contaminants from a wide range of pumped liquid and pasty products.



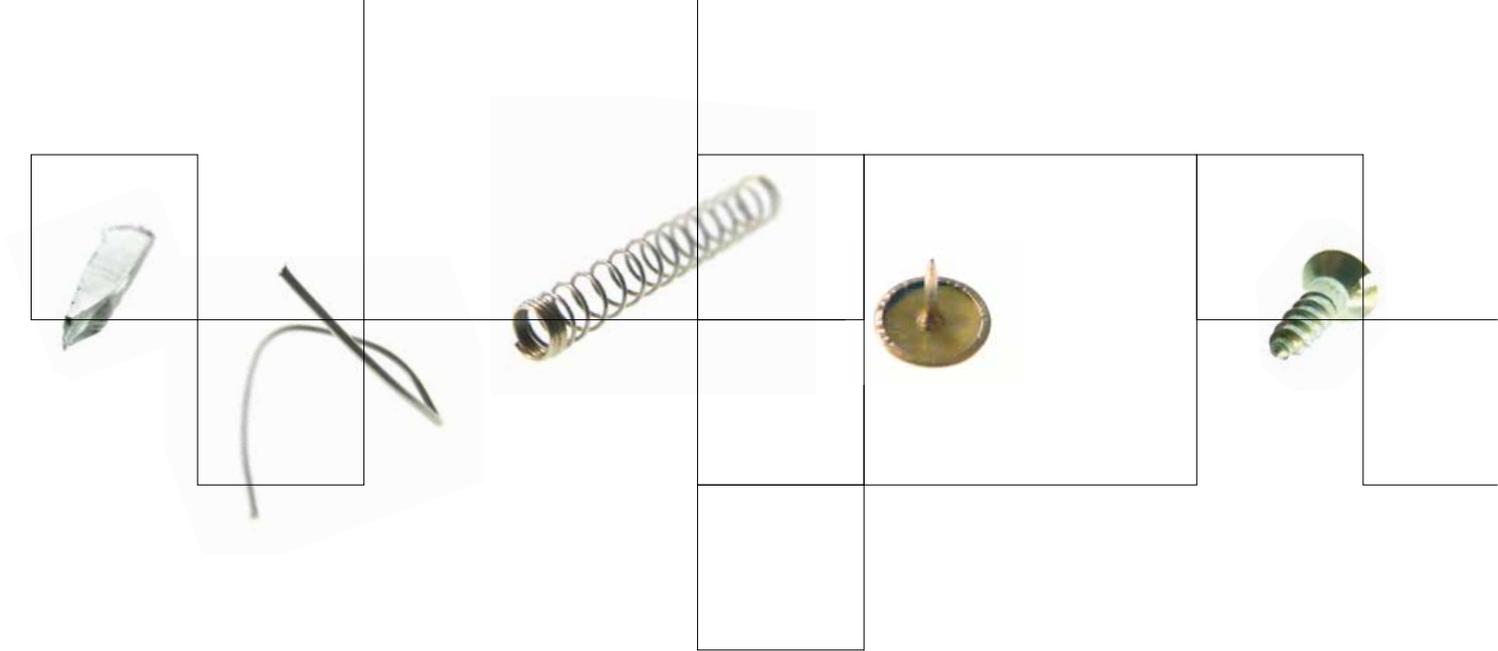
LIQUISCAN VF+

The LIQUISCAN VF+ metal separator for filler applications is installed at vacuum fillers or pumps. It is delivered on a mobile, height-adjustable stand. The low and well-balanced centre of gravity makes the system highly stable especially when it needs to be moved.



LIQUISCAN PL

The LIQUISCAN PL metal separator for pumped products is integrated in pipes. It comes in a special-steel frame for table or wall mounting. As an option this separator also is available mounted on a mobile, height-adjustable stand.



Consumer protection.

Product purity. An imperative in the food industry

All the food, people eat, must be absolutely pure and clean. This is one of the most important principles of the food industry. One decisive criterion here is that your products leave your factory without any metal contaminations and other contaminants. This guarantees that consumers are safe from any health impairments and that your company is safe from a loss of confidence, product liability cases, and expensive product recalls.

Quality assurance.

IFS compliant production. Responsibility and economic success

The INTERNATIONAL FOOD STANDARD (IFS) defines the most important requirements for the quality management of food manufacturers. All the renowned trade chains therefore demand that their suppliers are certified according to this IFS standard.

The detection and separation of metals and contaminants is a decisive criterion of IFS compliant production. Chapter 5 states that food manufacturers must take all the necessary steps to prevent contamination with metal particles or other contaminants. The IFS rating system for example provides that when a gap in metal detection is found during auditing this will lead to points taken off, which will endanger certification.

**S+S
Separation and
Sorting Technology
GmbH**

Regener Straße 130
D-94513 Schönberg
Germany
Tel. +49 8554 308-0
Fax +49 8554 2606
info@se-so-tec.com
www.sesotec.com

S+S system world



Detecting and separating contaminants:

- Removing contaminants:
- metals
 - plastics
 - glass
 - ceramics, porcelain, stones
 - and many others
- Removing from (good material):
- bulk materials
 - liquids and pastes
 - individually packaged product
 - packed and loose items
- Product types:
- end-products (food, textiles, plastics etc)
 - industrial raw materials
 - recycled materials

can be integrated into all types of conveyor systems



Detecting and separating sub-standard products:

- Qualitative defects:
- incorrect colour
 - agglomerations
 - breakages
 - air inclusions in packs
 - incorrect positioning / distribution
- Quantitative defects:
- incorrect weight
 - count errors (incorrect number of items in package)
- Product types:
- end-products (food, textiles, plastics etc)
 - industrial raw materials
 - recycling materials

can be integrated into all types of conveyor systems



Sorting mixed materials into single fractions:

- Types of material:
- glass
 - plastics
 - metals
 - and many others
- Delivery flows:
- bulk materials
 - individually packaged product
- can be integrated into:
- conveying systems
 - bulk material flows

For further information or to discuss your particular application contact one of our specialists.

www.sesotec.com



**Choose the Original
Choose Success!**

Operating Companies:



S+S Inspection Ltd.
24 Park Gate Business Centre
Chandlers Way
Swanwick
Southampton SO31 1FQ
United Kingdom
Tel.: +44 1489 553 740
Fax: +44 1489 575 471
info@sesotec.co.uk
www.sesotec.co.uk



S+S Separation et Technologie Sarl
4 rue Artisanale
F-67310 Wasselonne
France
Tel.: +33 388 04 2230
Fax: +33 388 04 2231
info@sesotec.fr
www.sesotec.fr



S+S Inspection Asia Pte Ltd.
25 International Business Park
#01-67 German Centre
Singapore 609916
Singapore
Tel.: +65 6562 8875
Fax: +65 6562 8876
info@se-so-tec.com.sg
www.sesotec.com.sg



S+S Indian Representative Office
C/O M+V Marketing & Sales Pvt. Ltd.
R K Plaza Survey No. 206/3, Plot
No. 17 Lohgaon Viman Nagar Pune,
Maharashtra, PIN 411 014
India
Tel.: +91 20 2674 1012
Fax: +91 20 2674 1001
info.india@sesotec.com
www.sesotec.com



S+S Separation and Sorting Technology Co., Ltd.
Shanghai Branch
Add: 1B, Building 13
No. 518 Xinzhuang Road
Songjiang District
CN-201612 Shanghai
China
Tel.: +86 21 37005075
Fax: +86 21 37005080
enquiry@se-so-tec.com.cn
www.sesotec.com.cn



S+S Inspection Inc
1234 Hardt Circle
Bartlett, IL 60103
USA
Tel.: +1 224-208-1900
Fax: +1 224-208-1909
info@sesotec.us
www.sesotec.us



S+S Turkey Representative Office
Şenlikköy Mah.
Hanımeli Sokak No:8 D:1
TR-34153 Florya/Istanbul
Turkey
Tel: +90 212 426 18 21
Fax: +90 212 426 18 22
info@sesotec.com
www.sesotec.com

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