Mixed Plastics & Solid Waste Recycling

Cost Effective recovery of high-quality secondary raw materials

- Color separation
- Metal separation
- Polymer separation
- Material separation
Customized Sesotec system solutions
Adding Value and protecting the environment

All plastics are produced from limited natural resources such as crude oil, coal, natural gas, and plants. Many end up in the waste bin after having been used. Plastic waste is often detrimental to the environment, hence the need to remove it in an environmentally friendly manner. The only way to do this is by recovery and recycling.

Mixed plastics, such as those used in light packaging, require sorting by different criteria. Light-weight and laminated components must be separated and different plastic types identified. Only the highest quality recycled fractions can be reused in new products. Nowadays sophisticated sorting technologies make it possible to classify plastic waste into separate high purity fractions.

Simplified Process

- overband magnet
- drum magnet
- multi-sensor sorting systems
Multi-Sensor Sorting Systems

VARISORT
Solid waste & mixed plastics recycling

The multi-sensor sorting system VARISORT can be used universally in many different recycling applications (e.g. plastics, metal, electronic waste and solid waste recycling). It 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.

VARISORT COMPACT
Flexible use for plastic granulate & flakes, metal & e-scrap

Compared with conventional belt sorting systems the VARISORT COMPACT is characterized by its compact design requiring reduced space and much greater ability to be moved as plant demands change. The material infeed is effected by using specially adapted vibratory feeders and chutes to guarantee homogeneous material distribution over the full width of a fast-running conveyor belt. The combination of an inclined chute and a high speed conveyor eliminates problems due to the weight, shape and abrasive characteristics of the material to be inspected.

The VARISORT COMPACT sorting systems are designed for a universal use in the various fields of the recycling industry. These include the processing of plastic, metal and E-scrap.

FLAKE PURIFIER+
Optimized for flake & regrind sorting

The multi-sensor sorting system FLAKE PURIFIER+ is especially designed for the operation in the plastic recycling industry. The material infeed is done by a specifically adjusted vibratory feeder. 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  Color and Shape Sensor  M  Metal Sensor  N  NIR Sensor
For more detailed information please contact us. Our experienced Sesotec sales engineers and specialists will be pleased to discuss applications in depth and will visit you to assess the project at first hand.

**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

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