

All about PET.

Total Separation and Sorting solutions.

- Colour separation
- Metal separation
- Polymer separation
- Material separation



Systematic Contaminant Separation.

The greatest added value in PET recycling.

pure fractions.



Sesotec provides proven and cost effective solutions for every application in the PET industry – from granulate processing through the finished product and on to material recycling.

Our product range allows us to place detection, separation and sorting stages at the best position in the process with to ensure the highest product quality, the most effective machinery protection and the highest grade recycled.

We provide complete solutions at every stage which together comprise an integrated quality assurance system.

Everything from a single source!

Safe detection <ul style="list-style-type: none">■ Colour and shape sensors■ Metal sensors■ NIR sensors
Reliable separation <ul style="list-style-type: none">■ Metal contaminants■ Foreign bodies■ Faulty products■ Material sorting
Smooth integration <ul style="list-style-type: none">■ at each stage in the process■ of every conveyor system■ of sorting stages■ Customised solutions
Complete documentation <ul style="list-style-type: none">■ Quality management information■ Production data logging■ Intranet connection
Comprehensive project management <ul style="list-style-type: none">■ Project consultation■ Product tests and trials■ Training courses and seminars■ Worldwide after-sales service and support

Perfectly produced. Perfectly recycled.

Contaminant removal and sorting of material flows into pure fractions throughout the complete PET product life cycle.



PET recycling with high added value

For the recycling of PET Sesotec has developed solutions that separate foreign materials from PET flows and sort these material flows into unmixed fractions. Depending on the level of contamination purities of almost 100% can be reached in the bottle and flake segment by way of multi-stage sorting processes. These sorting stages essentially contribute to the value-adding return of PET recycling materials into the production cycle.

Granulate sorting for quality assurance

PET granulate may contain small metal particles that during processing will contaminate the melt and cause expensive malfunctions in the injection moulding of preforms and caps. Sesotec sorting systems reliably remove magnetic and non-magnetic metal particles and other contaminations from PET granulate. They thus protect injection-moulding machines against damage and provide a consistent quality assurance system.

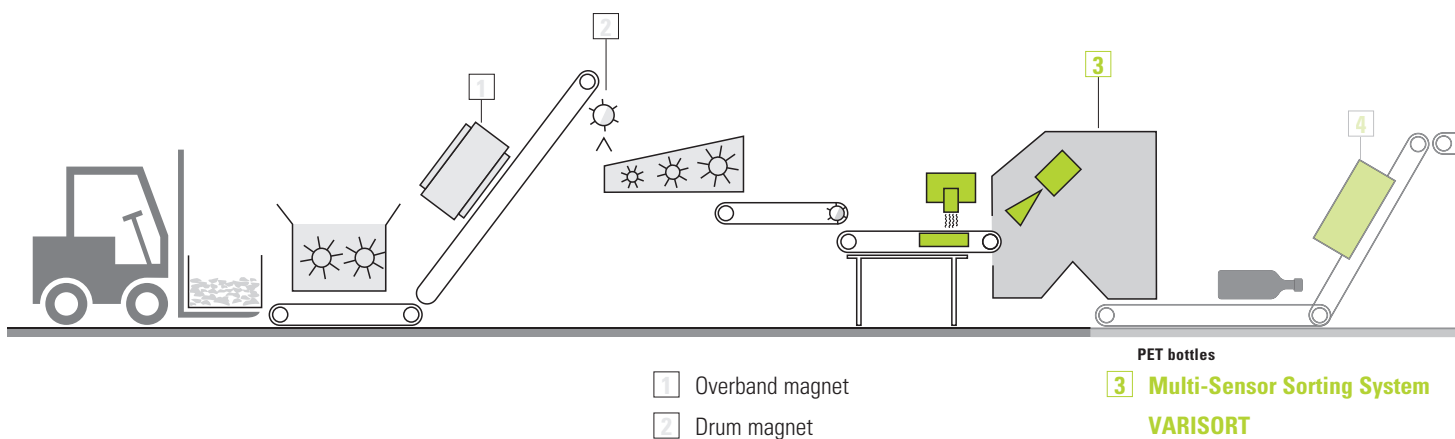
PET bales
PET briquettes

► Bale breaking

► Ballistic
separation

► Eddy Current

► PET bottles sorting
(single-/multi-level)



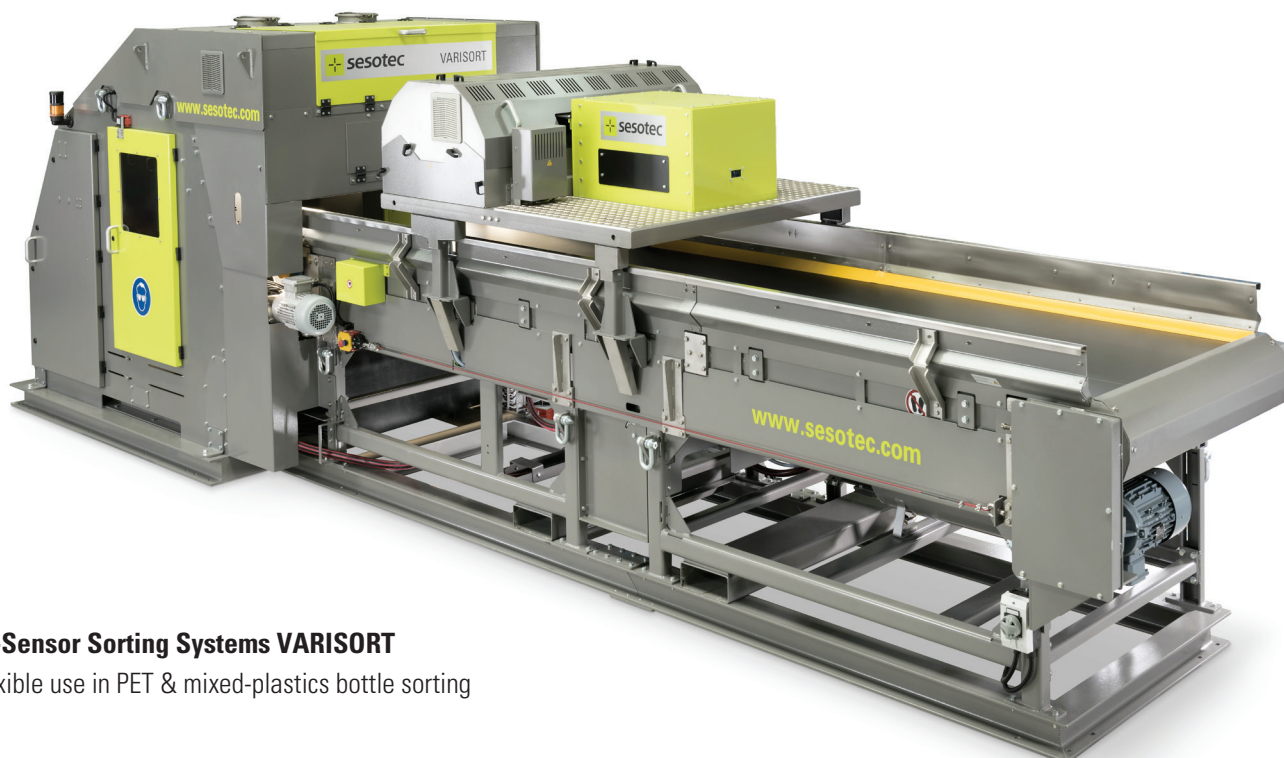
PET bottle sorting.

A basic concept for many applications.

The VARISORT sorting systems will sort mixed streams into single fractions, playing a pivotal role in ensuring the highly pure recycled material can be profitably reprocessed in the production cycle. Optimally scattered on a fast-running conveyor belt the waste reaches the detection area. The electronic evaluation unit determines the exact position of the unwanted products, and with accurate timing and positioning activates the corresponding nozzles of the air-blast unit.

Sensors:

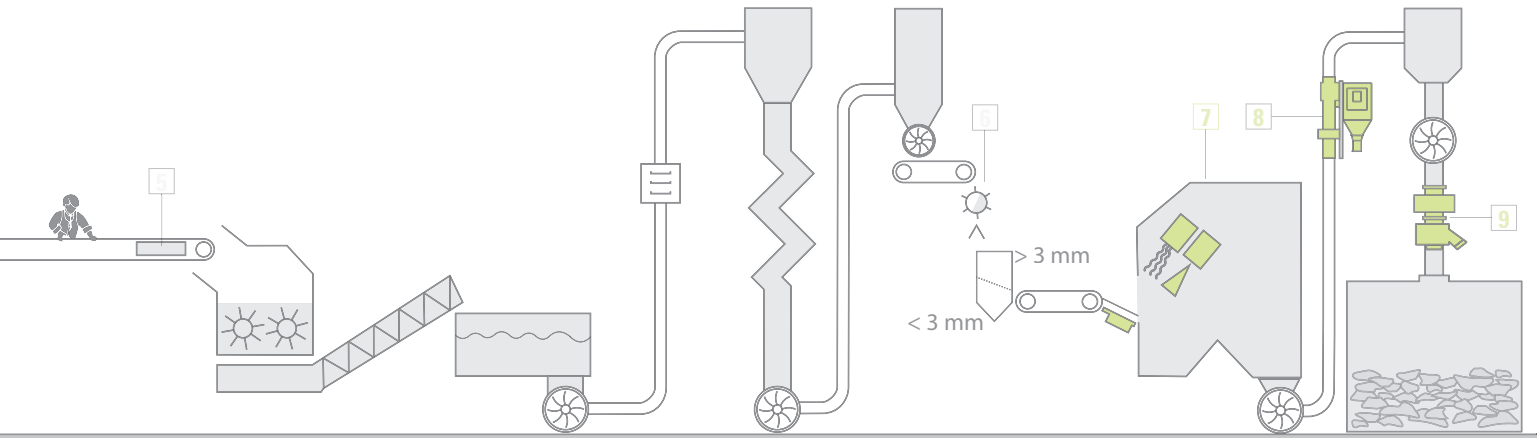
- C Colour and Shape Sensor
- M Metal Sensor
- N NIR Sensor



Multi-Sensor Sorting Systems VARISORT

For flexible use in PET & mixed-plastics bottle sorting

Manual sorting ► Shredding ► Washing ► Drying ► Air separator ► Screening ► Flake Sorting / Quality Inspection



- 4 Tunnel metal detector
- 5 Single-face metal detector

Drum magnet

7 Multi-Sensor Sorting System
FLAKE PURIFIER+

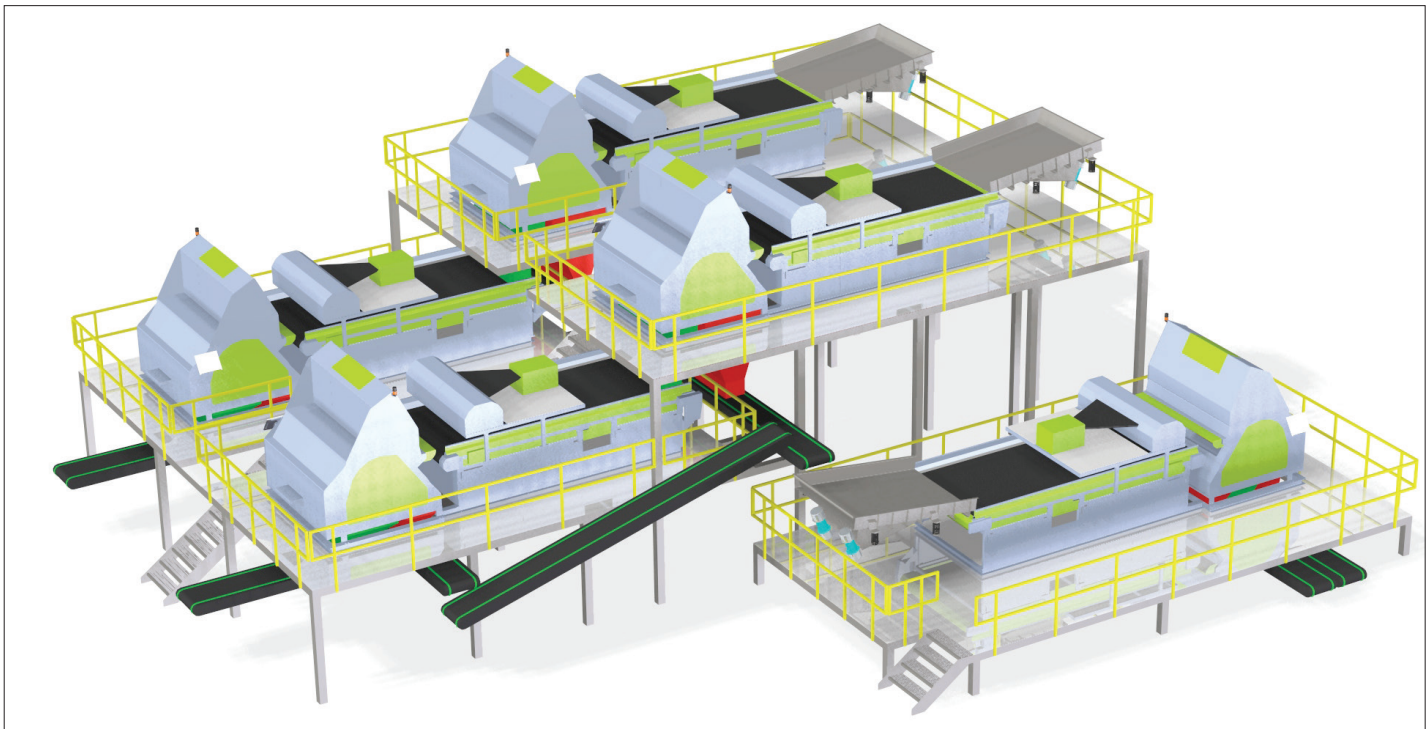
8 GF metal separator

9 RAPID metal separator

PET flakes

Customer-specific complete line for bottle sorting.

Complex complete lines are realised in close contact with plant manufacturers and suppliers. From material infeed through to material transport and up to filling of the end product, all the stages are worked out together. Planning is then completed with a central line control system where all the machines are integrated, necessary information is gathered, and the complete line can be controlled.



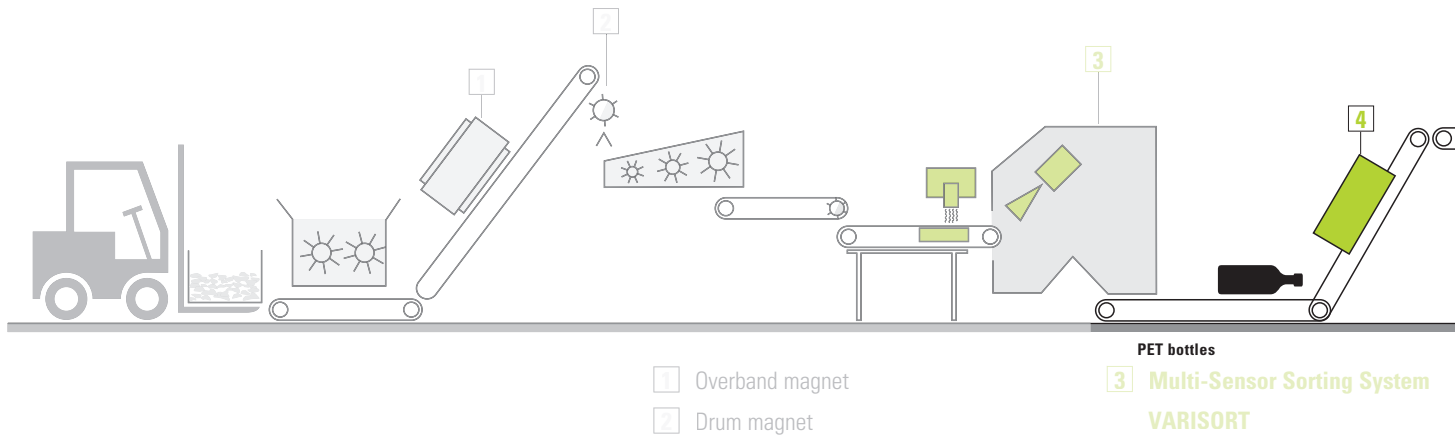
PET bales
PET briquettes

► Bale breaking

► Ballistic
separation

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► PET bottles sorting
(single-/multi-level)



PET flake sorting.

Modular concept for high quality.

The multi-sensor sorting system FLAKE PURIFIER+ is especially designed for the operation in the plastic recycling industry. The material infeed is done by specifically adjusted conveyor trough modules. Besides the sensors for the metal and color separation, Sesotec also uses a high performance module for the recognition of contaminations (e.g. different polymer types). For difficult sorting tasks, the separate information of each particular sensor can be combined intelligently and thereby supply an even more precise sorting decision.

Sensors:

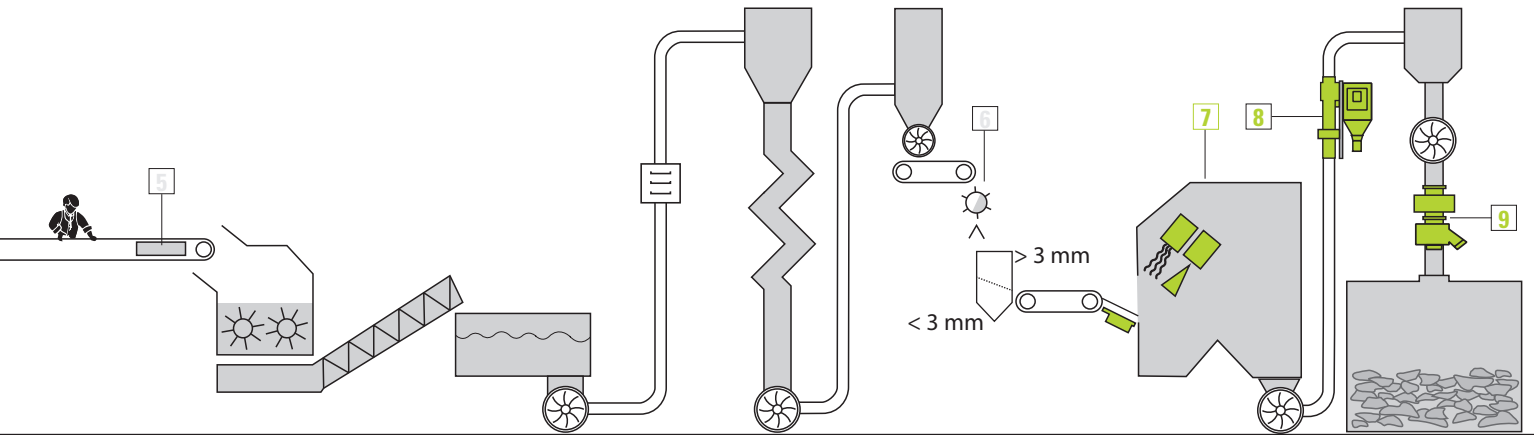
- C Colour and Shape Sensor
- M Metal Sensor
- N NIR Sensor



Multi-Sensor Sorting Systems FLAKE PURIFIER+

Optimised for flake & regrind sorting

Manual sorting ► Shredding ► Washing ► Drying ► Air separator ► Screening ► Flake Sorting / Quality Inspection



- 4 Tunnel metal detector
- 5 Single-face metal detector

6 Drum magnet

7 Multi-Sensor Sorting System
FLAKE PURIFIER+

8 GF metal separator

9 RAPID metal separator

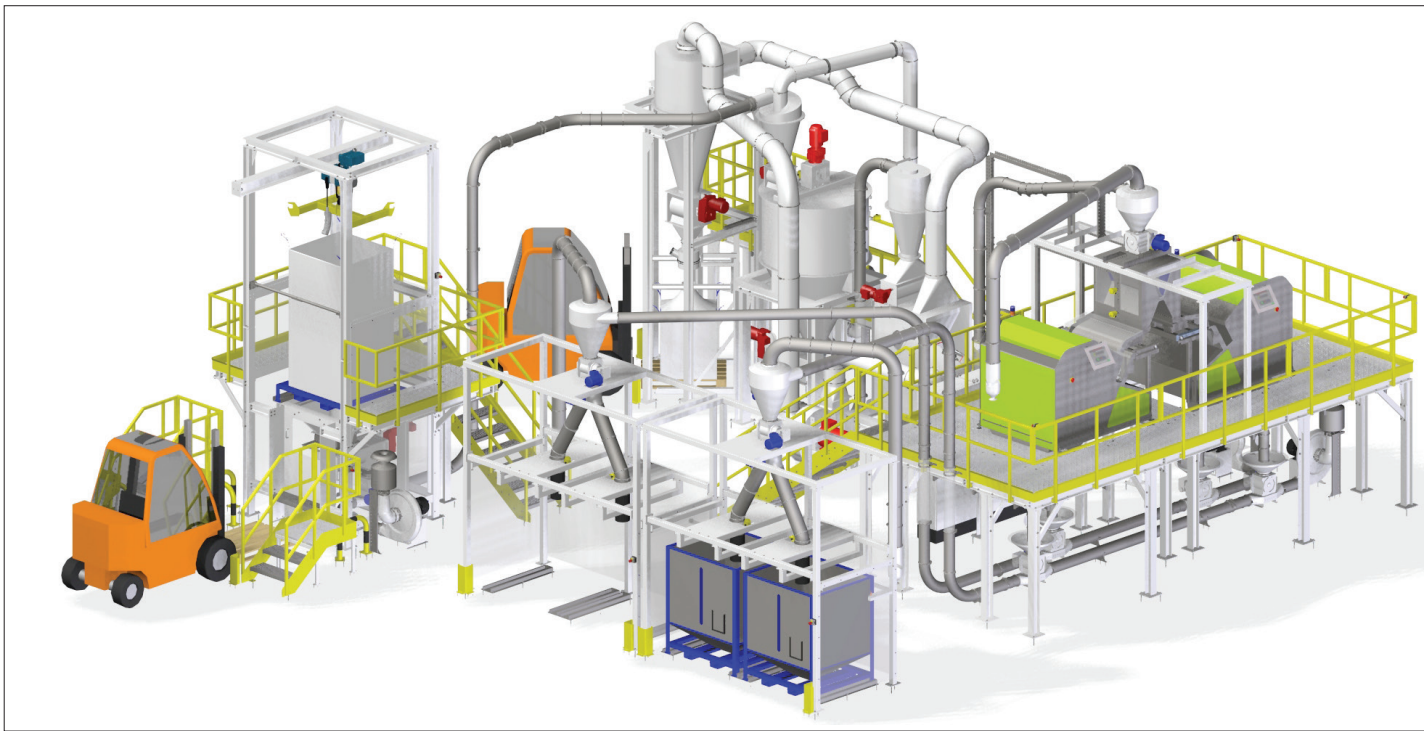
PET flakes

Customer-specific sorting module for granulate and regrind processing.

FLAKE PURIFIER+ multi-sensor sorting systems provide unmixed materials of best quality in the fields of PET, HDPE or mixed-plastics regrind processing.

Around the sorting systems Sesotec offers customer-specific complete structural periphery and complete lines in cooperation with long-standing plant manufacturing partners.

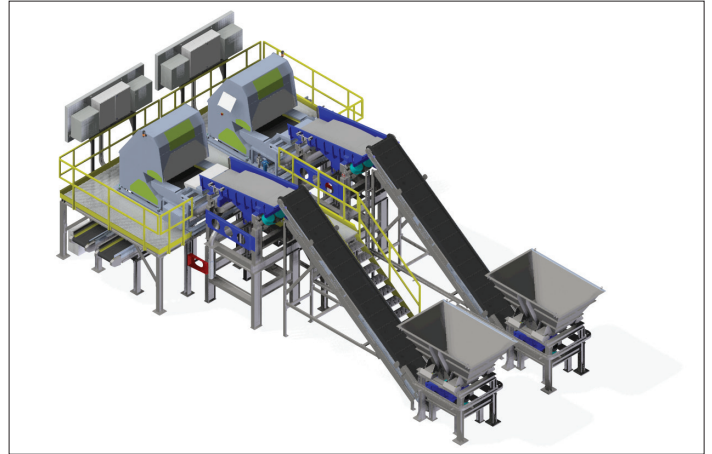
In addition to the sorting systems Sesotec also provides platforms, infeed and outfeed hoppers, conveyor technology combined with filling level sensors, and suitable control technology.



Turn-key solutions

Tailor made sorting facilities

- Steelwork, funnels, blowers, piping, cyclones, rotary valves, sieve chutes, conveyors, vibratory feeder, Big-Bag filling station
- Cabling, switch cabinet, plant control system, signaling, visualisation
- Start-up, assembly, commissioning, remote access



Our Technical Center - Your Safety

- Latest Sesotec technologies
- Product trials (small samples to big test runs)
- Documentation and test evaluation
- Simulation of a whole production process
- Customer-specific optimisation of sorting applications
- Support by application and development engineers

SERVICE - Worldwide

Every customer needs the best solution for his application. Expert technical consultation is of the highest priority for us before and after installation and commissioning. Our support and specialist service engineers operate worldwide to ensure that the supplied Sesotec equipment continues to give the best possible performance.

- Service packages
- Maintenance contracts
- Training

